



**North State Intercity Bus System
Business Plan
for Shasta Regional
Transportation Agency**

Approved June 19, 2018



Report for:



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LIST OF ACRONYMS

- HVIP - Hybrid and Zero Emission Truck and Bus Voucher Incentive Project
- LCTOP - Low Carbon Transit Operations Program
- NSSR - North State Super Region
- SJJPA - San Joaquin Joint Powers Authority
- SRTA - Shasta Regional Transportation Agency
- REU - Redding Electric Utility
- TIRCP - Transit and Intercity Rail Capital Program
- SMUD - Sacramento Municipal Utilities District

1 INTRODUCTION

1.1 Background

Rural Northern California faces a lack of public transportation connectivity. Residents of regions north of Sacramento, composing 1/3 of the entire state and 45,000 square miles, have very limited access to the resources and services of the Sacramento region and beyond. Conversely, access to the recreation-rich valleys, mountains, lakes, rivers and unique communities for travelers coming to the North State have limited public transportation options as well. This limited access results in travelers relying on personal automobiles to make these trips. This gap in transportation options stifles economic growth, limits job access, limits access to education, encourages more vehicle trips, and continues reliance on greenhouse gas producing travel methods.

The North State Intercity Bus System will address this issue providing convenient, cost effective transportation on battery electric buses between Redding and Sacramento. This service is connected by a feeder system from Butte, Glenn and Tehama counties with future connections planned to other rural northern California counties.

The need for this service has been discussed for many years in various forums, but was specifically focused on in the Shasta Intercity Transportation to Sacramento and Bay Area Feasibility Study and Action Plan in 2016 (<https://www.srta.ca.gov/285/Shasta-Intercity-Study>) and subsequent application for funding through the Transit and Intercity Rail Capital Program (<http://srta.ca.gov/DocumentCenter/View/3444/NS-Express-Connect>). This initial capital funding request was unsuccessful, but not without valuable lessons learned on program improvements. The initial project momentum led to the North State Express Questionnaire (Attachment A) and the North State Intercity Bus Business Plan. Information from these efforts fed into a successful 2018 Transit and Intercity Rail Capital Program award of \$8.461 million (<http://srta.ca.gov/150/Grants>).

Figure 1.1 shows the opportunity for connecting the North State and Sacramento region on the North State Intercity Bus System. In the second map, the green line represents connectivity improvements in Phase I of the project, which is detailed in this business plan. The blue line represents connectivity of Phase II of the project which will be developed after Phase I is implemented.

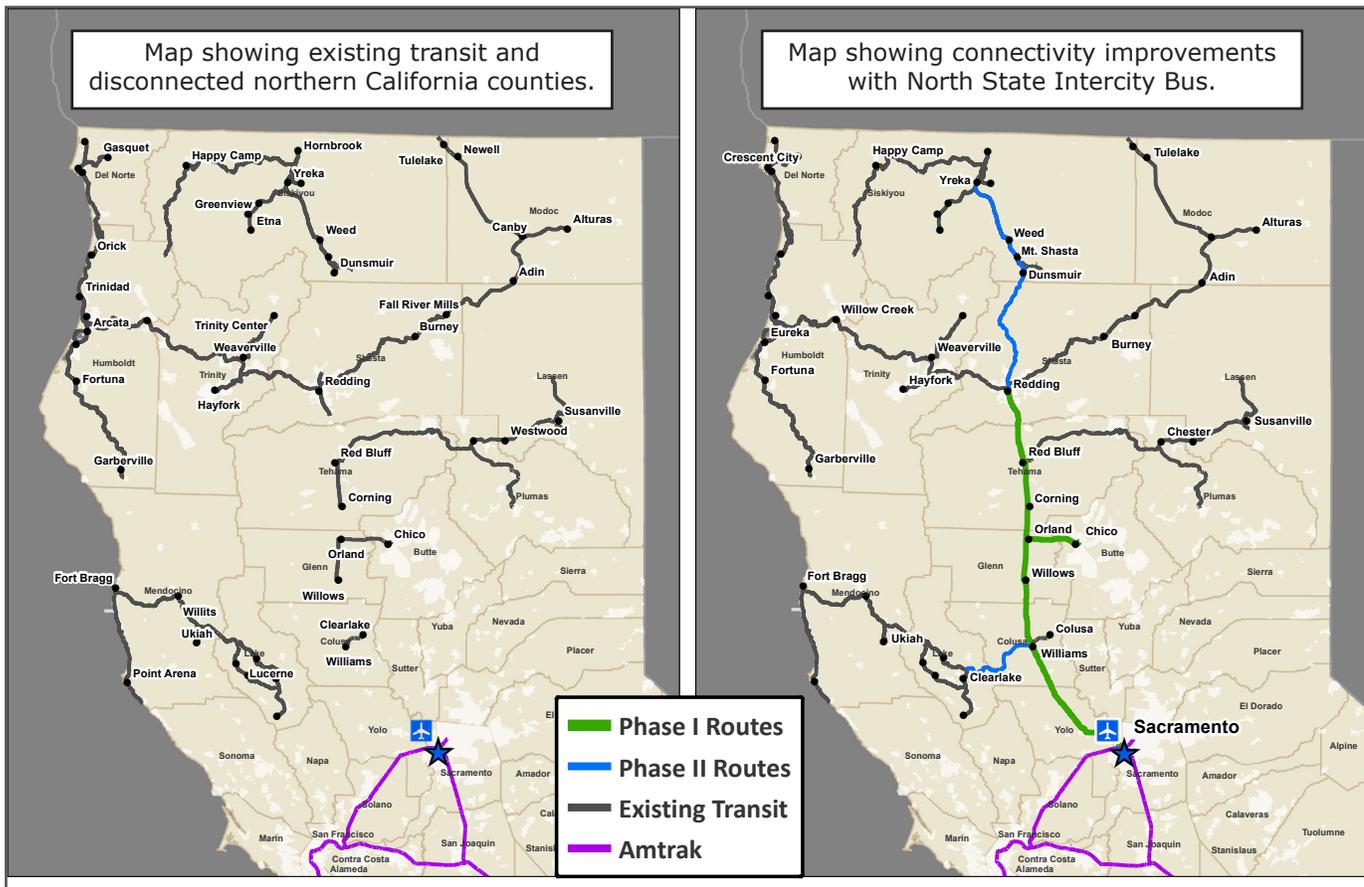


Figure 1.1: Schematic Map of North State Intercity Bus Routes

For most of the North State, Sacramento is the most convenient major urbanized area for business, commerce, high level health care, social and employment services, recreation, and connections to points beyond. According to nearly 1,000 North State residents surveyed and annual unmet transit needs reports from 14 counties, important connections in Sacramento include the San Joaquins Amtrak rail service, Capitol Corridor Amtrak rail service, and the Sacramento International Airport.

The North State Intercity Bus System will bridge Northern California’s transit connectivity gap with an intercity battery-electric bus system serving the I-5 corridor from Redding to Sacramento, supplemented by new electric feeder bus services and existing transit connections.

This project is the highest priority intercity connectivity project in the entire North State and is supported by the North State Super Region – an alliance of 16 Northern California counties. Additionally, the project was developed in cooperation with the San Joaquin Joint Powers Authority (SJJPA) because of the important symbiotic benefits of the North State Intercity Bus System and rail connectivity in Sacramento and points beyond. The North State Intercity Bus System will address I-5 corridor congestion by moving people in single-plus occupancy vehicles onto modernized electric buses, utilizing sustainable energy sources and integrated ticketing. The project will connect to regional transit and intercity rail, as well as future high-speed rail which is planned to eventually reach as far north as Sacramento. In addition to alleviating congestion, the project will help meet California’s goal of reducing greenhouse gas emissions to 40% below 1990 levels by 2030 as defined in Senate Bill 32 (2016, Global Warming Solutions Act). The use of battery-electric vehicles and sustainable power sources will ensure zero- to low-emissions for all trips.

A schematic map of the transit system is shown as Figure 1.2.

North State Intercity Bus

Schematic Transit Service Map

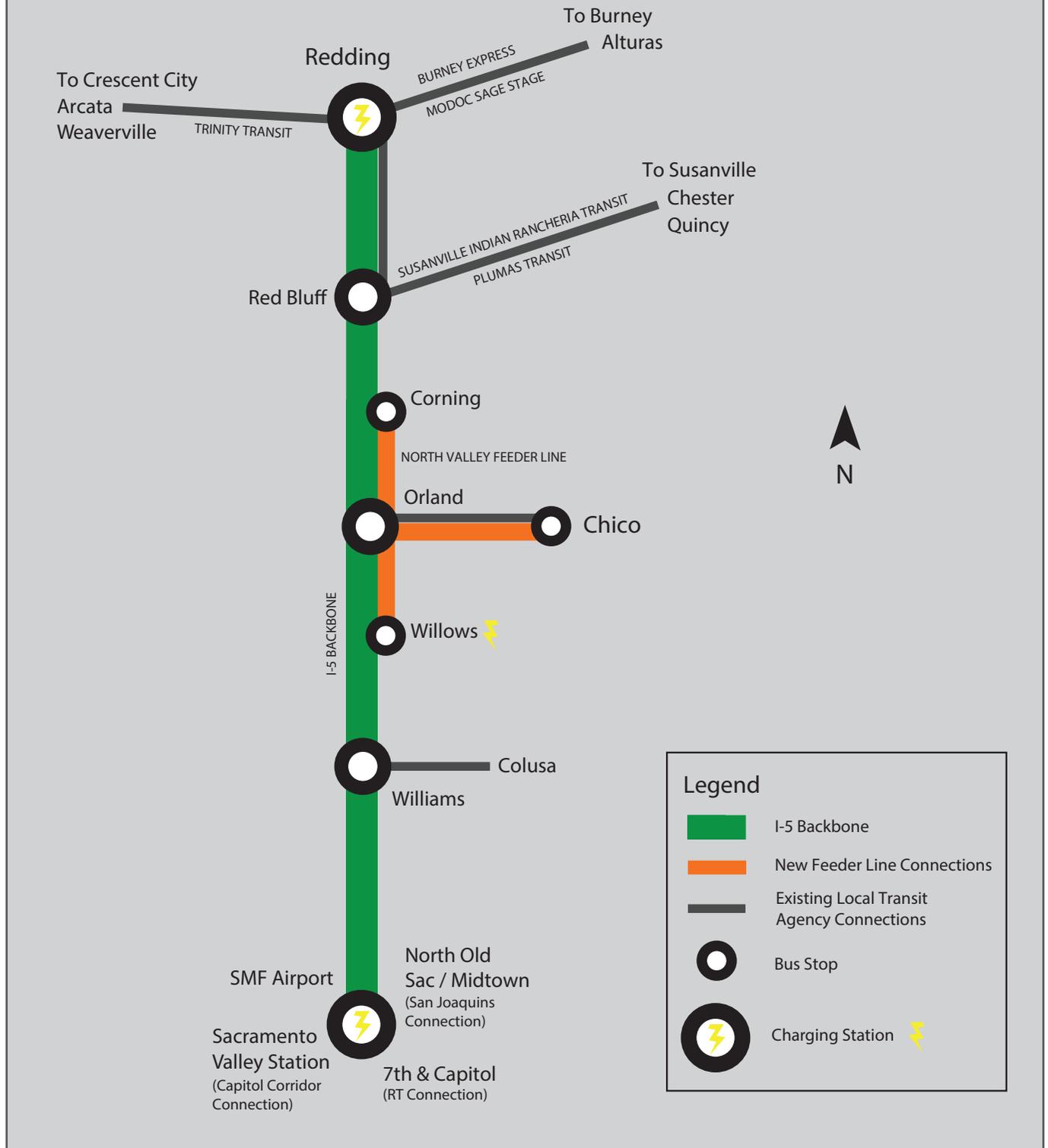


Figure 1.2: Schematic Map of North State Intercity Bus Routes

2 RIDERSHIP PROJECTIONS

Using multiple source data, including mobile source data, annual ridership for the entire system's first year is estimated to be 58,506. Annual ridership is projected to increase annually based on marketing, system familiarity, system optimization and planned expansion. The table below shows the estimated ridership at full implementation of the North State Intercity Bus System as being implemented with the I-5 Backbone and North Valley Feeder.

Route	Year 1 Ridership	Year 12 Ridership	Daily Average
<i>I-5 Backbone</i>	31,218	31,402	85.79
<i>North Valley Feeder</i>	27,288	27,450	75.00
<i>Full System</i>	58,506	58,852	161

2.1 Ridership Estimation Methodology

Ridership estimation is a challenge in areas with limited existing transit service. Therefore, a multi-pronged approach was used to predict potential ridership and determine transit service feasibility using socioeconomic adjustments (i.e. household income, population and job density, and vehicle ownership) to understand transit ridership propensity. Ridership demand was modeled considering mobile source data (Streetlight), results from North State Express Questionnaire (Attachment A), Unmet Transit Needs from 14 counties (2015-2017), community support, number of beneficiaries (ridership estimation), and partnerships with major trip generators.

In order to account for different propensities to take transit, Census data was used to understand employment mix within each destination zone. The transit mode share for trips was adjusted on earnings (1.3% for low-income, -0.1% for moderate income, and -0.5% for high income). These adjustments were developed to estimate high and low rates of transit trips per person.

A detailed methodology for ridership estimation can be found in Attachment B – Ridership Estimation Methodology.

3 OPERATING PLAN

3.1 Service Overview

The North State Intercity Bus System will directly serve eight cities in six counties, including the City and County of Sacramento. Beyond the cities and counties directly served by bus stops, the system will provide connections to nearby regions by connecting with existing local transit systems. At implementation the North State Intercity Bus System will include two routes: the I-5 Backbone and the North Valley Feeder. Each route will be operated under separate contracts. The I-5 Backbone is proposed to be operated by Shasta Regional Transportation Agency and the North Valley Feeder will be operated by Glenn Transit Service. Each agency will contract out the operations to a qualified transit operations provider. Other routes providing important connections in the North State are planned for the future, but currently do not have the capital funding. The following sections describe the operations of the North State Intercity Bus System in further detail.

3.2 Equipment Overview

3.2.1 Vehicles

The North State Intercity Bus System will use seven battery-electric buses. Each bus will be selected during the procurement process to meet the range and capacity needs of the route it serves. An overview of vehicle needs is presented in Table 3.1 and is discussed in further detail in Section 4.1: Equipment Procurement Strategies. For more information, see Attachment C – Coach and Transit Bus Facts.

Route Name	Number of Vehicles	Trip Mileage	Absolute Range Necessary	Seats	Approximate Charge Time
I-5 Backbone	5	170	238	30 +	3 hours
North Valley Feeder	2	140	196	20 +	2 hours, 20 minutes

The I-5 Backbone will use five 40+-foot buses, with three vehicles charging in Redding each night and two charging in Sacramento. The North Valley Feeder will use two smaller transit vehicles with a higher mileage range.

3.2.2 Charging Equipment

Two main types of charging stations are currently available in the industry: plug-in depot charging stations and opportunity charging stations. Table 3.2 shows the general charging needs for the North State Intercity Bus System.

Route Name	General Location	Charger Type	Voltage Requirement	Kilowatt Requirement	Estimated Charge Time
I-5 Backbone	RABA Maintenance Yard	Depot Charger	480v	450kW	3.5 Hours
I-5 Backbone	SacRT (N & 29th Street)	Depot Charger	480v	450kW	3.5 Hours
I-5 Backbone	Redding Downtown Transit Center	Opportunity Charger	480v	550-1000kW	5-15 Minutes
North Valley Feeder	Glenn County Maintenance Yard	Depot Charger	480v	450kW	3.5 Hours

Plug-in depot charging stations will be located in Sacramento, Redding, and Willows. Plug-in depot charging stations deliver a full charge over approximately two to three hours, depending on the vehicle's battery capacity, charging capacity, and miles driven. These charging stations must be located in secure areas where the public is not exposed to tripping hazards and electric infrastructure.

Opportunity charging stations provide vehicles with a fast charge at convenient locations such as curbside bus stops and transit centers. Opportunity charging stations have rooftop or undercarriage connections for charging and can boost range at approximately 45 miles with 15 minutes of charging. This charging infrastructure can be operated directly at transit stops and layover locations.

3.2.3 Renewable Energy Infrastructure

A priority and a goal of SRTA and the North State Super Region is to run the North State Intercity Bus System carbon-free or near carbon-free. To achieve this goal a solar array will be installed in Redding and renewable energy will be purchased for charging needs in Sacramento and other sites where solar arrays cannot be installed.

3.3 Service Locations

The following sections describe the type and location of operation facilities serving the North State Intercity Bus System. Each facility is unique regarding the services and amenities provided since they are located at existing developed properties such as an existing transit center, hotel, or retail use. Each of these service locations will be operated via a partnership agreement between the property owner, business proprietor, and SRTA.

3.3.1 Bus Stops

The North State Intercity Bus System includes stops at 11 locations in eight cities. Bus stops include facilities where customers may disembark to transfer to another bus. Some bus stops are co-located with amenities such as food services and retail. Below is a list of all bus stops currently proposed within the North State Intercity Bus System. A full description of each stop is provided in Attachment D.

I-5 Backbone

- Redding Downtown Transit Center
- Red Bluff
- Orland
- Williams
- Sacramento International Airport
- 7th Street and Capitol Mall
- Sacramento Valley Station
- Future North Old Sacramento/Midtown (proposed future station for the San Joaquins service)

North Valley Feeder

- Corning
- Orland
- Chico
- Willows

3.3.2 Charging Stations

The I-5 Backbone and North Valley Feeder require layover and overnight charging. Two charging locations have been identified as suitable for the I-5 Backbone and one location for the North Valley Feeder. The Redding Downtown Transit Center and Sacramento Valley Station are key locations for opportunity charging stations.

1. I-5 Backbone – Redding

Redding Area Bus Authority (RABA) maintenance facility-333 South Market Street, Redding, CA 96001.

2. I-5 Backbone – Sacramento options

Sacramento Regional Transit (SacRT) vehicle storage yard-N and 29th Streets, Sacramento, CA 95811

Or a future Bus Layover Facility in the City of Sacramento long range plans-either near W and 5th Streets under Highway 50 or in the Sacramento Railyards Plan Area adjacent to the Sacramento Valley Station.

3. North Valley Feeder-Willows

Glenn County maintenance yard-777 Colusa Street, Willows, CA 95988.

Infrastructure upgrades are needed at the proposed charging locations to accommodate the system power needs. In addition to transformer upgrades that can provide the 480V service, third party upgrades related to switchboards, distribution panels, and conduits and wire are also needed.

The following sections discuss each bus stop and layover charging location in more detail.

3.3.3 Bus Storage, Maintenance and Charging Locations

RABA Maintenance Facility and Downtown Transit Center

The Redding-based I-5 Backbone vehicles will be cleaned, serviced, and charged at the RABA Maintenance Facility. The RABA Maintenance Facility will include two plug-in depot charging stations. The Redding Downtown Transit Center may have an opportunity charging station.

Both RABA locations have a service voltage of 208V. The Redding Electric Utility (REU) can upgrade the transformers to accommodate the required 480V service voltage and kilowatts (kW), however, this will affect the currently-installed infrastructure at the sites. REU has recommended that an additional transformer be installed at both sites to serve the new charging load requirements. Transformer upgrade costs are identified in the project budget at approximately \$25,000 per installation. In addition to this charge, third party contractors will need to install switchgear, panels, conduits and wire to accommodate the charging station installation.

Sacramento Regional Transit (N and 29th Streets)

The Sacramento-based I-5 Backbone vehicles will be cleaned, serviced, and charged at the Sacramento Regional Transit Maintenance Facility. Two plug-in depot charging stations will likely be installed at the Maintenance Facility.

SacRT has the kilowatt capacity (1000kW), but not the voltage capacity (480V) available at their transit site under the Capitol City Freeway. The current infrastructure has been dimensioned to satisfy the need for the CNG compressor that fuels their fleet of vehicles but would need upgrades to charge the new electric vehicles. According to the local power provider, Sacramento Municipal Utility District (SMUD), the minimum cost for upgrading and accommodating charging station installation at this location is \$200,000.

Glenn County Maintenance Yard

North Valley Feeder vehicles will be charged, cleaned and serviced at the Glenn County Maintenance Yard in Willows. Two plug-in depot charging stations will be installed at the Glenn County Maintenance Yard to serve the North Valley Feeder. The local utility provider (Pacific Gas & Electric) required an application for new power service to explore the upgrade requirements of this location. This application is being developed and charging infrastructure upgrades will be detailed upon availability.

3.4 Service Schedule

The schedule for the North State Intercity Bus System optimizes passenger convenience, operational efficiency, and vehicle charging requirements. Additionally, the schedule has been designed to coordinate with local transit system connections as well as passenger rail connections in Sacramento. The following sections discuss the timetables of the I-5 Backbone and North Valley Feeder. Timetables are read from the top-down and all times are departures unless noted as arrivals. Figure 3.1 shows the logistics of the system which drive the details of the service schedule.

NORTH STATE INTERCITY BUS SYSTEM

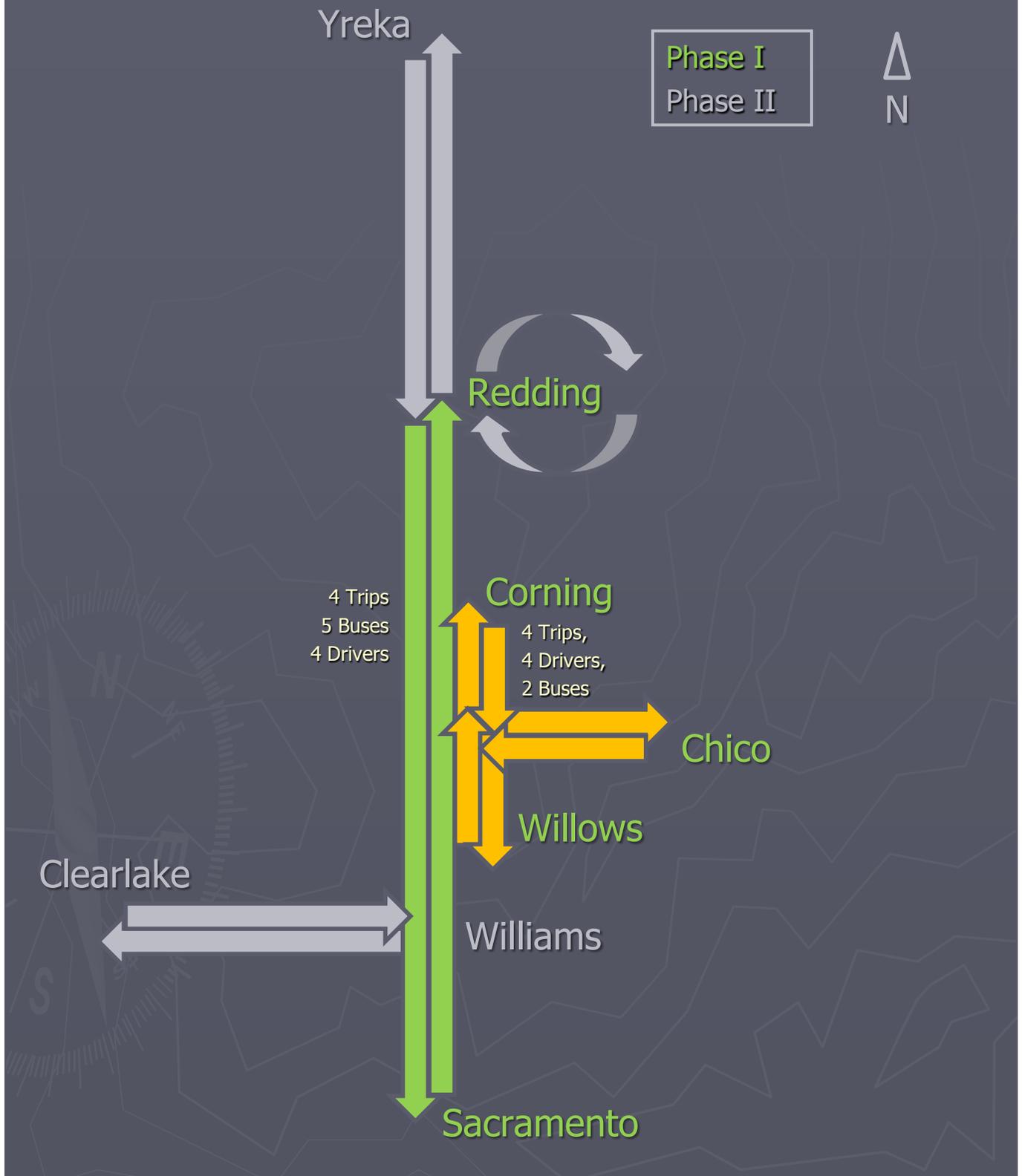


Figure 3.1: North State Intercity Bus Route Details

3.4.1 I-5 Backbone

The I-5 Backbone is the central route of the North State Intercity Bus system. The I-5 Backbone connects Redding and Sacramento, while also tying together the North Valley Feeder and existing transit connections.

The I-5 Backbone completes four round trips daily, as shown in Table 3.3. Departure times are aligned to allow connections to and from the San Joaquins and Capitol Corridor rail services in Sacramento, as shown by the boxes with blue and red outlines in Table 3.5. Results of the North State Express Questionnaire indicated that residents of Northern California communities preferred to make trips to Sacramento that begin before 11 AM and return trips departing from Sacramento in the afternoon and evening.

Table 3.3					
I-5 Backbone Timetable					
Southbound					
		Trip 1	Trip 2	Trip 3	Trip 4
Redding	Downtown Transit Center	5:01 AM	7:31 AM	10:28 AM	5:28 PM
Red Bluff	Hampton Inn & Suites/Holiday Inn Ex	5:31 AM	8:01 AM	10:58 AM	5:58 PM
Orland	CVS	6:06 AM	8:36 AM	11:33 AM	6:33 PM
Williams	SR 20 or E Street Site	6:53 AM	9:23 AM	12:20 PM	7:20 PM
Sacramento	Sacramento International Airport	7:46 AM	10:16 AM	1:13 PM	8:13 PM
	7 th & Capitol Stop	8:08 AM	10:38 AM	1:35 PM	8:35 PM
	Sacramento Valley Station	8:20 AM	10:50 AM	1:47 PM	8:47 PM
Northbound					
		Trip 1	Trip 2	Trip 3	Trip 4
Sacramento	Sacramento Valley Station	5:00 AM	11:35 AM	3:45 PM	7:30 PM
	7 th & Capitol Stop	5:12 AM	11:47 AM	3:57 PM	7:42 PM
	Sacramento International Airport	5:34 AM	12:09 PM	4:19 PM	8:04 PM
Williams	SR 20 or E Street Site	6:27 AM	1:02 PM	5:12 PM	8:57 PM
Orland	CVS	7:14 AM	1:49 PM	5:59 PM	9:44 PM
Red Bluff	Hampton Inn & Suites/Holiday Inn Ex	7:49 AM	2:24 PM	6:34 PM	10:19 PM
Redding	Downtown Transit Center (arrives)	8:19 AM	2:54 PM	7:04 PM	10:49 PM

Figure 3.2 provides a logistical overview of movement of the I-5 Backbone vehicles and drivers.

NORTH STATE EXPRESS INTERCITY BUS SYSTEM

I-5 Backbone

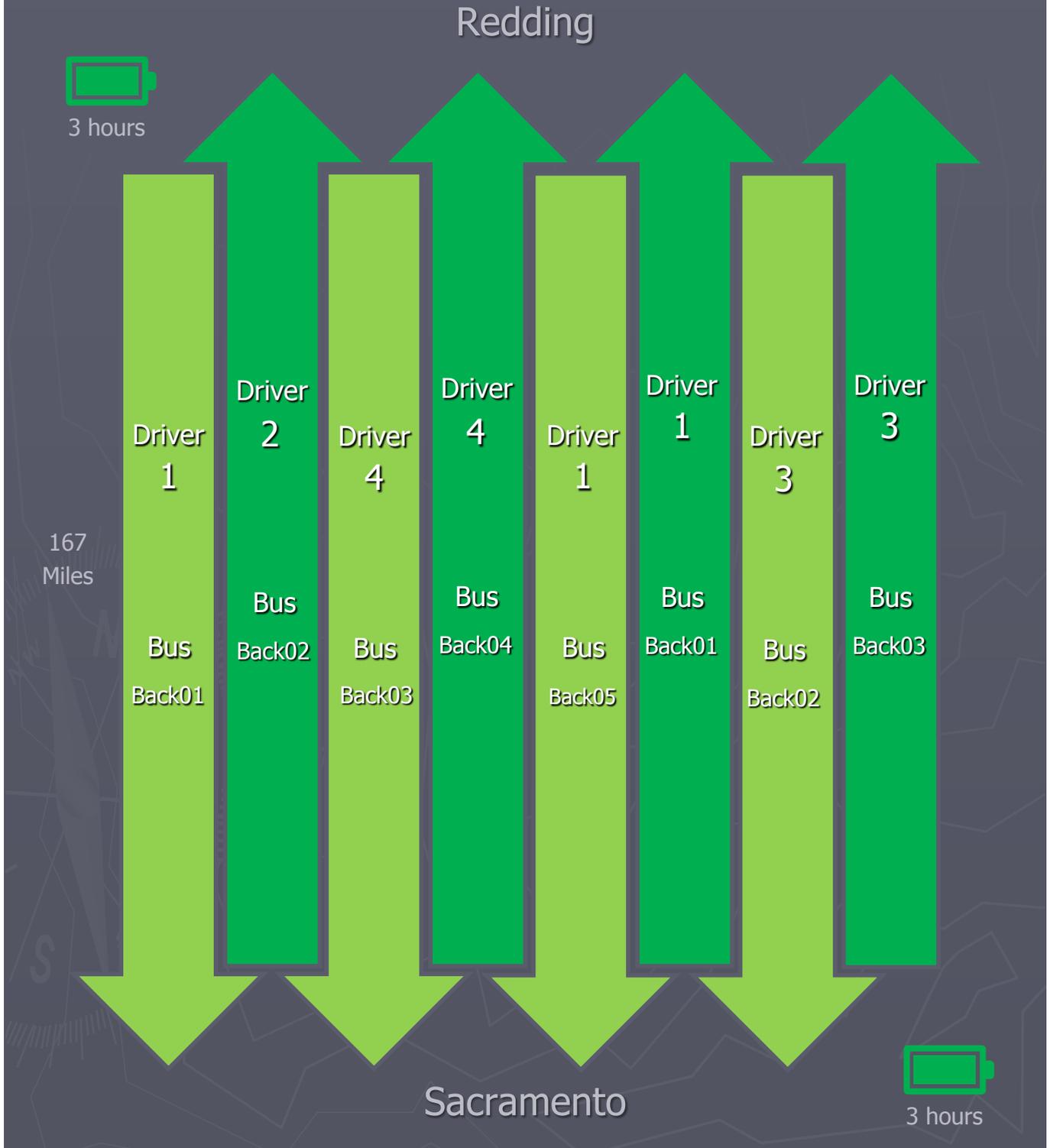


Figure 3.2: I-5 Backbone Route Details

3.4.2 North Valley Feeder

The North Valley Feeder runs in a “double L” configuration between Willows, Corning, and Chico. Buses charge at the Glenn County Maintenance yard in Willows, and each route begins and ends at the Willows Walmart. The total distance of the route is approximately 140 miles.

The North Valley Feeder schedule is coordinated to provide riders from Chico with a simple connection to the I-5 Backbone by minimizing wait times. Glenn Ride would continue operating its gasoline fueled vehicles in the gaps between this schedule or could interline with the North Valley Feeder schedule.

Table 3.4 displays the trip schedule for the North Valley Feeder and Figure 3.3 illustrates the vehicle movements, distances and charging location.

Table 3.4					
North Valley Feeder Timetable					
Southbound					
		Trip 1	Trip 2	Trip 3	Trip 4
Corning	Transportation Center	6:33 AM	9:08 AM	4:28 PM	9:23 PM
Orland	9th Street / Walker	6:57 AM	9:32 AM	4:52 PM	9:47 PM
Chico	Greyhound / Amtrak Station	7:34 AM	10:09 AM	5:29 PM	10:24 PM
Orland	9th Street / Walker	8:11 AM	10:46 AM	6:06 PM	11:01 PM
Willows	Walmart (arrives)	8:27 AM	11:02 AM	6:22 PM	11:17 PM
Northbound					
		Trip 1	Trip 2	Trip 3	Trip 4
Willows	Walmart	4:25 AM	7:00 AM	2:20 PM	7:15 PM
Orland	9th Street / Walker	4:48 AM	7:23 AM	2:43 PM	7:38 PM
Chico	Greyhound / Amtrak Station	5:25 AM	8:00 AM	3:20 PM	8:15 PM
Orland	9th Street / Walker	6:02 AM	8:37 AM	3:57 PM	8:52 PM
Corning	Transportation Center	6:26 AM	9:01 AM	4:21 PM	9:16 PM

NORTH STATE EXPRESS INTERCITY BUS SYSTEM

North Valley Feeder Line

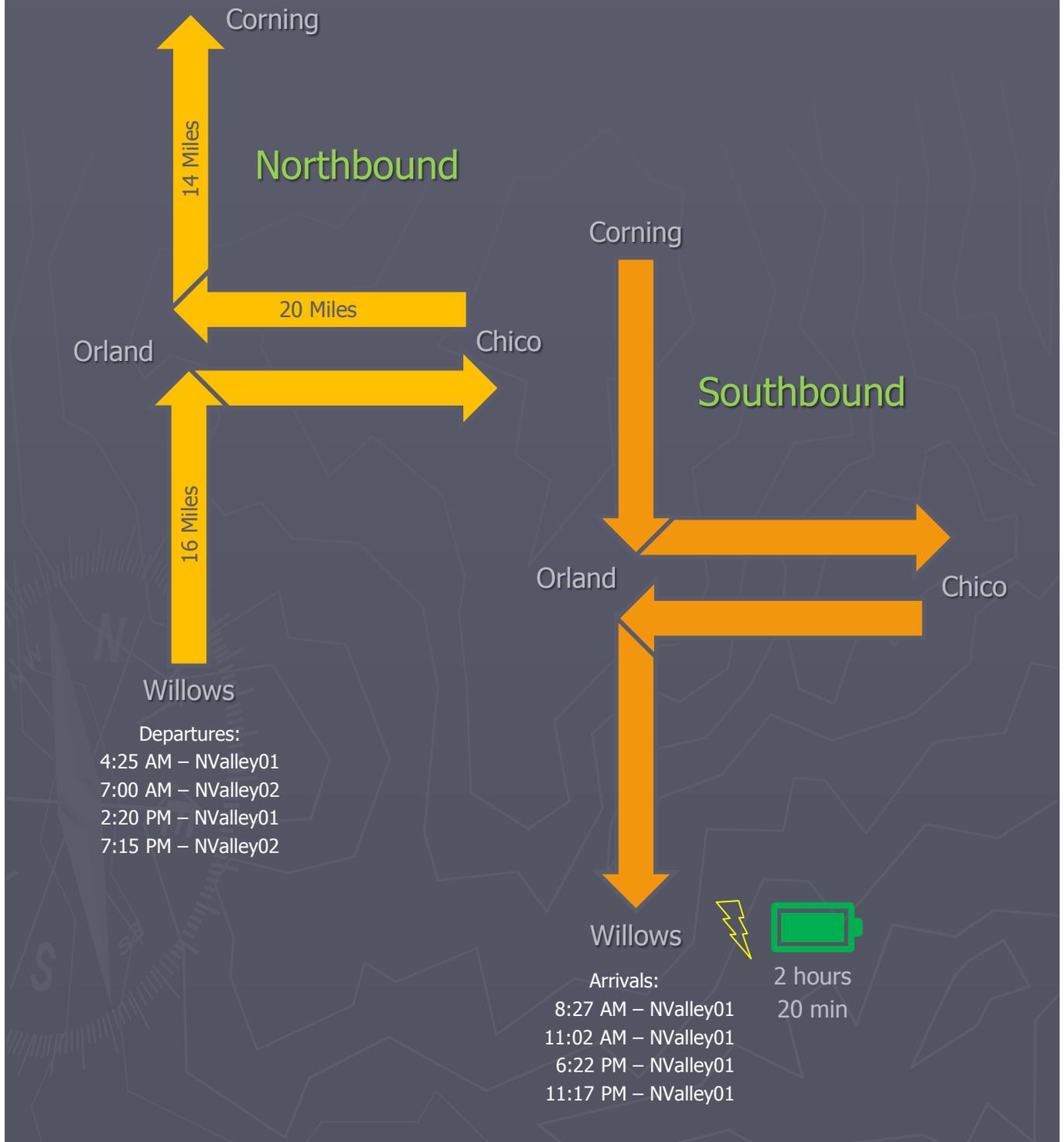


Figure 3.3: North Valley Feeder Route Details

3.5.2 Airports

Sacramento International Airport (SMF)

The Sacramento International Airport (SMF) is the most convenient international airport for residents of Northern California. SMF provides national and international flight service. Currently, there are few available options for reaching SMF other than by personal automobile. Options include the indirect Amtrak Coast Starlight which takes 5+ hours and departs Redding at 2:00 AM, or a private shuttle service which cost over \$100. The North State Intercity Bus Service I-5 Backbone will stop at SMF eight times each day – four stops in each direction and cost \$20 one way. Providing this connection will make travel more accessible for Northern California residents.

Redding Municipal Airport

Redding Municipal Airport is located 6 miles southeast of Redding and offers six daily flights to San Francisco on United Airlines. The Redding Area Bus Authority offers service to the airport via the Airport Express bus service, which runs from the Canby Transfer Center several times a day. Connections from the North State Intercity Bus can be made from the Redding Downtown Transit Center.

3.5.3 California High Speed Rail (HSR)

The I-5 Backbone will connect to High Speed Rail in Sacramento. Phase 1 of HSR will connect San Francisco to Los Angeles by 2029, followed by a Phase 2 connection to Sacramento. When Phase 1 is complete, North State Intercity Bus travelers can connect to HSR in Merced by taking the San Joaquins train from Sacramento. HSR opens the possibility for fast connections from the North State to Los Angeles and the rest of Southern California.

3.5.4 Local Transit Systems

The North State Intercity Bus System is coordinated with several local transit agencies throughout Northern California to ensure efficient connections. The North State Intercity Bus System is anticipated to improve connecting transit systems by attracting new riders and related revenue. See Attachment E for detailed information about each local transit system connected to the North State Intercity Bus System.

4 SERVICE EQUIPMENT

4.1 Equipment Procurement Strategies

The North State Intercity Bus System requires seven buses and at least three charging locations. Various vehicles and charging stations will be purchased to meet the needs of each route. The I-5 Backbone will require five coach-style buses, which include space for storing luggage and other convenient amenities, described in section 5: Service Amenities. The North Valley Feeder will likely use low-floor traditional transit buses with a slightly lower seating capacity. Three service locations will require plug-in depot charging stations, which deliver a standard charge to buses and are generally located at vehicle storage or maintenance yards.

4.1.1 Vehicles

Several manufacturers are building or developing electric-powered buses with high range and seating capacity. Table 4.1 – Bus Specifications displays the specifications of buses that fit the needs of the North State Intercity Bus and are eligible for vouchers through California’s Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP). The HVIP program is an important component to the capital outlay plan for this project.

Table 4.1

BUS SPECIFICATIONS

Name	Length (feet)	Body Type	Seats	Stated Max Range (miles)	Max Speed	Full Charge Time (hrs)	Miles Replenished / 5 minutes	Charging Capacity	Battery Capacity (kwh)	Ideal for Route(s):
GreenPower EV550	45	Double Decker	100	240					478	Backbone
Proterra Catalyst 40ft	42.5	Transit	40	55 to 426	65	1 to 4.5	5 to 6	120	660	Backbone, NV Feeder
BYD 40 ft K9	40.9	Transit	41	255	62	2.5		80 kw	500	Backbone, NV Feeder
BYD 45 ft C10	45.4	Coach	57	200	68.4	1-1.5		300 kW	394	NV Feeder
BYD K9 35-ft	35.8	Transit	32	230	62	3-4 hrs		80 kw	350	NV Feeder
Proterra Catalyst 35ft XR+	35	Transit	28	193 to 235	65	2.5	5	110	330	NV Feeder
Proterra Catalyst 35ft E2	35	Transit	28	251 to 302	65	3	6	120	440	NV Feeder

Note: BYD specs sourced from "Tech Specs" brochures. 2016 model tech specs listed on BYD website vary from these.

Range and charging specifications of Proterra and BYD buses were used for planning purposes because of the eligibility of these vehicles for the HVIP voucher, as well as their ability to meet system range requirements. Vehicles used in the actual system will be determined during the procurement process.

4.1.2 Vehicle Recommendations

The following vehicles meet the needs of either the I-5 Backbone or North Valley Feeder route and are detailed in Table 4.1 – Bus Specifications. More options will likely be available when vehicles are purchased.

The I-5 Backbone will require a coach or large-capacity bus with a range of at least 238 miles. The Proterra Catalyst 40-foot bus is a potential option for the I-5 Backbone due to its seating capacity and stated range of up to 426 miles. The BYD K9 40-foot offers a similar seating capacity and a stated range of 255 miles. GreenPower offers a double decker bus with 100 seats and a stated range of 240 miles.

The North Valley Feeder will likely use an approximately 35-foot transit bus with a range of at least 196 miles, such as the Proterra Catalyst 35-foot. The Proterra Catalyst 35-foot seats 28 and is available in various options, and can reach a stated maximum range of 302 miles with the E2 model. Another viable option is BYD's K9 35-foot seats 32 and features a stated range of 230 miles.

4.1.3 Charging Infrastructure

Plug-in depot charging stations will be located in Sacramento, Redding, and Willows. Plug-in depot charging stations will be located at vehicle maintenance yards (Section 3.3.3) and will re-charge vehicle batteries completely over a period of approximately three and a half hours.

An opportunity charging station may be installed in Redding at the Downtown Transit Center. The opportunity charging station at the Downtown Transit Center would provide the I-5 Backbone vehicles with an extra mileage capability while laying over or boarding.

One equipment provider being explored is Proterra, who manufactures all facets of electric bus equipment including the bus, battery, and charging equipment. Proterra manufactures plug-in depot charging stations as well as overhead opportunity charging stations. Proterra manufactures overhead fast-chargers with the capacity to replenish 12-15 miles for every five minutes of charging, as shown in Figure 4.1. Assisted automatic docking uses wireless communications to govern the speed and stop location of the bus and connects the charger with no input required from the driver, making it simple and safe. Opportunity charging methods are designed to avoid public interaction with charging equipment for safety reasons.



Figure 4.1: Proterra Overhead Fast-Charger

4.1.4 Solar Infrastructure

A goal of SRTA and Glenn Transit Service is to run the North State Intercity Bus System carbon-free. To achieve this goal, solar arrays will be installed in Redding and renewable energy will be purchased for charging needs in Sacramento. The I-5 Backbone buses will be charged in Redding where Redding Electric Utility’s (REU) current resource mix is approximately 60% carbon-free, as shown in the following pie chart. In addition to REU’s resources, the project has received capital funding for solar arrays to be installed in Redding to offset remaining battery-electric bus charging needs (see Attachment J).

Table 4.2				
MAINTENANCE COSTS				
Budget Item	I-5 Backbone	North Valley Feeder	Annual Total	12-Year Total
Cost (\$/mile)	\$ 0.60	\$ 0.60		
Mileage/year	484720	145600		
Bus Maintenance Warranty	\$ 290,832	\$ 87,360	\$ 378,192	\$ 4,538,304

Figure 4.2: REU Power Resource Mix

For charging needs in Sacramento, SRTA intends to buy into Sacramento Municipal Utility District’s (SMUD) SolarShares Program. This program will allow the buses to run on currently available solar energy without needing to develop a new solar array.

4.2 Equipment Maintenance

Vehicles will require ongoing maintenance. Cost of maintaining vehicles is estimated to be \$0.60 per mile, totaling approximately \$381,936 annually for the entire system. This figure is based on total annual operating miles of the system, as shown in Table 4.2.

Table 4.2				
MAINTENANCE COSTS				
Budget Item	I-5 Backbone	North Valley Feeder	Annual Total	12-Year Total
Cost (\$/mile)	\$ 0.60	\$ 0.60		
Mileage/year	484720	145600		
Bus Maintenance Warranty	\$ 290,832	\$ 87,360	\$ 378,192	\$ 4,538,304

4.3 Useful Life of Equipment

The useful life of the proposed buses is 12 years or 750,000 miles. Below is a cost comparison of the lifetime costs of electric buses compared to regular diesel fueled buses.

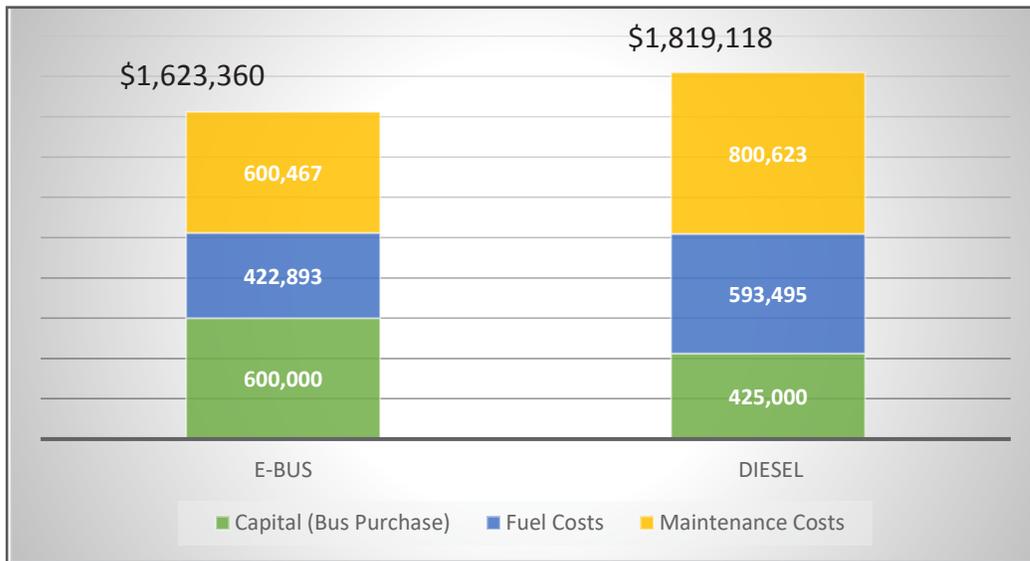


Figure 4.3: Approximate costs of Electric vs Diesel buses

The battery is the most vulnerable component of an electric bus, but is rapidly improving through technological advances. The battery is also easy to replace, and manufacturers offer an array of battery and leasing options to ensure vehicles utilize all of the battery useful life. Funding for replacement is discussed in further detail in Chapter 8: Budget.

5 SERVICE AMENITIES

5.1 Vehicle Amenities

Many amenities are available to improve passenger and driver safety and comfort. Some questions in the North State Express Questionnaire were developed to help understand what amenities future passengers desired. Below is a list of amenities recommended by future riders. Most of these amenities are available on buses from major bus manufacturers, but specifics will be defined at the vehicle procurement stage.

- Interior Bike Racks
- Monitors
- Security Cameras
- Bus Tracking Hardware/Software
- WiFi
- Electrical Outlets and USB Ports
- Window Tinting
- Reclining Seats
- Folding Armrests and Footrests
- Retractable Window Shades
- Interior Overhead Storage
- Individual Overhead Air Flow Control
- Individual Overhead Reading Lights
- Premium Sound System with Microphone
- Full Service Lavatory
- Tables
- Refreshment Bar
- Extra-Large Capacity Storage Bays Under Bus
- Water, Ice and Cups by Request
- Service Animal Access

Buses will be equipped with accommodations for individuals with disabilities such as wheel chair lifts or ramps, regulation tie downs, designated seating sections, and bus drivers trained in serving riders with disabilities.

5.2 Station Amenities

Station amenities vary by location. The majority of North State Intercity Bus System stop locations are located at businesses and existing transit bus stops. All stops will feature shelter, seating, trash cans, safety lighting, system information kiosks, and accessibility for persons with disabilities. Parking lots and sidewalks will be illuminated with appropriate light fixtures for safety and security. Many service stops are intentionally located in locations with access to restrooms, climate controlled waiting area, water, and food at nearby businesses.

For more detailed information regarding each service stop, see Section 3.2: Service Locations and the Transit Stop Location Information Sheets located in Attachment D.

The model for this analysis is based on forecasted ridership by route (see Attachment B - Ridership Estimation Methodology Memo). The model assumes a base fare of \$15 for the I-5 Backbone and \$5 for feeder services, without a transfer discount. Passengers using both feeder and the I-5 Backbone to complete their trip would pay both fares for a total of \$20. This base fare was chosen in relation to the next best alternative for travel; Amtrak tickets are generally \$27 when purchased in advance. Discounts may be available for students and honored citizens (seniors, persons with disabilities, and veterans), and a fare cap or earned pass system may be offered.

Attachment F discusses ticketing and fare structure in further detail.

7 MARKETING STRATEGIES

7.1 Launch Marketing

SRTA and Glenn Transit Agency will kick off the North State Intercity Bus System with an integrated outreach campaign that introduces the connectivity improvements, economic opportunities, and environmental benefits of the system. A professional marketing approach will be solicited from qualified firms to assist with launch and ongoing marketing. The solicited approach will include graphic design and branding for buses, stop location signs, route guides, website, media platforms and marketing materials. In addition, advertising via radio and television interviews, stakeholder presentations, community event presence and other creative methods will take place. Marketing will be done well in advance of the service kickoff date to encourage immediate ridership.

7.2 Ongoing Marketing

In addition to launch marketing, the North State Intercity Bus will utilize ongoing marketing strategies to sustain ridership. Ongoing marketing will be developed with the guidance from qualified marketing firms. SRTA will provide updates and news about the North State Intercity Bus through the social media platforms established during the launch. On-board advertising will be used to continuously promote the North State Intercity Bus. Printed route maps may be available on board. Exterior branding will also promote the system.

7.3 Vouchers and Incentive Programs

It is anticipated that vouchers will be offered in the initial stages of implementation of the system. Vouchers will be offered to individual users and groups that will likely find value in the new bus system. Free rides on the system will give passengers first-hand experience at the convenience and efficiency of the system and encourage them to continue using it. Potential users would include regular southbound commuters to SMF or Sacramento such as government and tech industry employees who regularly meet in Sacramento. Incentives would also include partnering with airlines flying out of Redding and Sacramento for passengers coming from rural communities in the North State Intercity Bus service area.

Other North State counties may consider involvement in the voucher program. SRTA will take guidance from the selected marketing professional once the solicitation and contracting process has been complete.

8 BUDGET

8.1 Capital Costs

The total capital costs for the North State Intercity Bus System is currently estimated at \$9,515,790 with the program launch planned in November 2019. Capital costs are presented in Table 8.1.

Budget Item	I-5 Backbone	North Valley Feeder	Total
Battery Electric Buses	\$ 3,750,000	\$ 1,200,000	\$ 4,950,000
Depot Charging	\$ 160,000	\$ 40,000	\$ 200,000
Opportunity Charging Station (en-route)	\$ 50,000	\$ 25,000	\$ 75,000
Transformer Install	\$ 325,000	\$ 200,000	\$ 525,000
Bringing Power to Site	\$ 20,000	\$ -	\$ 20,000
Solar Installation	\$ 978,000	\$ -	\$ 978,000
Vehicle Amenities (2.5)	\$ 550,000	\$ 220,000	\$ 770,000
Energy Costs		\$ 62,254	\$ 62,254
Bus Maintenance Warranty	\$ 290,832	\$ 91,104	\$ 381,936
Ticketing Equipment Costs	\$ 84,500	\$ 89,300	\$ 173,800
Land Lease	\$ 26,400	\$ -	\$ 26,400
Site Maintenance Cost	\$ 48,000	\$ -	\$ 48,000
Performance Monitoring (5)	\$ 50,000	\$ -	\$ 50,000
Launch Marketing	\$ 218,400	\$ 30,000	\$ 248,400
Signage/Wayfinding	\$ 50,000	\$ 25,000	\$ 75,000
Discounted Rider Passes	\$ 58,400	\$ 41,600	\$ 100,000
Passenger Parking	\$ -	\$ 2,500	\$ 2,500
Land Lease	\$ -	\$ 5,000	\$ 5,000
Transit Shelters	\$ -	\$ 10,000	\$ 10,000
Project Planning	\$ 31,050	\$ 36,450	\$ 67,500
Environmental Review	\$ 8,280	\$ 9,720	\$ 18,000
Consultant Selection	\$ 4,600	\$ 5,400	\$ 10,000
Partnership Agreements	\$ 44,160	\$ 51,840	\$ 96,000
Program Administration	\$ 286,580	\$ 336,420	\$ 623,000
Total Capital Costs	\$ 7,034,202	\$ 2,481,588	\$ 9,515,790

A portion of the capital revenue needs for the project will come from the Hybrid and Zero Emission Truck and Bus Voucher Incentive Program (HVIP) in the amount of \$875,000 based on vouchers for seven vehicles at approximately \$125,000 per vehicle. This leaves a capital purchase need of \$8,634,488. The Shasta Regional Transportation Agency was awarded \$8,641,000 in funding from the Transit and Intercity Rail Program in April 2018 for the capital costs.

A complete capital and operating budget can be found in Attachment G.

8.2 Vehicle Replacement

As vehicles in the fleet age, transit agencies will need to plan for replacement. The feeder vehicles are unlikely to exceed one million miles in the first 12 years, which is the maximum lifetime recommended mileage for these vehicles. The bus manufacturers recommend replacement at 12 years or 750,000 miles, so it is recommended that both North Valley Feeder vehicles be replaced at that threshold. The I-5 Backbone travels a total of 484,720 annually between the five available vehicles. The fleet was analyzed based on shifting individual vehicle use to different percentages by year. Additionally, maximum lifetime mileage may vary by bus manufacturer and the vehicle replacement plan may need adjusting following the procurement process.

The following table shows the recommended replacement year of individual vehicles.

Table 8.2

Vehicle ID	Annual Miles/System	% of annual miles	Annual Miles/Vehicle	Year 1	Year 2	Year 3	% of annual miles	Year 4	Year 5	Year 6	% of annual miles	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Back01	484720	30%	145,416	145,416	290,832	436,248	15%	508,956	581,664	654,372	20%	72,708	169,652	266,596	363,540	460,484	557,428
Back02		30%	145,416	145,416	290,832	436,248	15%	508,956	581,664	654,372	20%	72,708	169,652	266,596	363,540	460,484	557,428
Back03		15%	72,708	72,708	145,416	218,124	25%	339,304	460,484	581,664	20%	678,608	96,944	193,888	290,832	387,776	484,720
Back04		15%	72,708	72,708	145,416	218,124	25%	339,304	460,484	581,664	20%	678,608	96,944	193,888	290,832	387,776	484,720
Back05		10%	48,472	48,472	96,944	145,416	20%	242,360	339,304	436,248	20%	533,192	630,136	96,944	193,888	290,832	387,776
		100%					100%				100%						
NValley01	145600	50%	72,800	72,800	145,600	218,400		291,200	364,000	436,800		509,600	582,400	655,200	728,000	800,800	873,600
NValley02		50%	72,800	72,800	145,600	218,400		291,200	364,000	436,800		509,600	582,400	655,200	728,000	800,800	873,600

Replacement target of 750,000 miles based on Proterra performance and durability documentation, 2017.

The capital costs for the I-5 Backbone vehicle replacement using this transfer of vehicle service strategy will be \$1.5 million for two vehicles in year six of service and another \$1.5 million in year seven. One more vehicle will need replacing in year eight for \$750,000.

The capital costs for the North Valley Feeder vehicle replacement will be \$1,200,000 at year 12.

8.3 Operational Costs

Annual operating costs of the I-5 Backbone and North Valley Feeder Service is projected to be \$1,178,431 annually. See the following operating cost summary:

Table 8.3 ANNUAL OPERATING COSTS			
Budget Item	I-5 Backbone	North Valley Feeder	Total
Operating Costs	\$ 675,077	\$ 416,100	\$ 1,091,177
Energy Cost (vehicle charging)	\$ -	\$ 62,254	\$ 62,254
Ticketing Admin (annual license fee)	\$ 2,500	\$ 2,500	\$ 5,000
Ongoing Marketing	\$ 10,000	\$ 10,000	\$ 20,000
	\$ 687,577	\$ 490,854	\$ 1,178,431

The project will operate using funding resources shown in Attachment G-North State Intercity Bus Service Budget. The project recognizes a fully funded annual operations budget based on the I-5 Backbone and North Valley Feeder being implemented and adding riders to the system. The system functions best as a whole for budgetary purposes and for GHG reduction efficiencies. Any reduction in these projections will be compensated with a Transportation Development Act (TDA) Loan Fund held by the Shasta Regional Transportation Agency and local (TDA) funds (or other) for the feeder services.

8.4 Funding Resources

The project would not be possible without TIRCP funding of the start-up costs and the use of zero emission buses and solar support which minimizes operation costs. Committed and potential fund sources are described as follows:

FTA 5311(f). Federal Transit Administration 5311(f) funds are particularly well-suited for this service because they are designed for rural intercity connections. However, funds are limited and currently committed to other rural needs. Caltrans and FTA are interested in realigning the program to encourage a better coordination and efficiency with the limited funds available. The project aligns well with these goals and the North State Super Region agencies intend to work with the state and FTA to improve the funding program.

Additional State Support for Rail Connections. The state is desirous of realigning the old mechanisms for intercity bus service support to rail. Promising new delivery methods include broader partnerships with local transit agencies and universal ticketing and revenue sharing. Due to the geographic scale of the proposed project, the North State Super Region is desirous of developing a direct partnership with the state as it makes little sense to pin the new service to a single JPA rail provider that does not represent or include members of the North State. The potential for rail partnerships in the North State extend far beyond the San Joaquin trains.

Rail Provider Reimbursements. Another form of support in development could be fare revenue sharing agreements either directly with rail providers or airlines or brokered by the state through a seamless universal integrated ticketing system.

State Support for Feeder Buses Associated with Intercity Rail. Because the proposed project is primarily intended to support intercity rail services, associated funding programs through the SJJPA will be available to help offset operating cost starting in the second year of operations. \$200,000 annually is currently pledged. This is a minimum and the actual amounts will be established through agreements. There is also an effort to partner directly with the state or other rail providers for support funding.

Fare Revenue. Fare revenue is based on ridership estimates and fare revenue at rates shown in Table 6.1. Fare revenue is the most unpredictable funding source which is why the Transportation Development Act backstops are in place.

CMAQ. Tehama County is the only region along the I-5 Backbone service that receives Congestion Mitigation Air Quality funds. SRTA is working with Tehama County to determine if these funds can help with operational needs, particularly within the first year when state support for rail connections will not be available.

LCTOP. Low Carbon Transit Operation Program (LCTOP) funds are available by formula in small amounts to each of the regions served by the project. For ease of administration, the regions will work with the state to pool shares into a single application. Over time and particularly after the first year of operations, LCTOP funds will be tapered back to the extent other resources become available and re-allocated to complementary services and the capital needs.

SRTA and other North State Super Region partners anticipate using Low Carbon Transit Operations Program (LCTOP) funding to offset first and possibly second year operating costs. Since the low carbon transit operations program funding will be used for operating costs or vouchers, there will be no change to the benefits of this project if the funding from that source is not awarded to the project. Low carbon transit program is a regional non-competitive allocation.

Low Carbon Fuel Standard (LCFS) Electricity Program. By opting into the LCFS program and providing electricity as transportation fuel, the electricity providers can earn an LCFS credit for each metric ton of CO2 equivalent emissions avoided through the use of electricity. The credits will have a monetary value and may be sold to regulated parties who must offset deficits created by their supply of fuels with Carbon Intensity scores that exceed the LCFS standards. It is anticipated that these funds will be available in small amounts to help offset operational costs of the North State Intercity Bus System.

Block Ticket Sales. SRTA intends to work with major trip generators to sell discounted or guaranteed blocks of tickets or passes to incentivize ridership. Target groups will be large employers such as public agencies — including state agencies, medical providers, educational institutions, and social service agencies.

Advertising. Limited revenue may be derived from advertising. This will not be a major focus area, particularly on the outside of buses which represent a strong potential to market and brand the service itself.

TDA Local. Local Transportation Development Act funds will be used as needed for feeder services. Again, this is a backstop funding measure should other more appropriate funds sources for intercity bus service not materialize. To the extent certain existing feeder services already use TDA funds, they will continue to do so at the same levels.

TDA Loan Fund. SRTA maintains a Transportation Development Act (TDA) Loan Fund which has been pledged as a fail-safe source for the I-5 Backbone should any other funding sources, such as fare revenue, fall short. This source will also help bridge the gap in the first year when the rail support dollars cannot be used. This funding source would need to be paid back in future years with fare revenue or other resources.

Although these sources alone could support the service if required in the long-term, this would max out local capabilities making it difficult to address other transit needs. Several other operational revenue sources will be pursued. To the extent these are successful, local resources can provide for other import support and expansion needs.

8.4.1 Special Circumstances for State Rail Funding

The San Joaquins Joint Powers Authority (SJJPA) maintains a financial plan and receives state operating assistance to contract with Amtrak to run connecting thruway buses (through another subcontractor). The SJJPA currently spends \$1.482 million for the bus service to Redding. Theoretically, with the North State Intercity Bus System, the SJJPA would no longer need to provide 219,000 service miles annually with the thruway system between Sacramento and Redding. SJJPA has agreed that the savings could be transferred to SRTA for operation of the new service under terms yet to be negotiated.

9 PERFORMANCE METRICS

9.1 Performance Monitoring Database

A performance monitoring database will be developed to help track and foster efficient report generation. Most of the items below will have specific metrics established for performance monitoring on a quarterly basis. However, monthly monitoring may be required for certain transit metrics. The administering agency and all associated feeder route operators will prepare monthly progress reports. The performance monitoring database will be designed so that reports can be easily generated and included in the monthly progress reports.

SRTA will develop a detailed test plan to describe the data collection and technical analysis work. SRTA will monitor selected buses by utilizing preinstalled data collection hardware or installing as necessary electronic data collection devices on each vehicle. These devices will enable a detailed analysis of (at minimum) miles traveled, usage patterns, charging patterns, and other factors. GHG emission data will be collected to gain a detailed understanding of the total GHG savings this project generates. The monitoring will continue on an ongoing basis for each vehicle, starting with the deployment of vehicles into revenue service. All vehicles will be geographically tracked electronically.

SRTA will prepare an annual Technical Evaluation Report that will capture all data collected, analysis conducted, and lessons learned from the testing period. The report will show the analysis result for each vehicle type and each route that was selected. Deliverables will include:

- Test plan, monthly data summaries, annual reports, final technical report
- GHG emissions tracking/savings
- Operating costs
- Lifecycle costs
- Other metrics agreed upon

9.2 Customer Feedback

9.2.1 Continuous Customer Feedback

SRTA will provide a customer feedback form embedded in the agency's website, specifically for comments and questions about the North State Intercity Bus. The form will be located in a section of the website where it is easily found, alongside route schedules and fare information. Solicitation for email requests or surveys after the ride is taken could also be used as a valuable tool for massaging the ride scheduling.

9.2.2 Annual Surveys

In addition to count and budget data as a measurement of system performance, annual surveys will be conducted. The surveys will encourage riders to provide feedback regarding convenience of the system and changes in travel behavior.

Surveys will be conducted using online questionnaire tools such as Survey Monkey. The online surveys would be advertised on SRTA's website and Facebook, on the website where users purchase tickets, and on board the buses. Printed surveys may also be provided on buses.

10 PHASE II EXPANSION

The first phase of the North State Intercity Bus System serves as the central route for travelers throughout the North State as well as a base for future transit connections. Three additional feeder routes were proposed in the initial project concept and TIRCP funding application, but did not receive capital funding: The Siskiyou Feeder, and Shasta Urban Feeder and Lake Feeder. These routes will be implemented as Phase II, depending on funding.

Each feeder connects to the I-5 Backbone, increasing the service area of the North State Intercity bus and allowing for increased connections to regional and local transit systems. See Attachment H for a detailed Phase II service schedule, including recommended vehicles and fares and Attachment I for detailed Phase II locations.

10.1 Phase II Feeder Routes

10.1.1 Siskiyou Feeder

The Siskiyou Feeder will run three round trips from Yreka to Redding per day. The buses travel approximately 100 miles each way, charging in both Redding and Yreka from Monday – Saturday with a future Sunday service plan. Three drivers are necessary for this route. Ridership is projected to be low, and therefore a small vehicle such as the 20-seater BYD C6 may be ideal for the service. The Siskiyou Feeder will provide a local transit connection to the Siskiyou Transit and General Express (STAGE).

10.1.2 Shasta Urban Feeder

The Shasta Urban Feeder will operate approximately six circular trips daily throughout Redding 7 days a week. Three trips labeled “Southbound” are aligned to bring passengers to the Downtown Transit Center in time to transfer to the southbound I-5 Backbone buses. Northbound Shasta Urban Feeder trips are aligned to pick up passengers from the northbound I-5 Backbone at the Downtown Transit Center and bring them to destinations throughout Redding.

10.1.3 Lake Feeder

The Lake Feeder will travel from Clearlake to Williams four times each day. The bus begins at the Lake County Transit yard in Lower Lake before picking up passengers at the Clearlake Walmart approximately 1 mile north. The bus then travels 43 miles to Williams. An opportunity charger may be installed in Williams, though the buses should have no issues making a round trip back to Lower Lake to charge. Three drivers and two small buses are necessary for this route.

10.2 Phase II Charging

Two plug-in depot charging stations will be installed at Lake Transit Authority’s maintenance yard in Lower Lake, CA, approximately 1.4 miles south of the bus stop at Walmart in Clearlake. A solar canopy will be installed to provide the buses with renewable energy.

A solar array will be installed in Lake County to supply battery-electric feeder bus charging needs for the Lake Feeder. The array will be installed at the Lake Transit Authority yard located at 9240 CA-53, Lower Lake, CA 95457.

The Yreka and Williams charging sites do not currently have solar charging infrastructure. SRTA will work with power providers to ensure that a renewable power resource mix is delivered to these sites.

10.2.1 Phase II Locations

Phase II routes will include the following stop locations:

Siskiyou Feeder

- Yreka
- Weed
- Mt. Shasta
- Dunsmuir
- Redding Downtown Transit Center

Shasta Urban Feeder

- Redding Downtown Transit Center
- Masonic Transfer Center
- Shasta College
- Redding Municipal Airport
- Hilltop Drive Hotels
- Canby Transfer Center
- Turtle Bay Hotel & Exploration Park

Lake Feeder

- Clearlake
- Williams

The following schematic route map of Phase II illustrates the stops.

North State Intercity Bus

Phase II Schematic Transit Service Map

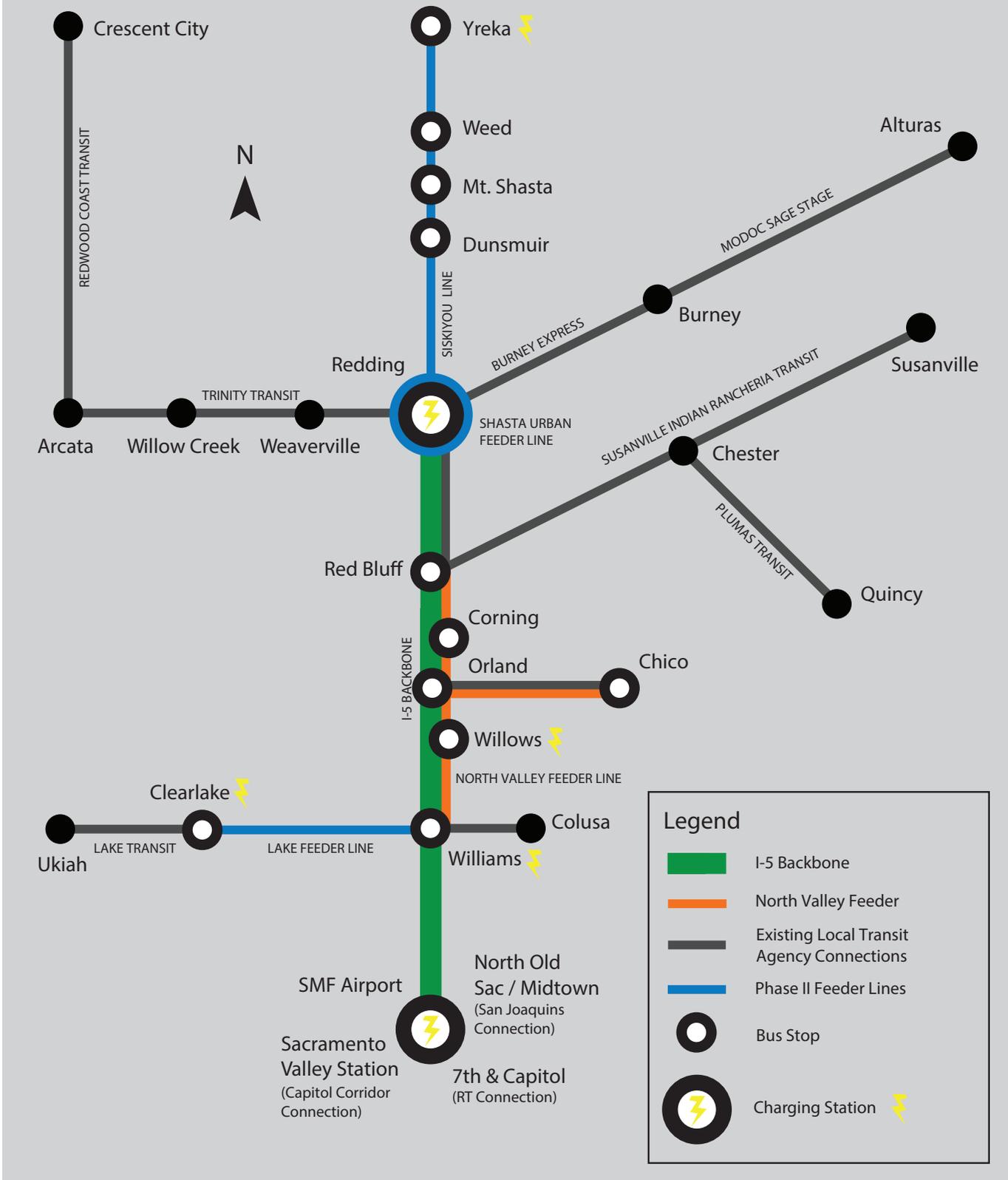


Figure 10.1: Schematic Map of Phase I and Phase II Routes

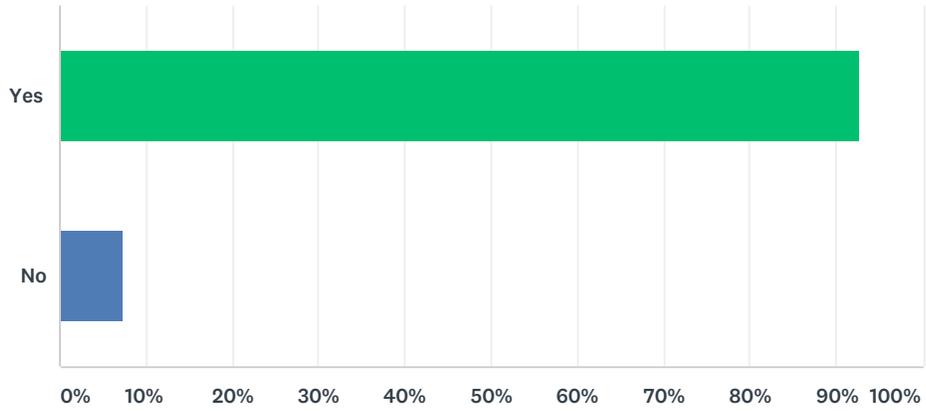
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ATTACHMENT A

North State Express Questionnaire

Q1 Do you own or have regular access to a vehicle?

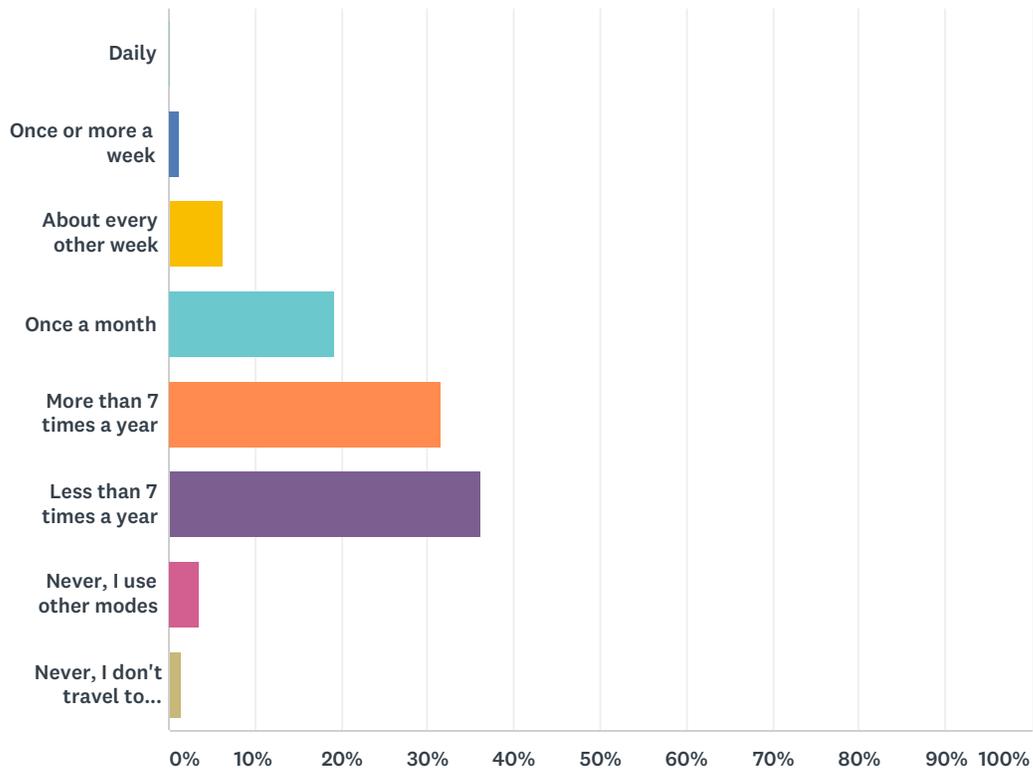
Answered: 987 Skipped: 3



ANSWER CHOICES	RESPONSES	
Yes	92.60%	914
No	7.40%	73
TOTAL		987

Q2 How often do you drive to Sacramento?

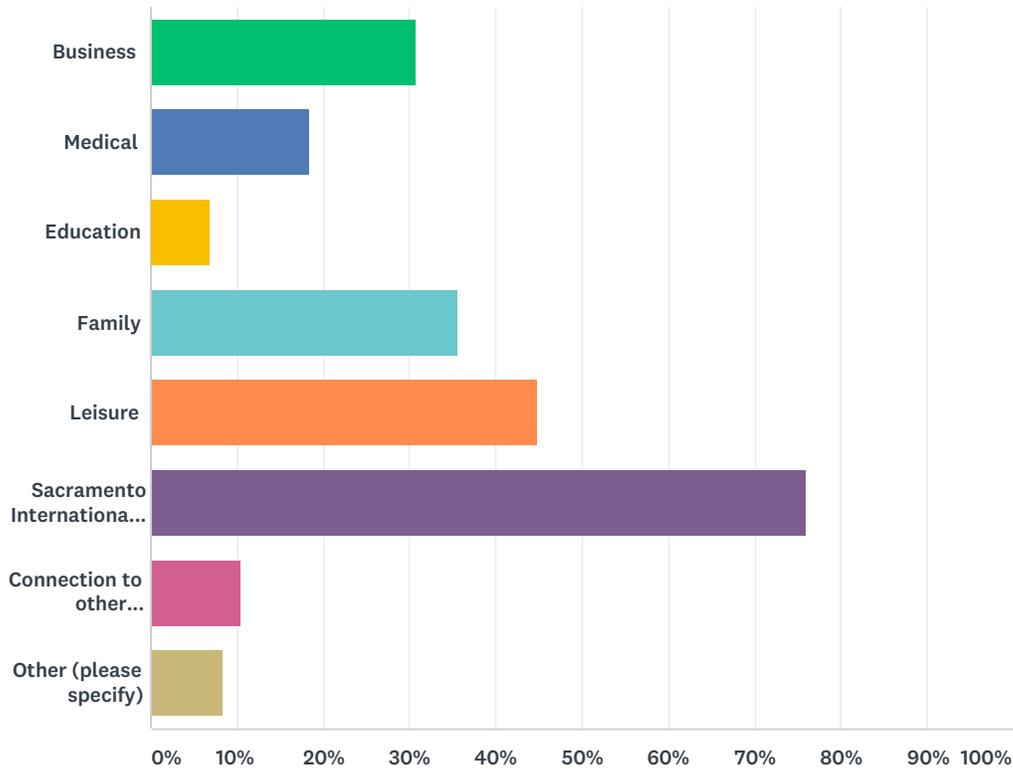
Answered: 993 Skipped: -3



ANSWER CHOICES	RESPONSES
Daily	0.30% 3
Once or more a week	1.21% 12
About every other week	6.34% 63
Once a month	19.34% 192
More than 7 times a year	31.62% 314
Less than 7 times a year	36.15% 359
Never, I use other modes	3.63% 36
Never, I don't travel to Sacramento	1.41% 14
TOTAL	993

Q3 What is the general purpose of your trip to Sacramento? Please check all that apply.

Answered: 992 Skipped: -2



ANSWER CHOICES	RESPONSES	
Business	30.85%	306
Medical	18.35%	182
Education	6.96%	69
Family	35.58%	353
Leisure	44.86%	445
Sacramento International Airport	76.01%	754
Connection to other transportation	10.48%	104
Other (please specify)	8.27%	82
Total Respondents: 992		

#	OTHER (PLEASE SPECIFY)	DATE
1	shopping	12/22/2017 9:51 PM
2	As a pit stop on my way to southern california.	12/22/2017 4:16 PM

North State Express Questionnaire

SurveyMonkey

3	Sac is only a a pit stop, I actually have nothing in Sac except a two hour layover. I seldom head to Reno if i don't have reliable transportation so that really is so "not happening". During the summer months I'd be there at least 2 or 3 times a week, winter probably 1 a month for sure. I just absolutely refuse to take the bus with the 2 hor layover (assuming the bus is on time) 6 + hours for a 3 1/2 drive? Not going to happen. I think we here living in this red neck town with all the in breeds need to get out of here. If your're not from here , you don't belong here i	12/21/2017 4:35 PM
4	Shopping	12/21/2017 1:45 PM
5	Passing through to Bay Area.	12/20/2017 9:30 PM
6	seminars for my choral group	12/20/2017 12:10 PM
7	Specialists at UC Davis and in SF	12/19/2017 10:58 AM
8	Needed transportation to the airport	12/19/2017 7:31 AM
9	I fly to Redding from Phoenix 12-13 times a year via Sac. airport. I used the shuttle when it was in operation This would be wonderful	12/18/2017 6:10 PM
10	Xi	12/17/2017 11:19 PM
11	Shopping	12/17/2017 12:03 PM
12	Medical and concerts	12/16/2017 3:09 PM
13	Religious.	12/16/2017 7:48 AM
14	Beauty supplies	12/15/2017 2:07 PM
15	Shopping	12/14/2017 1:26 PM
16	Sports	12/14/2017 1:26 PM
17	Work conferences.	12/13/2017 4:46 PM
18	To pick up my daughter from college on the capitol corridor train.	12/13/2017 1:56 PM
19	Shopping Sightseeing	12/13/2017 1:20 PM
20	Old Sacramento shopping	12/12/2017 3:07 PM
21	Attend concerts or lectures, advocate at the capitol	12/12/2017 12:17 PM
22	To connect to a train at the Sac Amtrak station near Old Town.	12/12/2017 11:56 AM
23	Events Shopping	12/12/2017 9:14 AM
24	Shopping	12/12/2017 9:10 AM
25	Taking Daughter to and from UCD	12/11/2017 8:51 PM
26	Capital to San Jose from chico	12/11/2017 1:07 PM
27	Nothing there for me, airlines don't have good routes to places I go	12/11/2017 7:57 AM
28	Hi	12/11/2017 7:56 AM
29	Passing through driving south	12/11/2017 7:49 AM
30	I would go if I had transportation.	12/10/2017 11:55 PM
31	Thanks for taking a survey for RDG/SMF bus service. I know of 2 children with illnesses that required regular commutes to the children's hospital in the Sacramento area. It has been a struggle for the families to travel that distance. I know a senior man who has to commute to Sacramento Kaiser 2 times a month for tests or follow-ups for his injured back. We would be happy to pay \$30/one way to/from the SMF airport. We are praying for this service to be permanent and build ridership.	12/10/2017 7:43 PM
32	Shopping	12/10/2017 4:05 PM
33	NA	12/10/2017 4:00 PM
34	Volunteer activities	12/10/2017 1:35 PM
35	To visit family	12/10/2017 11:25 AM
36	Shopping and visiting friends.	12/10/2017 8:08 AM

North State Express Questionnaire

SurveyMonkey

37	Jury Duty (Federal Grand Jury, District Eastern District Court), Veterinary care	12/10/2017 7:44 AM
38	Shopping	12/10/2017 6:43 AM
39	Youth sports	12/10/2017 1:23 AM
40	Reserve Military Drill	12/9/2017 5:19 PM
41	Shopping	12/9/2017 4:11 PM
42	Shopping at stores not available in Redding.	12/9/2017 12:46 PM
43	Visit attractions downtown--Old Town, shopping, things we don't have in Redding	12/9/2017 11:08 AM
44	Shopping	12/9/2017 9:46 AM
45	Shopping	12/9/2017 9:09 AM
46	IKEA	12/9/2017 8:17 AM
47	Various occasions	12/9/2017 6:04 AM
48	Shopping and Events	12/9/2017 1:01 AM
49	Pleasure	12/8/2017 8:54 PM
50	Shopping	12/8/2017 8:12 PM
51	Friends, shopping, museums	12/8/2017 4:41 PM
52	Enrpute to SW and So Cal to avoid heavy traffic	12/8/2017 11:09 AM
53	Medical	12/7/2017 9:25 PM
54	Shopping	12/7/2017 8:55 PM
55	If there. Is a line to get to Sacramento that would i like to. know. From. Southwest. To redding.	12/7/2017 8:35 PM
56	sometimes shopping	12/7/2017 7:00 PM
57	Various meetings that are held in downtown Sac.	12/7/2017 6:35 PM
58	None	12/7/2017 5:31 PM
59	Pick up daughter from bus (SF to Sac)	12/7/2017 5:24 PM
60	Airport or driving through	12/7/2017 12:43 PM
61	Shopping	12/7/2017 12:37 PM
62	shopping	12/7/2017 10:07 AM
63	Shopping, Entertainment	12/7/2017 9:59 AM
64	visiting friends	12/6/2017 9:54 PM
65	Airport for travel or for meeting family or friends traveling by air.	12/6/2017 8:51 PM
66	League of California Cities and California Planning Commissioners educational conferences & workshops. League of Women Voters. American Association of University Women.	12/6/2017 7:17 PM
67	Shopping	12/6/2017 7:00 PM
68	Train Depot	12/6/2017 5:49 PM
69	IKEA	12/4/2017 7:00 PM
70	Photography	12/4/2017 8:36 AM
71	Military bases	12/4/2017 4:29 AM
72	K	12/3/2017 9:14 PM
73	Shopping	12/3/2017 8:58 AM
74	Trains..	12/3/2017 4:44 AM
75	Shopping	12/2/2017 9:15 PM
76	To see my family.	12/1/2017 11:43 PM

North State Express Questionnaire

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77	I	12/1/2017 11:16 AM
78	Fit varies	11/30/2017 10:44 PM
79	airport	11/30/2017 9:34 PM
80	shopping	11/30/2017 11:33 AM
81	I just take a trip down to Sacramento for no reason.	11/17/2017 7:58 AM
82	Shopping at IKEA	11/15/2017 9:55 PM

Q4 Where do you start your trip?

Answered: 946 Skipped: 44

#	RESPONSES	DATE
1	Redding Urbanized Area Redding or Anderson ca	12/27/2017 11:25 AM
2	Redding Urbanized Area Redding	12/26/2017 9:34 PM
3	Red Bluff red bluff	12/26/2017 12:29 PM
4	Redding Urbanized Area Home, Igo CA, just west of Redding	12/25/2017 8:24 PM
5	Yuba City	12/24/2017 1:21 PM
6	Red Bluff Red Bluff	12/24/2017 12:05 PM
7	Redding Urbanized Area Redding	12/24/2017 8:12 AM
8	Redding Urbanized Area Redding	12/23/2017 9:51 PM
9	Redding Urbanized Area Redding, CA	12/23/2017 8:06 PM
10	Redding Urbanized Area my house in Redding	12/22/2017 9:51 PM
11	Cottonwood	12/22/2017 9:49 PM
12	Redding Urbanized Area Redding	12/22/2017 4:16 PM
13	Humboldt Co Arcata California	12/22/2017 1:42 PM
14	Red Bluff Red Bluff	12/22/2017 11:29 AM
15	Redding Urbanized Area Redding	12/22/2017 8:26 AM
16	Ukiah, CA.	12/22/2017 7:04 AM
17	Reno, Nevada when using Amtrack Susanville, Ca when in a car	12/21/2017 10:59 PM
18	Humboldt Co Humboldt -rio dell	12/21/2017 10:30 PM
19	Redding Urbanized Area Redding	12/21/2017 9:24 PM
20	Redding Urbanized Area Redding CA	12/21/2017 9:11 PM
21	Red Bluff Red bluff	12/21/2017 5:41 PM
22	Red Bluff Red Bluff, Ca	12/21/2017 4:35 PM
23	Redding Urbanized Area Redding	12/21/2017 3:46 PM
24	Williams	12/21/2017 3:28 PM
25	Red Bluff Red Bluff	12/21/2017 2:11 PM
26	Los Molinos	12/21/2017 2:00 PM
27	Red Bluff Red Bluff	12/21/2017 1:56 PM
28	Corning	12/21/2017 1:45 PM
29	Humboldt Co Eureka, CA	12/21/2017 1:41 PM
30	Cottonwood, CA	12/21/2017 1:36 PM
31	Red Bluff Red Bluff	12/21/2017 1:34 PM
32	Red Bluff Red Bluff	12/21/2017 1:19 PM
33	Humboldt Co Humboldt	12/21/2017 11:32 AM
34	Red Bluff Red Bluff, CA.	12/21/2017 9:56 AM
35	Chico Urbanized Area Chico	12/21/2017 8:38 AM

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36	Chico Urbanized Area	Chico	12/21/2017 8:26 AM
37	Red Bluff	red bluff or redding	12/21/2017 7:53 AM
38	Red Bluff	Red Bluff	12/21/2017 7:23 AM
39	Chico Urbanized Area	Chico	12/21/2017 1:20 AM
40	Red Bluff	Red Bluff, CA	12/21/2017 12:40 AM
41	Redding Urbanized Area	Redding, Calif. 96003	12/21/2017 12:25 AM
42	Redding Urbanized Area	Redding	12/21/2017 12:04 AM
43	Red Bluff	Red Bluff	12/20/2017 11:39 PM
44	Redding Urbanized Area	Redding, ca	12/20/2017 11:34 PM
45	Chico Urbanized Area	Chico	12/20/2017 10:58 PM
46	Red Bluff	red bluff	12/20/2017 9:35 PM
47	Redding Urbanized Area	Redding	12/20/2017 9:30 PM
48	Redding Urbanized Area	Redding	12/20/2017 9:30 PM
49		Burney	12/20/2017 9:15 PM
50	Red Bluff	Red Bluff (home)	12/20/2017 8:55 PM
51		Yreka	12/20/2017 8:54 PM
52	Red Bluff	Red Bluff, CA 96080	12/20/2017 7:57 PM
53		Ukiah, California 6	12/20/2017 7:02 PM
54	Red Bluff	Red Bluff	12/20/2017 5:45 PM
55	Red Bluff	Red Bluff	12/20/2017 5:24 PM
56	Red Bluff	Red Bluff	12/20/2017 5:23 PM
57	Redding Urbanized Area	Shasta Lake	12/20/2017 5:17 PM
58	Redding Urbanized Area	Redding to Sacramento Airport	12/20/2017 3:16 PM
59	Red Bluff	Red Bluff	12/20/2017 3:09 PM
60	Redding Urbanized Area	Redding, CA	12/20/2017 2:40 PM
61		Redding	12/20/2017 2:37 PM
62		Red Bluff	12/20/2017 2:25 PM
63		White more RVCA School	12/20/2017 2:25 PM
64		Whitmore	12/20/2017 2:25 PM
65		Red Bluff	12/20/2017 2:21 PM
66		Redding	12/20/2017 2:20 PM
67		Red Bluff	12/20/2017 1:56 PM
68		Redding, CA	12/20/2017 1:45 PM
69	Red Bluff	Red Bluff	12/20/2017 1:37 PM
70	Redding Urbanized Area	Redding, CA or From SAC Airport to Redding	12/20/2017 1:29 PM
71	Red Bluff	Red Bluff	12/20/2017 1:25 PM
72	Red Bluff	Red bluff	12/20/2017 1:24 PM
73	Redding Urbanized Area	River View Christian Academy in Whitmore	12/20/2017 1:15 PM
74	Red Bluff	Red Bluff, Antelope area	12/20/2017 1:12 PM
75	Redding Urbanized Area	Redding	12/20/2017 1:09 PM
76	Red Bluff	Red Bluff	12/20/2017 12:32 PM

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77	Red Bluff	Red Bluff, CA727-9	12/20/2017 12:26 PM
78	Red Bluff	Red Bluff	12/20/2017 12:18 PM
79	Red Bluff	Red Bluff	12/20/2017 12:12 PM
80	Red Bluff	Red Bluff	12/20/2017 12:10 PM
81	Red Bluff	Red Bluff	12/20/2017 12:09 PM
82	Red Bluff	Red Bluff, CA	12/20/2017 12:05 PM
83	Red Bluff	Red Bluff	12/20/2017 11:54 AM
84	Redding Urbanized Area	Shasta Lake City	12/20/2017 10:23 AM
85	Chico Urbanized Area	Chico	12/20/2017 9:33 AM
86	Humboldt Co	Eureka ca	12/20/2017 12:27 AM
87	Redding Urbanized Area	Redding Hilltop area	12/19/2017 11:35 PM
88		Cottonwood Ca	12/19/2017 7:19 PM
89	Redding Urbanized Area	Redding, CA	12/19/2017 4:51 PM
90		Fall River Mills, CA	12/19/2017 2:36 PM
91	Redding Urbanized Area	redding	12/19/2017 12:44 PM
92		Anderson	12/19/2017 10:58 AM
93	Redding Urbanized Area	Redding	12/19/2017 9:55 AM
94		Redding,CA	12/19/2017 9:54 AM
95		Redding	12/19/2017 9:42 AM
96		Redding	12/19/2017 9:35 AM
97		Whitmore	12/19/2017 7:55 AM
98		San Diego to SMA to Redding and a return	12/19/2017 7:54 AM
99		Redding	12/19/2017 7:36 AM
100		Redding	12/19/2017 7:35 AM
101		Redding	12/19/2017 7:32 AM
102		Redding	12/19/2017 7:31 AM
103		Anderson calif	12/19/2017 6:36 AM
104		Redding CA	12/19/2017 6:27 AM
105		Paradise	12/19/2017 6:05 AM
106		By old sacramento or by airport	12/19/2017 2:11 AM
107		Anderson	12/18/2017 9:48 PM
108		Weed	12/18/2017 6:28 PM
109		Phoenix, az Then back again	12/18/2017 6:10 PM
110		Chico, CA	12/18/2017 6:03 PM
111		Chico ca	12/18/2017 5:52 PM
112		Orland or chico	12/18/2017 4:42 PM
113		Susanville California	12/18/2017 3:53 PM
114		Redding CA	12/18/2017 3:35 PM
115		Eureka	12/18/2017 11:38 AM
116		Redding	12/18/2017 11:11 AM
117		Cottonwood , California	12/18/2017 9:57 AM

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118	Fort Jones	12/17/2017 11:47 PM
119	Redding	12/17/2017 11:19 PM
120	Susanville, CA	12/17/2017 10:01 PM
121	Susanville	12/17/2017 9:07 PM
122	Susanville	12/17/2017 7:27 PM
123	Southwest Redding	12/17/2017 6:23 PM
124	redding	12/17/2017 6:22 PM
125	Fresno	12/17/2017 1:09 PM
126	Chico	12/17/2017 12:03 PM
127	Cottonwood	12/17/2017 10:21 AM
128	Red Bluff	12/17/2017 5:47 AM
129	Upper Lake 95485	12/16/2017 6:10 PM
130	Redding,Ca	12/16/2017 3:09 PM
131	Redding	12/16/2017 1:56 PM
132	Redding	12/16/2017 1:04 PM
133	Redding/home	12/16/2017 11:28 AM
134	Redding, CA	12/16/2017 8:48 AM
135	Alturas, Modoc County.	12/16/2017 7:48 AM
136	Blue lake	12/16/2017 6:54 AM
137	Anderson, CA	12/16/2017 12:15 AM
138	Pheonix, Arizona	12/15/2017 8:23 PM
139	BURNEY	12/15/2017 5:51 PM
140	Redding, CA	12/15/2017 5:43 PM
141	Redding	12/15/2017 2:20 PM
142	Redding	12/15/2017 2:12 PM
143	Chico.ca	12/15/2017 2:07 PM
144	Shasta lake	12/15/2017 2:07 PM
145	paradise	12/15/2017 1:21 PM
146	Anderson	12/15/2017 11:16 AM
147	Corning,Ca	12/15/2017 10:08 AM
148	Redding Urbanized Area Round Mountain or Redding	12/15/2017 12:55 AM
149	Colusa County Williams	12/14/2017 10:27 PM
150	Redding Urbanized Area Redding to Sacramento and back	12/14/2017 10:02 PM
151	Redding Urbanized Area Redding	12/14/2017 5:55 PM
152	Yreka	12/14/2017 5:47 PM
153	Redding Urbanized Area Redding	12/14/2017 5:43 PM
154	Chico Urbanized Area Chico	12/14/2017 5:42 PM
155	Redding Urbanized Area Redding	12/14/2017 5:26 PM
156	Anderson	12/14/2017 4:08 PM
157	Redding Urbanized Area Redding	12/14/2017 3:40 PM
158	Weaverville, CA	12/14/2017 2:44 PM

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159	Red Bluff	Red Bluff, CA	12/14/2017 2:08 PM
160	Redding Urbanized Area	Redding	12/14/2017 1:34 PM
161	Redding Urbanized Area	Redding	12/14/2017 1:26 PM
162	Redding Urbanized Area	Redding	12/14/2017 1:26 PM
163	Redding Urbanized Area	Redding	12/14/2017 11:16 AM
164	Redding Urbanized Area	Shasta Lake	12/14/2017 10:06 AM
165	Redding Urbanized Area	Reddings	12/14/2017 9:37 AM
166	Redding Urbanized Area	Redding	12/14/2017 8:27 AM
167	Redding Urbanized Area	Redding Civic Center	12/14/2017 8:21 AM
168		Shasta Lake, CA	12/14/2017 1:18 AM
169	Redding Urbanized Area	Redding	12/14/2017 12:38 AM
170	Redding Urbanized Area	Redding	12/13/2017 11:35 PM
171		Redding	12/13/2017 11:10 PM
172		Redding	12/13/2017 10:52 PM
173		Shasta lake city	12/13/2017 9:56 PM
174		Red Bluff	12/13/2017 9:32 PM
175		Anderson	12/13/2017 9:28 PM
176		Redding Ca	12/13/2017 9:06 PM
177		Redding	12/13/2017 8:45 PM
178		Redding CA	12/13/2017 8:28 PM
179		South redding	12/13/2017 8:15 PM
180		Mckinleyville, CA	12/13/2017 7:58 PM
181		Redding	12/13/2017 7:33 PM
182		Anderson	12/13/2017 6:33 PM
183		Redding	12/13/2017 6:30 PM
184		Redding	12/13/2017 6:10 PM
185		Redding, California	12/13/2017 5:55 PM
186		Dunsmuir / Mt. Shasta (Siskiyou County)	12/13/2017 4:46 PM
187		Home in Redding.	12/13/2017 1:56 PM
188		home in redding	12/13/2017 1:26 PM
189		Redding	12/13/2017 1:20 PM
190		Palo Cedro CA	12/13/2017 1:07 PM
191		Redding	12/13/2017 12:29 PM
192		Redding ca	12/13/2017 12:24 PM
193		Humboldt County - Eureka	12/13/2017 12:10 PM
194		Redding	12/13/2017 12:08 PM
195		Redding, CA	12/13/2017 11:20 AM
196		Anderson, CA	12/13/2017 9:53 AM
197		Redding	12/13/2017 5:49 AM
198		Redding	12/13/2017 5:45 AM
199		Fall River Mills	12/13/2017 5:45 AM

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200	San diego		12/13/2017 2:24 AM
201	Drive my self		12/13/2017 1:54 AM
202	Shasta		12/12/2017 11:46 PM
203	Redding		12/12/2017 10:43 PM
204	Home - Palo Cedro		12/12/2017 10:09 PM
205	McArthur, CA		12/12/2017 9:54 PM
206	Redding		12/12/2017 9:04 PM
207	West Redding		12/12/2017 9:00 PM
208	Redding		12/12/2017 8:41 PM
209	Palo cedro		12/12/2017 8:22 PM
210	Cottonwood		12/12/2017 8:08 PM
211	Redding		12/12/2017 7:04 PM
212	Redding		12/12/2017 5:55 PM
213	Redding Urbanized Area	Redding, CA	12/12/2017 5:00 PM
214	Redding Urbanized Area	Home. Redding.	12/12/2017 4:51 PM
215	Redding Urbanized Area	Redding CA	12/12/2017 4:43 PM
216	Redding Urbanized Area	redding	12/12/2017 4:40 PM
217	Redding Urbanized Area	Redding	12/12/2017 4:22 PM
218	Redding Urbanized Area	Redding	12/12/2017 4:16 PM
219	Redding Urbanized Area	South Redding	12/12/2017 3:51 PM
220	Chico Urbanized Area	Chico CA	12/12/2017 3:41 PM
221	Redding Urbanized Area	Redding, CA	12/12/2017 3:37 PM
222		Redding generally. More specifically, 6 miles east of the city limit on Placer Street.	12/12/2017 3:36 PM
223	Redding Urbanized Area	Redding	12/12/2017 3:17 PM
224	Orland		12/12/2017 3:07 PM
225	Redding Urbanized Area	Redding, CA	12/12/2017 2:53 PM
226	Redding Urbanized Area	Redding	12/12/2017 2:43 PM
227	Redding Urbanized Area	Redding, CA	12/12/2017 2:24 PM
228	Redding Urbanized Area	Redding, CA	12/12/2017 1:54 PM
229	Redding Urbanized Area	In Redding	12/12/2017 1:22 PM
230	Old Shasta		12/12/2017 12:56 PM
231	Redding Urbanized Area	Redding	12/12/2017 12:55 PM
232	Redding Urbanized Area	Redding	12/12/2017 12:32 PM
233	Redding Urbanized Area	Redding	12/12/2017 12:29 PM
234	Redding Urbanized Area	Redding	12/12/2017 12:20 PM
235	Redding Urbanized Area	Redding	12/12/2017 12:17 PM
236		Home. Shingletown. Or from Redding.	12/12/2017 12:15 PM
237	Redding Urbanized Area	Redding	12/12/2017 12:05 PM
238	Redding Urbanized Area	Redding	12/12/2017 12:02 PM
239	Redding Urbanized Area	Redding	12/12/2017 11:57 AM
240	Redding Urbanized Area	Redding	12/12/2017 11:56 AM

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241	Outside of Redding (Round Mountain)		12/12/2017 11:47 AM
242	Montague, CA		12/12/2017 11:39 AM
243	Redding Urbanized Area	Anderson	12/12/2017 11:26 AM
244	Redding Urbanized Area	Redding	12/12/2017 11:19 AM
245	Redding Urbanized Area	Downtown Redding	12/12/2017 11:12 AM
246	Redding Urbanized Area	Downtown Redding. Cypress and Hartnell	12/12/2017 11:04 AM
247	Redding Urbanized Area	Redding, CA	12/12/2017 11:02 AM
248	Redding Urbanized Area	Redding	12/12/2017 11:00 AM
249	Redding Urbanized Area	Redding	12/12/2017 10:45 AM
250	Redding Urbanized Area	Redding	12/12/2017 10:28 AM
251	Either Redding, Anderson or Red Bluff		12/12/2017 10:16 AM
252	Redding Urbanized Area	Redding	12/12/2017 10:16 AM
253	Redding Urbanized Area	Redding	12/12/2017 10:14 AM
254	Old Shasta		12/12/2017 10:11 AM
255	Redding Urbanized Area	Redding	12/12/2017 10:09 AM
256	Redding Urbanized Area	Redding	12/12/2017 10:08 AM
257	Redding Urbanized Area	Redding, CA	12/12/2017 10:03 AM
258	Redding Urbanized Area	Redding, CA	12/12/2017 10:03 AM
259	Redding Urbanized Area	Redding, CA	12/12/2017 9:57 AM
260	Redding Urbanized Area	Anderson, CA	12/12/2017 9:48 AM
261	Redding Urbanized Area	Redding Downtown RABA Station (usually using Amtrak)	12/12/2017 9:48 AM
262	Redding Urbanized Area	Redding	12/12/2017 9:41 AM
263	Redding Urbanized Area	Anderson	12/12/2017 9:40 AM
264	Redding Urbanized Area	Redding	12/12/2017 9:30 AM
265	Redding Urbanized Area	Redding	12/12/2017 9:27 AM
266	Hornbrook		12/12/2017 9:22 AM
267	Redding Urbanized Area	Redding	12/12/2017 9:22 AM
268	Old Shasta or Shasta College		12/12/2017 9:22 AM
269	Redding Urbanized Area	Redding	12/12/2017 9:22 AM
270	Montgomery Creek		12/12/2017 9:18 AM
271	Redding Urbanized Area	Redding	12/12/2017 9:17 AM
272	Redding Urbanized Area	Redding, CA	12/12/2017 9:17 AM
273	Home or office		12/12/2017 9:15 AM
274	Redding Urbanized Area	Redding, CA	12/12/2017 9:14 AM
275	Redding Urbanized Area	Redding	12/12/2017 9:13 AM
276	Redding Urbanized Area	Redding	12/12/2017 9:12 AM
277	Redding Urbanized Area	From Redding	12/12/2017 9:10 AM
278	Redding Urbanized Area	From home in Redding	12/12/2017 9:10 AM
279	Redding Urbanized Area	Enterprise area of Redding.	12/12/2017 9:08 AM
280	Redding Urbanized Area	Redding	12/12/2017 9:07 AM
281	Redding Urbanized Area	Redding	12/12/2017 9:06 AM

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282	Redding Urbanized Area	Redding	12/12/2017 9:05 AM
283	Redding Urbanized Area	Redding, CA	12/12/2017 9:00 AM
284	Redding Urbanized Area	Redding/home.	12/12/2017 8:59 AM
285	Redding Urbanized Area	Redding	12/12/2017 8:57 AM
286	Redding Urbanized Area	Redding	12/12/2017 8:54 AM
287	Redding Urbanized Area	Redding	12/12/2017 8:43 AM
288	Redding Urbanized Area	Redding	12/12/2017 8:36 AM
289	Redding Urbanized Area	Redding	12/12/2017 8:35 AM
290	Redding Urbanized Area	Redding	12/12/2017 8:26 AM
291	Redding Urbanized Area	Redding	12/12/2017 8:15 AM
292	Redding Urbanized Area	Redding	12/12/2017 8:04 AM
293	Redding Urbanized Area	Shasta View Drive	12/12/2017 7:00 AM
294	Redding Urbanized Area	Redding	12/11/2017 11:46 PM
295	Redding Urbanized Area	HOME IN REDDING, CA.	12/11/2017 11:18 PM
296	Redding Urbanized Area	Anderson, CA	12/11/2017 11:00 PM
297	Redding Urbanized Area	Redding	12/11/2017 10:52 PM
298		Fall River Mills, CA	12/11/2017 10:44 PM
299	Red Bluff	Red Bluff	12/11/2017 10:40 PM
300	Redding Urbanized Area	Redding	12/11/2017 9:16 PM
301		Mt.Shasta	12/11/2017 9:11 PM
302	Redding Urbanized Area	Redding	12/11/2017 9:01 PM
303		Eureka/Arcata	12/11/2017 8:52 PM
304		Junction City	12/11/2017 8:51 PM
305	Redding Urbanized Area	Redding, CA	12/11/2017 8:42 PM
306	Redding Urbanized Area	Redding	12/11/2017 8:30 PM
307	Redding Urbanized Area	Redding, CA	12/11/2017 7:44 PM
308	Redding Urbanized Area	Redding	12/11/2017 7:38 PM
309		Clearlake	12/11/2017 7:30 PM
310	Redding Urbanized Area	Redding	12/11/2017 7:29 PM
311		Home - Palo Cedro	12/11/2017 7:25 PM
312	Redding Urbanized Area	Redding	12/11/2017 7:24 PM
313	Redding Urbanized Area	Redding, CA	12/11/2017 7:18 PM
314	Redding Urbanized Area	Redding	12/11/2017 7:02 PM
315	Redding Urbanized Area	home in North-east Redding or downtown Redding	12/11/2017 7:01 PM
316	Redding Urbanized Area	Redding	12/11/2017 7:01 PM
317	Redding Urbanized Area	North Redding	12/11/2017 6:54 PM
318	Chico Urbanized Area	Chico	12/11/2017 6:46 PM
319		home	12/11/2017 6:44 PM
320	Red Bluff	Red Bluff	12/11/2017 6:44 PM
321	Redding Urbanized Area	Redding	12/11/2017 6:41 PM
322	Redding Urbanized Area	Redding, CA	12/11/2017 6:33 PM

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323	Redding Urbanized Area	Redding	12/11/2017 6:29 PM
324	Chico or Redding		12/11/2017 6:28 PM
325	Redding Urbanized Area	Redding	12/11/2017 6:25 PM
326	Weaverville		12/11/2017 5:56 PM
327	Redding Urbanized Area	Redding	12/11/2017 5:00 PM
328	Redding Urbanized Area	Redding, CA	12/11/2017 4:49 PM
329	Redding Urbanized Area	Redding	12/11/2017 4:17 PM
330	Redding Urbanized Area	from our home- West Redding	12/11/2017 3:33 PM
331	Redding Urbanized Area	Red Bluff, Ca	12/11/2017 3:24 PM
332	Redding Urbanized Area	Redding	12/11/2017 2:49 PM
333	Yreka Ca		12/11/2017 2:19 PM
334	Redding Urbanized Area	Redding	12/11/2017 1:15 PM
335	Chico Urbanized Area	Chico	12/11/2017 1:07 PM
336	Chico Urbanized Area	Chico	12/11/2017 1:01 PM
337	Red Bluff	Red Bluff	12/11/2017 12:41 PM
338	Redding Urbanized Area	Redding	12/11/2017 12:32 PM
339	Palo Cedro		12/11/2017 12:27 PM
340	Friday Saturday		12/11/2017 12:14 PM
341	Fontana, CA		12/11/2017 12:04 PM
342	Redding Urbanized Area	Redding, CA	12/11/2017 11:53 AM
343	Redding Urbanized Area	Redding	12/11/2017 11:44 AM
344	Redding Urbanized Area	Redding	12/11/2017 11:40 AM
345	Yreka, Ca		12/11/2017 11:24 AM
346	Redding Urbanized Area	Redding	12/11/2017 11:00 AM
347	Redding Urbanized Area	Redding, CA	12/11/2017 11:00 AM
348	Chico Urbanized Area	Chico	12/11/2017 10:59 AM
349	Chico Urbanized Area	Chico	12/11/2017 10:53 AM
350	Chico Urbanized Area	Chico, Ca	12/11/2017 10:28 AM
351	Redding Urbanized Area	Redding CA	12/11/2017 10:26 AM
352	Redding Urbanized Area	Redding	12/11/2017 10:20 AM
353	Cottonwood		12/11/2017 9:49 AM
354	Redding Urbanized Area	Redding	12/11/2017 9:34 AM
355	Redding Urbanized Area	Redding	12/11/2017 7:56 AM
356	Redding Urbanized Area	Redding	12/11/2017 7:49 AM
357	Magalia, CA		12/11/2017 2:57 AM
358	Redding Urbanized Area	Redding	12/11/2017 2:22 AM
359	Redding Urbanized Area	Redding	12/11/2017 12:49 AM
360	Redding Urbanized Area	My home in Redding 96003	12/11/2017 12:19 AM
361	Redding Urbanized Area	Redding	12/11/2017 12:09 AM
362	N/A		12/10/2017 11:55 PM
363	Redding Urbanized Area	Redding	12/10/2017 11:49 PM

North State Express Questionnaire

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364	Redding Urbanized Area	Redding	12/10/2017 11:46 PM
365	Redding Urbanized Area	Redding	12/10/2017 11:20 PM
366	Redding Urbanized Area	Redding, California	12/10/2017 11:07 PM
367	Eureka ca		12/10/2017 11:01 PM
368	Redding Urbanized Area	Anderson	12/10/2017 10:27 PM
369	Redding Urbanized Area	Redding	12/10/2017 10:22 PM
370	Redding Urbanized Area	Redding	12/10/2017 9:48 PM
371	Redding Urbanized Area	North Redding	12/10/2017 9:35 PM
372	Redding Urbanized Area	Redding, CA	12/10/2017 9:28 PM
373	Redding Urbanized Area	West redding	12/10/2017 9:13 PM
374	Redding Urbanized Area	Redding	12/10/2017 9:03 PM
375	Redding Urbanized Area	Redding, CA	12/10/2017 8:58 PM
376	Redding Urbanized Area	Redding	12/10/2017 8:31 PM
377	Eureka, Humboldt County, CA		12/10/2017 8:20 PM
378	Redding Urbanized Area	Redding	12/10/2017 8:08 PM
379	Redding Urbanized Area	Home (west Redding off Placer)	12/10/2017 8:05 PM
380	Turtle Bay or RDG downtown transit center. SMF/RDG		12/10/2017 7:43 PM
381	Redding Urbanized Area	Redding	12/10/2017 6:45 PM
382	Redding Urbanized Area	Anderson or Redding CA	12/10/2017 6:19 PM
383	Yreka, ca		12/10/2017 6:00 PM
384	Redding Urbanized Area	Redding	12/10/2017 5:15 PM
385	Redding Urbanized Area	Anderson	12/10/2017 4:50 PM
386	Redding Urbanized Area	Redding CA	12/10/2017 4:40 PM
387	Redding Urbanized Area	Redding	12/10/2017 4:31 PM
388	Redding Urbanized Area	Redding	12/10/2017 4:30 PM
389	Redding Urbanized Area	Redding	12/10/2017 4:05 PM
390	Redding Urbanized Area	Redding,Ca@	12/10/2017 4:01 PM
391	Cottonwood		12/10/2017 4:00 PM
392	Redding Urbanized Area	Redding	12/10/2017 3:58 PM
393	Redding Urbanized Area	Redding, CA	12/10/2017 3:42 PM
394	Redding Urbanized Area	Redding	12/10/2017 3:28 PM
395	Redding Urbanized Area	Redding, CA	12/10/2017 3:28 PM
396	Redding Urbanized Area	Redding	12/10/2017 3:28 PM
397	Redding Urbanized Area	Redding	12/10/2017 3:27 PM
398	Home.		12/10/2017 3:27 PM
399	Redding Urbanized Area	Redding	12/10/2017 3:12 PM
400	Redding Urbanized Area	Redding	12/10/2017 2:59 PM
401	Susanville Ca		12/10/2017 2:55 PM
402	Redding Urbanized Area	Redding	12/10/2017 2:44 PM
403	Whitmore or redding		12/10/2017 2:25 PM
404	Redding Urbanized Area	Redding	12/10/2017 2:15 PM

North State Express Questionnaire

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405	Redding Urbanized Area	Redding	12/10/2017 2:12 PM
406	Redding Urbanized Area	Redding	12/10/2017 2:11 PM
407	Redding Urbanized Area	Redding, California	12/10/2017 2:11 PM
408	Redding Urbanized Area	Redding	12/10/2017 1:58 PM
409	Redding Urbanized Area	Red bluff ca	12/10/2017 1:35 PM
410	Redding Urbanized Area	Redding	12/10/2017 1:32 PM
411	Redding Urbanized Area	Redding,CA	12/10/2017 1:29 PM
412	Chico Urbanized Area	Chico	12/10/2017 1:14 PM
413	Redding Urbanized Area	Redding	12/10/2017 1:07 PM
414	Redding Urbanized Area	Redding	12/10/2017 1:06 PM
415	Redding Urbanized Area	Redding	12/10/2017 12:50 PM
416	Redding Urbanized Area	Redding, CA	12/10/2017 12:49 PM
417	Redding Urbanized Area	Redding	12/10/2017 12:23 PM
418	Redding Urbanized Area	Redding	12/10/2017 12:09 PM
419		Whitmore/redding	12/10/2017 12:07 PM
420		Weaverville	12/10/2017 12:03 PM
421	Redding Urbanized Area	west redding	12/10/2017 12:01 PM
422	Redding Urbanized Area	Redding, CA	12/10/2017 11:57 AM
423	Redding Urbanized Area	Redding	12/10/2017 11:47 AM
424	Redding Urbanized Area	Redding	12/10/2017 11:46 AM
425	Redding Urbanized Area	Redding CA	12/10/2017 11:42 AM
426	Redding Urbanized Area	Redding	12/10/2017 11:36 AM
427		Cincinnati oh	12/10/2017 11:25 AM
428	Redding Urbanized Area	Redding	12/10/2017 11:20 AM
429		Millville	12/10/2017 11:16 AM
430	Redding Urbanized Area	Redding	12/10/2017 11:06 AM
431	Chico Urbanized Area	Chico	12/10/2017 10:57 AM
432	Redding Urbanized Area	Redding	12/10/2017 10:54 AM
433		Weaverville	12/10/2017 10:53 AM
434	Redding Urbanized Area	Redding, ca	12/10/2017 10:47 AM
435	Chico Urbanized Area	Chico	12/10/2017 10:43 AM
436	Redding Urbanized Area	Redding, california	12/10/2017 10:37 AM
437	Redding Urbanized Area	Redding	12/10/2017 10:25 AM
438	Redding Urbanized Area	Redding, CA	12/10/2017 10:23 AM
439	Redding Urbanized Area	Redding	12/10/2017 10:15 AM
440	Redding Urbanized Area	REDDING	12/10/2017 10:09 AM
441	Redding Urbanized Area	Redding	12/10/2017 10:08 AM
442	Redding Urbanized Area	Redding	12/10/2017 10:08 AM
443	Redding Urbanized Area	Redding	12/10/2017 10:06 AM
444	Redding Urbanized Area	Redding, CA	12/10/2017 10:03 AM
445	Redding Urbanized Area	Redding	12/10/2017 10:02 AM

North State Express Questionnaire

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446	Redding Urbanized Area	Redding	12/10/2017 9:53 AM
447	Redding Urbanized Area	Redding	12/10/2017 9:52 AM
448	Redding Urbanized Area	Redding, CA.	12/10/2017 9:48 AM
449	Redding Urbanized Area	Redding	12/10/2017 9:48 AM
450	Redding Urbanized Area	Redding, CA	12/10/2017 9:46 AM
451	Redding Urbanized Area	Redding	12/10/2017 9:45 AM
452		Trinity Center, CA	12/10/2017 9:43 AM
453	Redding Urbanized Area	Redding	12/10/2017 9:40 AM
454	Redding Urbanized Area	Redding	12/10/2017 9:32 AM
455	Redding Urbanized Area	Redding	12/10/2017 9:27 AM
456	Redding Urbanized Area	Redding	12/10/2017 9:11 AM
457	Redding Urbanized Area	Redding	12/10/2017 9:10 AM
458	Redding Urbanized Area	Redding	12/10/2017 8:55 AM
459	Redding Urbanized Area	Redding	12/10/2017 8:49 AM
460	Redding Urbanized Area	Redding	12/10/2017 8:41 AM
461		Mount Shasta	12/10/2017 8:13 AM
462	Chico Urbanized Area	Chico	12/10/2017 8:08 AM
463	Redding Urbanized Area	Redding	12/10/2017 8:06 AM
464	Chico Urbanized Area	Chico	12/10/2017 7:59 AM
465	Redding Urbanized Area	Redding.ca	12/10/2017 7:56 AM
466		Shasta Lake, CA	12/10/2017 7:44 AM
467	Redding Urbanized Area	Redding	12/10/2017 7:29 AM
468		Lewiston	12/10/2017 7:29 AM
469	Redding Urbanized Area	Redding	12/10/2017 6:43 AM
470	Redding Urbanized Area	Redding	12/10/2017 6:33 AM
471	Redding Urbanized Area	Redding	12/10/2017 1:27 AM
472	Redding Urbanized Area	Redding	12/10/2017 1:23 AM
473	Redding Urbanized Area	Redding	12/9/2017 11:14 PM
474	Redding Urbanized Area	West Redding	12/9/2017 10:59 PM
475	Redding Urbanized Area	Redding	12/9/2017 10:47 PM
476	Redding Urbanized Area	Redding	12/9/2017 10:45 PM
477	Redding Urbanized Area	Redding	12/9/2017 10:42 PM
478		Weaverville CA	12/9/2017 10:13 PM
479	Red Bluff	Red Bluff	12/9/2017 9:50 PM
480	Redding Urbanized Area	Northeast Redding	12/9/2017 8:36 PM
481	Redding Urbanized Area	Anderson ca	12/9/2017 8:04 PM
482	Redding Urbanized Area	Anderson	12/9/2017 7:37 PM
483	Redding Urbanized Area	Redding	12/9/2017 7:26 PM
484		Hayfork	12/9/2017 6:59 PM
485		Lakehead	12/9/2017 6:58 PM
486	Redding Urbanized Area	Redding, CA	12/9/2017 6:52 PM

North State Express Questionnaire

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487	mount shasta		12/9/2017 6:48 PM
488	Pdx		12/9/2017 6:42 PM
489	Redding Urbanized Area	Redding	12/9/2017 6:41 PM
490	Redding Urbanized Area	Redding	12/9/2017 6:21 PM
491	Redding Urbanized Area	Redding	12/9/2017 6:06 PM
492	Redding Urbanized Area	Redding	12/9/2017 5:50 PM
493	Red Bluff	RED BLUFF	12/9/2017 5:48 PM
494	Weaverville		12/9/2017 5:36 PM
495	Redding Urbanized Area	Redding	12/9/2017 5:36 PM
496	Redding Urbanized Area	Redding	12/9/2017 5:21 PM
497	Redding Urbanized Area	Redding	12/9/2017 5:19 PM
498	Corning, Red Bluff, or Yreka.		12/9/2017 4:59 PM
499	Redding Urbanized Area	Redding	12/9/2017 4:43 PM
500	Redding Urbanized Area	Rdg	12/9/2017 4:11 PM
501	Dunsmuir, Siskiyou County		12/9/2017 3:34 PM
502	Redding Urbanized Area	Redding	12/9/2017 3:05 PM
503	Amtrak RABA		12/9/2017 2:26 PM
504	Home		12/9/2017 2:13 PM
505	Redding Urbanized Area	Redding	12/9/2017 2:02 PM
506	Redding Urbanized Area	Redding	12/9/2017 1:07 PM
507	Redding Urbanized Area	Redding	12/9/2017 12:46 PM
508	Redding Urbanized Area	Redding	12/9/2017 12:23 PM
509	Redding Urbanized Area	I start my trip in Redding, CA and drive to SMF	12/9/2017 11:53 AM
510	Redding Urbanized Area	Redding	12/9/2017 11:36 AM
511	Redding Urbanized Area	Redding	12/9/2017 11:09 AM
512	Redding Urbanized Area	Redding	12/9/2017 11:08 AM
513	Redding Urbanized Area	Redding, CA	12/9/2017 11:05 AM
514	Orland, California		12/9/2017 10:59 AM
515	Redding Urbanized Area	redding	12/9/2017 10:52 AM
516	Redding Urbanized Area	Redding	12/9/2017 10:39 AM
517	Redding Urbanized Area	Redding	12/9/2017 10:22 AM
518	Home		12/9/2017 10:09 AM
519	Redding Urbanized Area	Redding	12/9/2017 9:46 AM
520	Redding Urbanized Area	Redding	12/9/2017 9:15 AM
521	Redding Urbanized Area	Redding	12/9/2017 9:09 AM
522	Cottonwood		12/9/2017 9:02 AM
523	Redding Urbanized Area	Redding	12/9/2017 8:57 AM
524	Redding Urbanized Area	Redding	12/9/2017 8:44 AM
525	Redding Urbanized Area	Redding	12/9/2017 8:26 AM
526	Redding Urbanized Area	Home - Redding	12/9/2017 8:22 AM
527	Redding Urbanized Area	Redding	12/9/2017 8:17 AM

North State Express Questionnaire

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528	Shasta Lake (near Oasis and Cascade)		12/9/2017 7:53 AM
529	Redding Urbanized Area	Redding	12/9/2017 7:52 AM
530	Redding Urbanized Area	Redding	12/9/2017 7:44 AM
531	Red Bluff	Red Bluff	12/9/2017 7:29 AM
532	Redding Urbanized Area	Redding	12/9/2017 7:16 AM
533	Redding Urbanized Area	Redding	12/9/2017 7:14 AM
534	Burney, CA		12/9/2017 6:04 AM
535	Redding Urbanized Area	West Redding	12/9/2017 1:01 AM
536	Redding Urbanized Area	Redding or Anderson	12/9/2017 12:42 AM
537	Weaverville		12/8/2017 11:55 PM
538	Redding Urbanized Area	Redding, Ca	12/8/2017 11:24 PM
539	Mary Lake area		12/8/2017 11:19 PM
540	Durham		12/8/2017 11:15 PM
541	Redding Urbanized Area	Redding, CA	12/8/2017 11:11 PM
542	Redding Urbanized Area	Redding	12/8/2017 11:11 PM
543	Redding Urbanized Area	Redding CA so	12/8/2017 10:53 PM
544	Chico Urbanized Area	Chico	12/8/2017 10:39 PM
545	Redding Urbanized Area	Redding	12/8/2017 10:04 PM
546	Redding Urbanized Area	Redding	12/8/2017 9:53 PM
547	Sacramento		12/8/2017 9:49 PM
548	Redding Urbanized Area	Redding	12/8/2017 9:37 PM
549	Redding or Sacramento		12/8/2017 9:06 PM
550	Redding Urbanized Area	Redding,CA	12/8/2017 9:05 PM
551	Redding Urbanized Area	Redding	12/8/2017 9:04 PM
552	Redding Urbanized Area	Home- Redding	12/8/2017 8:55 PM
553	Redding Urbanized Area	Redding	12/8/2017 8:54 PM
554	Redding Urbanized Area	Redding	12/8/2017 8:53 PM
555	Redding Urbanized Area	Redding	12/8/2017 8:40 PM
556	Redding Urbanized Area	Redding	12/8/2017 8:12 PM
557	Redding Urbanized Area	Redding	12/8/2017 7:57 PM
558	Redding Urbanized Area	Redding, CA	12/8/2017 7:52 PM
559	Redding Urbanized Area	Redding	12/8/2017 7:42 PM
560	Redding Urbanized Area	Redding	12/8/2017 7:38 PM
561	Redding Urbanized Area	Redding	12/8/2017 7:15 PM
562	Redding Urbanized Area	home 1226 Orange Ave Redding	12/8/2017 7:06 PM
563	Redding Urbanized Area	Redding	12/8/2017 7:03 PM
564	Redding Urbanized Area	Redding, CA (Panorama drive)	12/8/2017 6:31 PM
565	Redding Urbanized Area	Redding	12/8/2017 6:23 PM
566	Ferndale		12/8/2017 6:20 PM
567	Redding Urbanized Area	Redding, CA	12/8/2017 6:00 PM
568	Mount Shasta/Dunsmuir		12/8/2017 5:29 PM

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569	Redding Urbanized Area	Redding	12/8/2017 5:01 PM
570	From home		12/8/2017 4:41 PM
571	Burney		12/8/2017 4:35 PM
572	Yreka		12/8/2017 4:22 PM
573	Redding Urbanized Area	Redding	12/8/2017 3:59 PM
574	Redding Urbanized Area	Redding	12/8/2017 3:48 PM
575	Cottonwood		12/8/2017 2:21 PM
576	Redding Urbanized Area	Anderson Ca	12/8/2017 2:05 PM
577	Redding Urbanized Area	Redding, CA	12/8/2017 1:50 PM
578	Redding Urbanized Area	Redding, CA	12/8/2017 1:42 PM
579	Susanville CA		12/8/2017 1:16 PM
580	Redding Urbanized Area	Redding	12/8/2017 1:11 PM
581	Hayfork CA		12/8/2017 12:41 PM
582	Yreka		12/8/2017 12:31 PM
583	Redding Urbanized Area	Redding	12/8/2017 12:25 PM
584	Eureka, Ca		12/8/2017 11:09 AM
585	West side		12/8/2017 11:01 AM
586	Redding Urbanized Area	Redding	12/8/2017 10:24 AM
587	Lassen County		12/8/2017 10:12 AM
588	Cottonwood		12/8/2017 10:00 AM
589	Burney, CA		12/8/2017 9:53 AM
590	Redding Urbanized Area	Redding home.	12/8/2017 9:33 AM
591	Redding Urbanized Area	downtown REdding	12/8/2017 9:23 AM
592	Burney		12/8/2017 8:15 AM
593	Redding or Chico		12/8/2017 6:19 AM
594	Redding Urbanized Area	Redding	12/8/2017 4:27 AM
595	Redding Urbanized Area	Redding	12/8/2017 2:21 AM
596	Redding Urbanized Area	Redding CA	12/7/2017 11:26 PM
597	Redding Urbanized Area	Redding	12/7/2017 11:16 PM
598	Redding Urbanized Area	Redding, CA	12/7/2017 11:07 PM
599	Redding Urbanized Area	Redding	12/7/2017 10:49 PM
600	Redding Urbanized Area	Redding	12/7/2017 10:48 PM
601	Mt Shasta		12/7/2017 10:30 PM
602	Redding Urbanized Area	Redding	12/7/2017 10:14 PM
603	Redding Urbanized Area	Redding, Ca	12/7/2017 10:06 PM
604	Burney		12/7/2017 9:54 PM
605	Redding Urbanized Area	Redding	12/7/2017 9:47 PM
606	Redding Urbanized Area	Redding	12/7/2017 9:46 PM
607	Redding Urbanized Area	Redding	12/7/2017 9:44 PM
608	Bella Vista		12/7/2017 9:27 PM
609	Redding Urbanized Area	Redding, CA	12/7/2017 9:11 PM

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610	Redding Urbanized Area	Redding	12/7/2017 9:03 PM
611	Redding Urbanized Area	Redding (Wisconsin Ave)	12/7/2017 9:00 PM
612	Redding Urbanized Area	Redding, CA	12/7/2017 9:00 PM
613	Redding Urbanized Area	Home in Redding	12/7/2017 8:55 PM
614	Redding Urbanized Area	Redding. Disabled clients going on vacation used to use the shuttle to the airport. It would be nice to have something similar again.	12/7/2017 8:37 PM
615		If I'm coming from Sacramento is there a coach. To take me from sac2 to Redding	12/7/2017 8:35 PM
616	Redding Urbanized Area	Redding	12/7/2017 7:49 PM
617	Redding Urbanized Area	Redding	12/7/2017 7:48 PM
618	Redding Urbanized Area	Redding	12/7/2017 7:44 PM
619	Redding Urbanized Area	Redding	12/7/2017 7:37 PM
620	Redding Urbanized Area	Redding, CA	12/7/2017 7:35 PM
621	Redding Urbanized Area	North west Redding	12/7/2017 7:23 PM
622		1875 Crestmont drive	12/7/2017 7:01 PM
623	Redding Urbanized Area	Redding	12/7/2017 7:00 PM
624	Redding Urbanized Area	Redding	12/7/2017 6:58 PM
625		My home or the airport.	12/7/2017 6:35 PM
626	Redding Urbanized Area	Redding, ca	12/7/2017 6:29 PM
627		Off of lake and market	12/7/2017 6:06 PM
628	Redding Urbanized Area	Redding, Ca	12/7/2017 6:05 PM
629		From the 96001 zip code - home.	12/7/2017 5:59 PM
630	Redding Urbanized Area	redding	12/7/2017 5:52 PM
631	Redding Urbanized Area	From my home in Redding	12/7/2017 5:44 PM
632	Redding Urbanized Area	Redding	12/7/2017 5:35 PM
633	Redding Urbanized Area	Redding	12/7/2017 5:31 PM
634	Redding Urbanized Area	Redding	12/7/2017 5:29 PM
635	Redding Urbanized Area	Redding	12/7/2017 5:26 PM
636	Redding Urbanized Area	Redding	12/7/2017 5:24 PM
637	Redding Urbanized Area	West Redding	12/7/2017 5:23 PM
638		Montague	12/7/2017 5:22 PM
639		Redding, Burney, Round Mountain	12/7/2017 5:22 PM
640	Redding Urbanized Area	Redding	12/7/2017 5:21 PM
641	Redding Urbanized Area	Redding	12/7/2017 5:03 PM
642	Redding Urbanized Area	Redding	12/7/2017 4:51 PM
643	Redding Urbanized Area	Redding	12/7/2017 4:45 PM
644	Redding Urbanized Area	Redding	12/7/2017 4:38 PM
645	Redding Urbanized Area	Redding	12/7/2017 4:36 PM
646	Redding Urbanized Area	Redding	12/7/2017 4:30 PM
647	Redding Urbanized Area	Redding	12/7/2017 4:15 PM
648	Redding Urbanized Area	Anderson or REdding	12/7/2017 4:12 PM
649	Redding Urbanized Area	Redding, CA 96001	12/7/2017 3:52 PM

North State Express Questionnaire

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650	Redding Urbanized Area	Redding	12/7/2017 3:45 PM
651	Redding Urbanized Area	redding	12/7/2017 3:26 PM
652	Redding Urbanized Area	Redding	12/7/2017 3:19 PM
653	Redding Urbanized Area	Redding	12/7/2017 3:18 PM
654	Redding Urbanized Area	Redding	12/7/2017 3:07 PM
655	Tehama County		12/7/2017 3:04 PM
656	Burney CA 96013		12/7/2017 3:02 PM
657	Redding Urbanized Area	Redding	12/7/2017 2:55 PM
658	Red Bluff	Red Bluff	12/7/2017 2:49 PM
659	Clearlake Oaks		12/7/2017 2:40 PM
660	Redding Urbanized Area	Redding	12/7/2017 2:27 PM
661	Redding Urbanized Area	Redding	12/7/2017 2:24 PM
662	Arcata, ca		12/7/2017 12:43 PM
663	Redding Urbanized Area	West Redding	12/7/2017 12:37 PM
664	Redding Urbanized Area	Redding	12/7/2017 12:29 PM
665	Redding Urbanized Area	Redding	12/7/2017 12:07 PM
666	Shingletown		12/7/2017 12:02 PM
667	Redding Urbanized Area	Redding	12/7/2017 11:58 AM
668	Shasta Lake		12/7/2017 11:39 AM
669	Redding Urbanized Area	Both West Redding and East Redding	12/7/2017 11:37 AM
670	Montgomery Creek		12/7/2017 11:34 AM
671	Cottonwood		12/7/2017 11:32 AM
672	Redding Urbanized Area	Downtown Redding	12/7/2017 11:30 AM
673	Sometimes Redding, but sometimes WA or OR cities.		12/7/2017 11:30 AM
674	Redding Urbanized Area	Redding	12/7/2017 11:21 AM
675	Redding Urbanized Area	My home in Redding	12/7/2017 11:18 AM
676	Redding Urbanized Area	Redding	12/7/2017 11:04 AM
677	Burney CA		12/7/2017 10:59 AM
678	Redding Urbanized Area	Redding	12/7/2017 10:45 AM
679	Redding Urbanized Area	Redding	12/7/2017 10:27 AM
680	Redding Urbanized Area	Redding	12/7/2017 10:23 AM
681	Redding Urbanized Area	Redding	12/7/2017 10:12 AM
682	Redding Urbanized Area	Redding	12/7/2017 10:11 AM
683	Redding Urbanized Area	Redding, CA	12/7/2017 10:10 AM
684	Chico Urbanized Area	chico	12/7/2017 10:07 AM
685	Palo Cedro, or Redding		12/7/2017 9:59 AM
686	Redding Urbanized Area	Redding	12/7/2017 9:44 AM
687	Redding Urbanized Area	Redding	12/7/2017 9:28 AM
688	Redding Urbanized Area	Redding	12/7/2017 9:24 AM
689	Redding Urbanized Area	redding	12/7/2017 9:21 AM
690	Redding Urbanized Area	Redding, CA	12/7/2017 9:20 AM

Attachment A

North State Express Questionnaire

SurveyMonkey

691	Redding Urbanized Area	Redding	12/7/2017 9:13 AM
692	Redding Urbanized Area	Redding	12/7/2017 9:08 AM
693	Redding Urbanized Area	West Redding	12/7/2017 9:08 AM
694	Redding Urbanized Area	Redding	12/7/2017 9:01 AM
695	Redding Urbanized Area	Redding, CA	12/7/2017 9:01 AM
696	Anderso		12/7/2017 8:49 AM
697	Redding Urbanized Area	Redding	12/7/2017 8:30 AM
698	Redding Urbanized Area	Home in Redding but can start anywhere	12/7/2017 7:50 AM
699	Cottonwood		12/7/2017 7:45 AM
700	Redding Urbanized Area	Redding	12/7/2017 7:12 AM
701	Redding Urbanized Area	Redding, CA	12/7/2017 6:16 AM
702	Redding Urbanized Area	Redding, Garden Tract	12/7/2017 5:40 AM
703	Redding Urbanized Area	Redding	12/7/2017 12:07 AM
704	Redding Urbanized Area	Redding	12/6/2017 11:46 PM
705	Redding Urbanized Area	Redding	12/6/2017 11:34 PM
706	Redding Urbanized Area	Anderson	12/6/2017 10:38 PM
707	Redding Urbanized Area	From Home in Redding	12/6/2017 10:08 PM
708	Redding Urbanized Area	West Redding	12/6/2017 9:57 PM
709	Redding Urbanized Area	Redding (home)	12/6/2017 9:54 PM
710	Redding Urbanized Area	Redding	12/6/2017 9:50 PM
711	Redding Urbanized Area	Redding	12/6/2017 9:31 PM
712	Redding Urbanized Area	Redding CA	12/6/2017 9:21 PM
713	Chico Urbanized Area	Chico, CA	12/6/2017 9:18 PM
714	Redding Urbanized Area	Redding	12/6/2017 9:12 PM
715	Redding Urbanized Area	Redding	12/6/2017 9:07 PM
716	Home address		12/6/2017 8:55 PM
717	Redding Urbanized Area	Redding, Ca	12/6/2017 8:51 PM
718	Redding Urbanized Area	Redding	12/6/2017 8:44 PM
719	Corning		12/6/2017 8:25 PM
720	Redding Urbanized Area	Redding CA	12/6/2017 8:25 PM
721	Redding Urbanized Area	Redding	12/6/2017 8:24 PM
722	Redding Urbanized Area	Redding	12/6/2017 8:19 PM
723	City of Shasta Lake		12/6/2017 7:57 PM
724	Redding Urbanized Area	Redding	12/6/2017 7:50 PM
725	Redding Urbanized Area	Redding	12/6/2017 7:46 PM
726	Redding Urbanized Area	Redding	12/6/2017 7:38 PM
727	Redding Urbanized Area	In West Redding	12/6/2017 7:35 PM
728	Redding Urbanized Area	Downtown Redding	12/6/2017 7:28 PM
729	Redding Urbanized Area	Redding - Ridgeview neighborhood	12/6/2017 7:18 PM
730	City of Shasta Lake, Shasta County, California.		12/6/2017 7:17 PM
731	Redding Urbanized Area	West Redding	12/6/2017 7:09 PM

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732	Redding Urbanized Area	Redding	12/6/2017 7:00 PM
733	Redding Urbanized Area	Redding	12/6/2017 6:38 PM
734	Redding Urbanized Area	Redding	12/6/2017 6:31 PM
735	Redding Urbanized Area	Redding	12/6/2017 6:23 PM
736	Redding Urbanized Area	Redding	12/6/2017 5:56 PM
737	Redding Urbanized Area	Redding	12/6/2017 5:54 PM
738	Redding Urbanized Area	Anderson	12/6/2017 5:49 PM
739	Redding Urbanized Area	Redding	12/6/2017 5:48 PM
740	Redding Urbanized Area	Redding	12/6/2017 5:47 PM
741	Redding Urbanized Area	Country Heights Redding	12/6/2017 5:42 PM
742	Redding Urbanized Area	Redding, CA	12/6/2017 5:41 PM
743	Redding Urbanized Area	Redding, Ca	12/6/2017 5:37 PM
744		Cottonwood, California	12/6/2017 5:34 PM
745	Redding Urbanized Area	Redding, CA	12/6/2017 5:33 PM
746	Chico Urbanized Area	Chico	12/6/2017 5:23 PM
747	Redding Urbanized Area	Redding	12/6/2017 5:14 PM
748	Redding Urbanized Area	Redding	12/6/2017 5:12 PM
749	Redding Urbanized Area	Redding	12/6/2017 5:08 PM
750	Redding Urbanized Area	Redding	12/6/2017 4:28 PM
751	Redding Urbanized Area	Redding	12/6/2017 4:11 PM
752	Redding Urbanized Area	Redding	12/6/2017 3:54 PM
753	Chico Urbanized Area	Chico, CA	12/6/2017 3:45 PM
754	Redding Urbanized Area	Redding, California	12/6/2017 3:34 PM
755	Chico Urbanized Area	Chico	12/6/2017 2:33 PM
756	Redding Urbanized Area	Anderson, CA	12/6/2017 1:03 PM
757		Klamath River, CA 96050	12/6/2017 12:30 PM
758	Redding Urbanized Area	Redding	12/6/2017 11:30 AM
759	Redding Urbanized Area	Redding, CA	12/6/2017 11:16 AM
760		Lakehead	12/6/2017 11:13 AM
761		Happy valley	12/6/2017 10:20 AM
762		Lakehead	12/6/2017 9:47 AM
763	Chico Urbanized Area	Chico	12/5/2017 7:22 PM
764	Chico Urbanized Area	Chico	12/5/2017 6:17 PM
765	Chico Urbanized Area	Chico	12/5/2017 4:44 PM
766	Chico Urbanized Area	Chico	12/5/2017 4:15 PM
767	Chico Urbanized Area	Chico,CA.	12/5/2017 4:00 PM
768	Chico Urbanized Area	Chico	12/5/2017 3:48 PM
769	Chico Urbanized Area	Chico	12/5/2017 3:45 PM
770		At home	12/5/2017 2:24 PM
771		Ft Jones	12/5/2017 2:21 PM
772	Chico Urbanized Area	Chico	12/5/2017 1:35 PM

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773	Oroville		12/5/2017 1:06 PM
774	Redding Urbanized Area	Redding	12/5/2017 10:30 AM
775	Chico Urbanized Area	Chico ca	12/5/2017 9:36 AM
776	Redding Urbanized Area	Redding	12/5/2017 9:05 AM
777	Redding Urbanized Area	Redding	12/5/2017 7:35 AM
778	Redding Urbanized Area	Redding	12/5/2017 7:21 AM
779	Weed calif		12/4/2017 11:48 PM
780	Redding Urbanized Area	Redding	12/4/2017 11:13 PM
781	Chico Urbanized Area	Chico	12/4/2017 9:39 PM
782	Cottonwood		12/4/2017 9:34 PM
783	Redding Urbanized Area	Redding, CA	12/4/2017 8:31 PM
784	Chico Urbanized Area	Chico	12/4/2017 8:06 PM
785	Chico Urbanized Area	Chico	12/4/2017 7:38 PM
786	Chico Urbanized Area	Chico	12/4/2017 7:20 PM
787	Redding Urbanized Area	Redding, ca	12/4/2017 7:05 PM
788	Mount Shasta		12/4/2017 7:00 PM
789	Chico Urbanized Area	Chico, CA	12/4/2017 6:43 PM
790	Redding Urbanized Area	Redding	12/4/2017 6:37 PM
791	Chico Urbanized Area	Chico	12/4/2017 6:16 PM
792	Chico Urbanized Area	Chico	12/4/2017 6:01 PM
793	Redding Urbanized Area	Redding	12/4/2017 2:08 PM
794	Chico Urbanized Area	Chico	12/4/2017 8:54 AM
795	Paradise		12/4/2017 8:50 AM
796	Redding Urbanized Area	Redding	12/4/2017 8:36 AM
797	Redding Urbanized Area	Anderson	12/4/2017 6:30 AM
798	Oroville or Willows, sometimes Chico		12/4/2017 4:29 AM
799	Chico Urbanized Area	Chico	12/4/2017 1:26 AM
800	ChiCo or redding		12/4/2017 12:41 AM
801	Chico Urbanized Area	Chico	12/3/2017 11:46 PM
802	Chico Urbanized Area	Chico	12/3/2017 10:55 PM
803	Chico Urbanized Area	Chico	12/3/2017 10:24 PM
804	Chico Urbanized Area	Chico	12/3/2017 9:49 PM
805	Magalia		12/3/2017 9:48 PM
806	Lakehead		12/3/2017 9:18 PM
807	Eureka, CA		12/3/2017 9:14 PM
808	Willits in Mendocino Co.		12/3/2017 8:31 PM
809	Shasta Lake		12/3/2017 8:10 PM
810	Chico Urbanized Area	Chico	12/3/2017 8:00 PM
811	Chico Urbanized Area	Paradise, Chico, or Oroville in Butte County	12/3/2017 7:42 PM
812	Chico Urbanized Area	Chico - Re: Question 5 & 6 - my start & return time really vary- based on flights, logistics regarding where I need to go. Sometimes I go late and take a RedEye .	12/3/2017 7:32 PM

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813	Eureka		12/3/2017 6:38 PM
814	Redding Urbanized Area	Redding	12/3/2017 5:00 PM
815	Redding Urbanized Area	Redding	12/3/2017 5:00 PM
816	Chico Urbanized Area	chico, ca	12/3/2017 1:58 PM
817	Redding Urbanized Area	Anderson, Redding California	12/3/2017 1:36 PM
818	oroville,ca.		12/3/2017 12:49 PM
819	Redding Urbanized Area	Redding	12/3/2017 12:47 PM
820	Redding Urbanized Area	Redding CA	12/3/2017 11:41 AM
821	Chico Urbanized Area	Chico, CA	12/3/2017 10:34 AM
822	Chico Urbanized Area	Chico	12/3/2017 10:00 AM
823	Redding Urbanized Area	Redding.	12/3/2017 9:52 AM
824	Chico Urbanized Area	West side of Chico	12/3/2017 9:28 AM
825	Susanville		12/3/2017 9:24 AM
826	Chico Urbanized Area	Chico	12/3/2017 8:58 AM
827	Eureka		12/3/2017 5:33 AM
828	Redding Urbanized Area	Redding,CA	12/3/2017 4:44 AM
829	Redding Urbanized Area	Redding	12/3/2017 2:42 AM
830	Eureka, CA		12/3/2017 2:36 AM
831	Redding Urbanized Area	Redding	12/3/2017 1:26 AM
832	Oroville		12/3/2017 12:48 AM
833	Dunsmuir, CA		12/2/2017 10:16 PM
834	Oroville		12/2/2017 10:08 PM
835	Chico Urbanized Area	Chico, CA	12/2/2017 9:47 PM
836	Cottonwood, CA		12/2/2017 9:39 PM
837	Chico Urbanized Area	Chico	12/2/2017 9:35 PM
838	Redding Urbanized Area	Redding	12/2/2017 9:15 PM
839	Redding Urbanized Area	Redding	12/2/2017 8:18 PM
840	Redding Urbanized Area	Redding	12/2/2017 8:12 PM
841	Redding Urbanized Area	Redding	12/2/2017 8:00 PM
842	Cottonwood		12/2/2017 7:51 PM
843	Mt Shasta		12/2/2017 7:42 PM
844	Yreka		12/2/2017 7:12 PM
845	Redding Urbanized Area	Redding, CA	12/2/2017 6:46 PM
846	Redding Urbanized Area	Redding	12/2/2017 5:44 PM
847	Redding Urbanized Area	Redding	12/2/2017 4:57 PM
848	Chico Urbanized Area	Chico	12/2/2017 4:17 PM
849	Redding Urbanized Area	Anderson, CA	12/2/2017 2:44 PM
850	Redding Urbanized Area	Redding	12/2/2017 12:51 PM
851	Redding Urbanized Area	Redding	12/2/2017 10:04 AM
852	Tehama County		12/2/2017 8:36 AM
853	Fort jones		12/2/2017 8:13 AM

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854	Redding Urbanized Area	Redding	12/2/2017 6:52 AM
855	Redding Urbanized Area	Redding	12/2/2017 12:58 AM
856	Chico Urbanized Area	Chico	12/1/2017 11:43 PM
857	Redding Urbanized Area	Redding	12/1/2017 11:23 PM
858	Redding Urbanized Area	Redding	12/1/2017 10:33 PM
859	Redding Urbanized Area	Redding CA	12/1/2017 10:16 PM
860	Redding Urbanized Area	Redding	12/1/2017 10:12 PM
861	Redding Urbanized Area	Anderson.	12/1/2017 9:11 PM
862		Cottonwood	12/1/2017 6:56 PM
863		Corning	12/1/2017 6:20 PM
864	Redding Urbanized Area	Anderson	12/1/2017 4:31 PM
865	Chico Urbanized Area	Chico, CA	12/1/2017 4:10 PM
866	Redding Urbanized Area	Redding, CA	12/1/2017 11:31 AM
867	Redding Urbanized Area	Redding, CA	12/1/2017 11:27 AM
868		Susanville CA	12/1/2017 11:16 AM
869	Redding Urbanized Area	Redding	12/1/2017 10:11 AM
870		Whitmore	12/1/2017 10:01 AM
871	Chico Urbanized Area	Chico	12/1/2017 8:01 AM
872		Orland, CA	12/1/2017 6:17 AM
873		Arcata	12/1/2017 6:01 AM
874		Mt. Shasta, CA	12/1/2017 12:11 AM
875	Redding Urbanized Area	Redding	11/30/2017 11:27 PM
876	Redding Urbanized Area	Redding	11/30/2017 10:44 PM
877		Mount Shasta	11/30/2017 10:42 PM
878		Dunsmuir	11/30/2017 10:15 PM
879		Dunsmuir, Mt. Shasta or Weed	11/30/2017 9:44 PM
880	Chico Urbanized Area	Chico	11/30/2017 9:34 PM
881	Redding Urbanized Area	Redding, CA	11/30/2017 9:30 PM
882	Redding Urbanized Area	Redding	11/30/2017 8:44 PM
883	Redding Urbanized Area	Redding	11/30/2017 8:41 PM
884		Yreka,Ca	11/30/2017 8:02 PM
885	Redding Urbanized Area	Redding Ca	11/30/2017 7:35 PM
886		Yreka, CA	11/30/2017 7:25 PM
887	Redding Urbanized Area	Redding	11/30/2017 7:10 PM
888		Yreka or etna	11/30/2017 6:38 PM
889		Yreka	11/30/2017 6:33 PM
890		Yrekall	11/30/2017 6:25 PM
891		Cottonwood ca	11/30/2017 6:13 PM
892	Redding Urbanized Area	Redding	11/30/2017 6:06 PM
893	Chico Urbanized Area	Chico	11/30/2017 5:37 PM
894	Redding Urbanized Area	Redding	11/30/2017 5:00 PM

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895	Red Bluff	Red Bluff	11/30/2017 1:10 PM
896	Redding Urbanized Area	Redding	11/30/2017 11:33 AM
897	Cottonwood		11/30/2017 11:20 AM
898	Chico Urbanized Area	Chico	11/30/2017 11:15 AM
899	Redding Urbanized Area	Redding	11/30/2017 11:06 AM
900	Redding Urbanized Area	Redding (work) or Anderson (home)	11/30/2017 10:33 AM
901	Red Bluff	Red Bluff	11/30/2017 9:31 AM
902	Redding Urbanized Area	Redding	11/30/2017 8:51 AM
903	Redding Urbanized Area	Redding	11/30/2017 8:41 AM
904	Redding Urbanized Area	Redding	11/30/2017 8:13 AM
905	Redding Urbanized Area	Redding	11/30/2017 6:58 AM
906	Sacramento		11/30/2017 6:58 AM
907	Cottonwood		11/30/2017 6:06 AM
908	Driving to the airport		11/30/2017 12:16 AM
909	Northern Humboldt County		11/29/2017 11:41 PM
910	Redding Urbanized Area	Redding	11/29/2017 11:18 PM
911	Redding Urbanized Area	Redding	11/29/2017 10:48 PM
912	Corning		11/29/2017 10:41 PM
913	Oroville or Chico		11/29/2017 10:11 PM
914	Redding Urbanized Area	Redding	11/29/2017 10:00 PM
915	Redding Urbanized Area	Redding	11/29/2017 9:56 PM
916	Cottonwood		11/29/2017 9:51 PM
917	Redding Urbanized Area	East Redding	11/29/2017 9:47 PM
918	Redding Urbanized Area	Redding	11/29/2017 9:14 PM
919	Redding Urbanized Area	Redding	11/29/2017 9:09 PM
920	Redding Urbanized Area	Redding	11/29/2017 8:57 PM
921	Enterprise		11/29/2017 8:41 PM
922	Redding Urbanized Area	Redding	11/29/2017 8:40 PM
923	Redding Urbanized Area	Redding	11/29/2017 8:22 PM
924	Redding Urbanized Area	Redding	11/29/2017 8:06 PM
925	amtrak		11/29/2017 7:52 PM
926	Redding Urbanized Area	Redding, CA	11/29/2017 7:01 PM
927	Weaverville, CA		11/29/2017 6:18 PM
928	Redding Urbanized Area	My home in Redding	11/29/2017 6:10 PM
929	Cottonwood		11/29/2017 5:54 PM
930	Susanville, CA		11/29/2017 10:40 AM
931	Crescent City		11/27/2017 3:36 PM
932	Susanville, CA		11/27/2017 2:31 PM
933	Susanville		11/27/2017 10:11 AM
934	Redding Urbanized Area	Redding	11/25/2017 10:52 PM
935	Crescent City, CA 95531		11/20/2017 5:36 PM

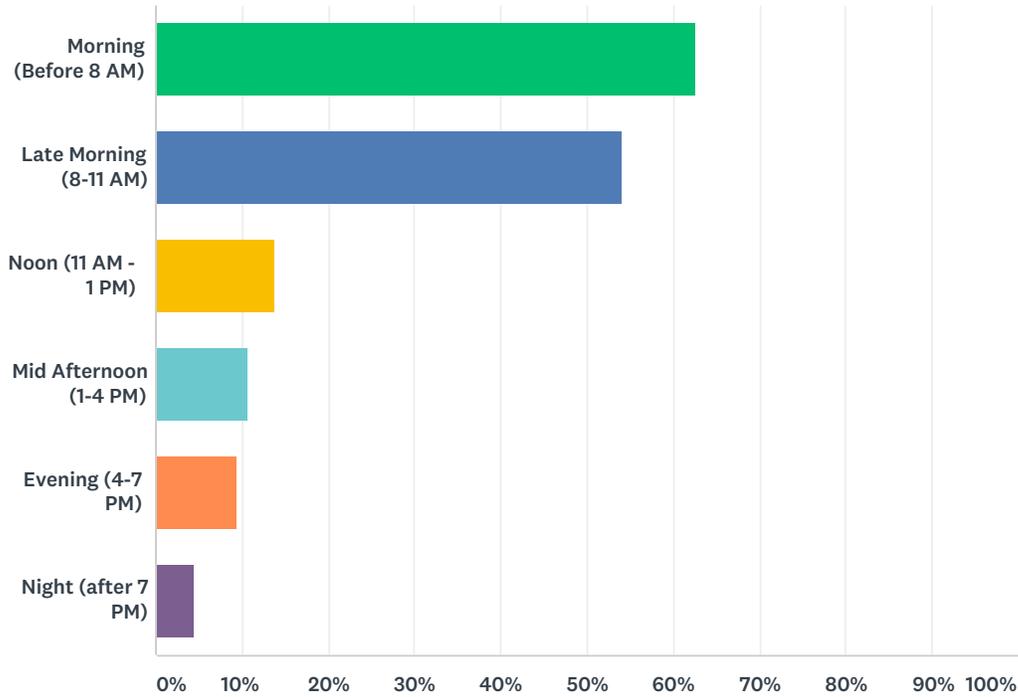
North State Express Questionnaire

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936	Redding Urbanized Area	Redding	11/17/2017 9:33 PM
937	Redding Urbanized Area	Redding	11/17/2017 2:32 PM
938	Redding Urbanized Area	Anderson	11/17/2017 7:58 AM
939	Redding Urbanized Area	Redding, CA	11/16/2017 9:27 AM
940		Garden Tract	11/16/2017 9:00 AM
941	Redding Urbanized Area	Redding (home)	11/15/2017 9:55 PM
942	Redding Urbanized Area	Redding	11/15/2017 8:54 PM
943	Redding Urbanized Area	Redding	11/15/2017 8:00 PM
944	Chico Urbanized Area	Chico	11/15/2017 8:00 PM
945	Redding Urbanized Area	My house in Redding	11/15/2017 7:51 PM
946	Redding Urbanized Area	Downtown Resding	11/15/2017 6:30 PM

Q5 What time of day do you begin your trip to Sacramento?

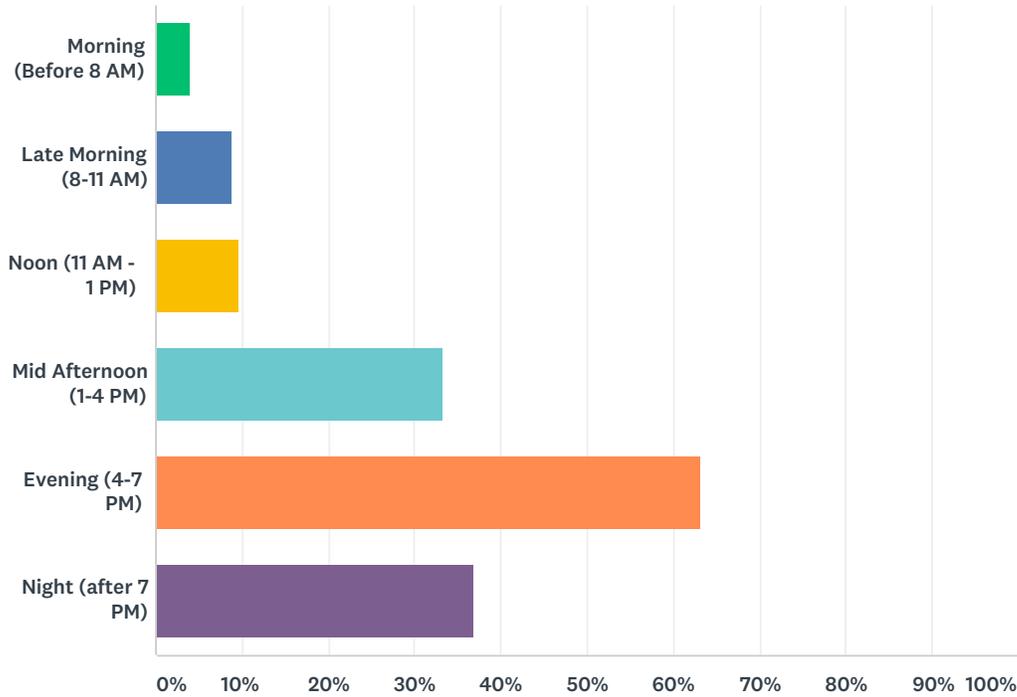
Answered: 975 Skipped: 15



ANSWER CHOICES	RESPONSES	
Morning (Before 8 AM)	62.56%	610
Late Morning (8-11 AM)	54.05%	527
Noon (11 AM - 1 PM)	13.85%	135
Mid Afternoon (1-4 PM)	10.77%	105
Evening (4-7 PM)	9.44%	92
Night (after 7 PM)	4.41%	43
Total Respondents: 975		

Q6 What time of day do you plan to return?

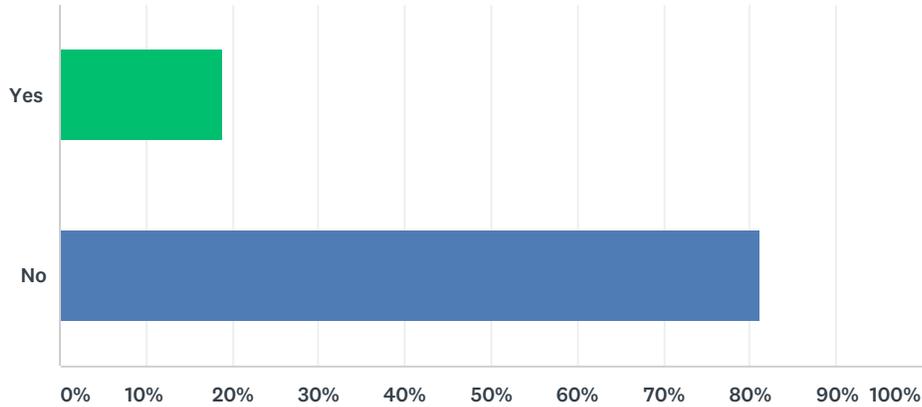
Answered: 967 Skipped: 23



ANSWER CHOICES	RESPONSES	
Morning (Before 8 AM)	3.93%	38
Late Morning (8-11 AM)	8.79%	85
Noon (11 AM - 1 PM)	9.72%	94
Mid Afternoon (1-4 PM)	33.20%	321
Evening (4-7 PM)	63.19%	611
Night (after 7 PM)	36.81%	356
Total Respondents: 967		

Q7 Do you take the Greyhound, train or other transit methods (besides a car) to get to Sacramento?

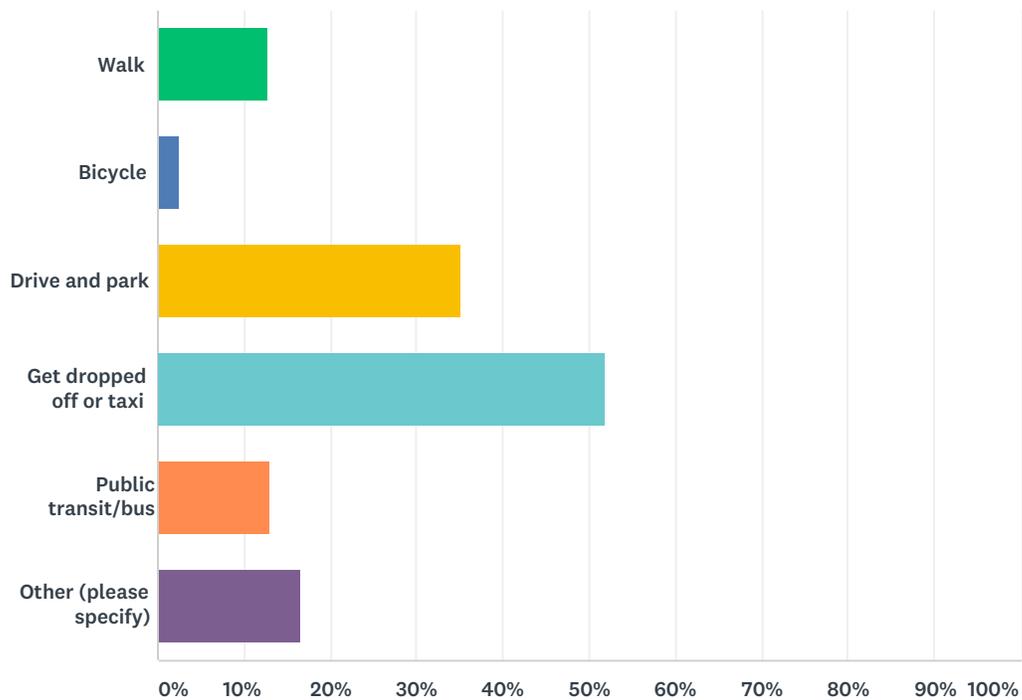
Answered: 988 Skipped: 2



ANSWER CHOICES	RESPONSES	
Yes	18.72%	185
No	81.28%	803
TOTAL		988

Q8 If so, how do you travel to the bus or train station?

Answered: 355 Skipped: 635



ANSWER CHOICES	RESPONSES
Walk	12.68% 45
Bicycle	2.54% 9
Drive and park	35.21% 125
Get dropped off or taxi	51.83% 184
Public transit/bus	12.96% 46
Other (please specify)	16.62% 59
Total Respondents: 355	

#	OTHER (PLEASE SPECIFY)	DATE
1	N/a	12/22/2017 4:16 PM
2	Dropped off by friends	12/21/2017 10:59 PM
3	Do not	12/20/2017 10:58 PM
4	N/A	12/20/2017 5:24 PM
5	Rental car	12/20/2017 3:16 PM
6	Family member drives	12/20/2017 1:37 PM
7	get a ride from friend	12/19/2017 4:51 PM
8	Friend	12/19/2017 7:36 AM
9	Uber	12/19/2017 2:11 AM

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10	fly	12/18/2017 6:10 PM
11	friend drives me	12/16/2017 6:10 PM
12	Car	12/16/2017 3:09 PM
13	n/a/	12/15/2017 8:23 PM
14	N/A	12/14/2017 10:06 AM
15	.	12/13/2017 8:45 PM
16	Get a ride from a friend or family member	12/13/2017 6:33 PM
17	Uber or Lyft	12/13/2017 4:46 PM
18	Drive my self	12/13/2017 1:54 AM
19	It's an hour and a half drive just to get to Redding	12/12/2017 9:54 PM
20	Uber	12/12/2017 9:27 AM
21	airport shuttle	12/11/2017 11:46 PM
22	n/a	12/11/2017 11:44 AM
23	Rental car to airport	12/11/2017 12:19 AM
24	ask for rides from airport to RDG	12/10/2017 7:43 PM
25	Rental car	12/10/2017 4:00 PM
26	Susanville has very little to chose from	12/10/2017 2:55 PM
27	N/A	12/10/2017 9:32 AM
28	Fly in an airplane	12/10/2017 7:44 AM
29	Airport	12/10/2017 6:43 AM
30	Don't take Greyhound	12/9/2017 5:21 PM
31	NA	12/9/2017 12:46 PM
32	Airport shuttle	12/8/2017 11:55 PM
33	Fly in and out of Sacramento	12/8/2017 9:06 PM
34	Car	12/8/2017 9:04 PM
35	I do not use	12/8/2017 5:01 PM
36	friend	12/8/2017 1:50 PM
37	Used to use Shuttle. Now I must use RDD airport for connection.	12/7/2017 8:37 PM
38	Some one will pick me up	12/7/2017 8:35 PM
39	bum a ride	12/7/2017 5:52 PM
40	Amtrak	12/7/2017 5:22 PM
41	Uber	12/7/2017 4:15 PM
42	I don't	12/7/2017 3:19 PM
43	Uber Lyft	12/7/2017 12:43 PM
44	get dropped off	12/7/2017 10:07 AM
45	Uber	12/6/2017 9:50 PM
46	Won't do that because of inconvenient hours and frightening area & lack of safe parking & safe are in which to wait.	12/6/2017 8:51 PM
47	Do not know where there is a bus station.	12/6/2017 1:03 PM
48	Haven't taken the train as the hours do not work well for me.	12/6/2017 11:13 AM
49	Get dropped off	12/4/2017 7:20 PM

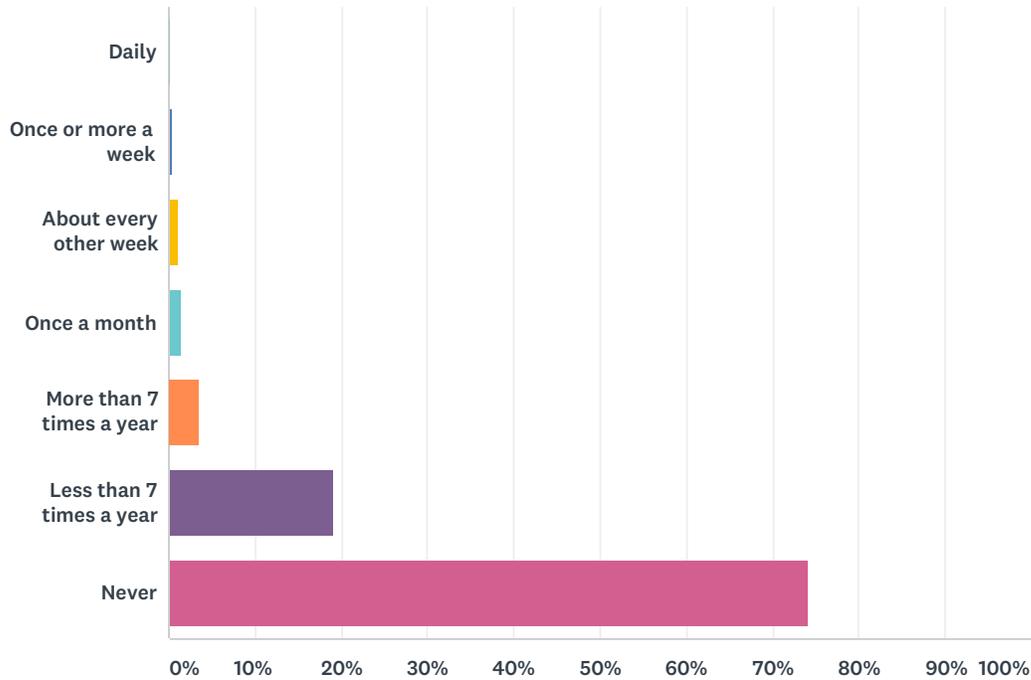
North State Express Questionnaire

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50	Taxi from Paradise is \$40 each way. Bus schedules don't mesh with most bus/train schedules out of Chico.	12/4/2017 8:50 AM
51	Car only. I don't drive, someone else drives	12/3/2017 1:36 PM
52	No	12/1/2017 9:11 PM
53	N/a	11/30/2017 10:44 PM
54	I can walk to the Amtrak station, but would need a ride to get to the Greyhound station in Weed.	11/30/2017 9:44 PM
55	Uber	11/30/2017 8:02 PM
56	Friends & family	11/30/2017 11:06 AM
57	Get a ride	11/30/2017 6:58 AM
58	I don't	11/30/2017 6:58 AM
59	Personal Vehicle	11/17/2017 7:58 AM

Q9 How often do you take the Greyhound, train or other transit methods to Sacramento?

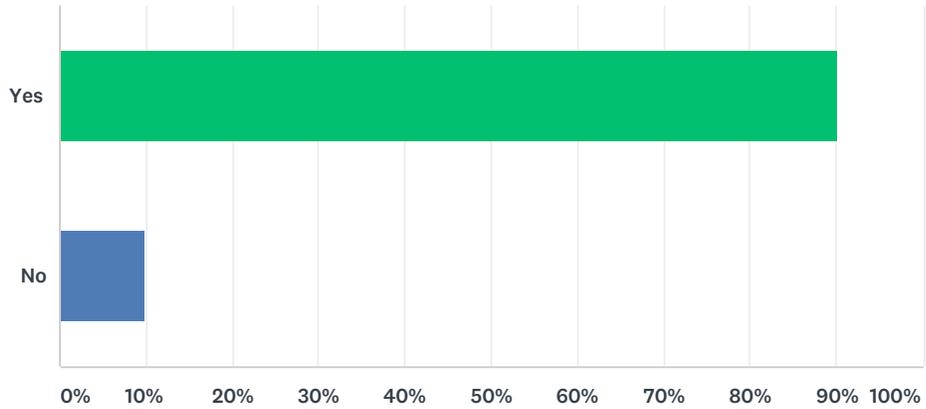
Answered: 921 Skipped: 69



ANSWER CHOICES	RESPONSES
Daily	0.22% 2
Once or more a week	0.43% 4
About every other week	1.09% 10
Once a month	1.52% 14
More than 7 times a year	3.58% 33
Less than 7 times a year	19.11% 176
Never	74.05% 682
TOTAL	921

Q10 Are you interested in riding transit to Sacramento?

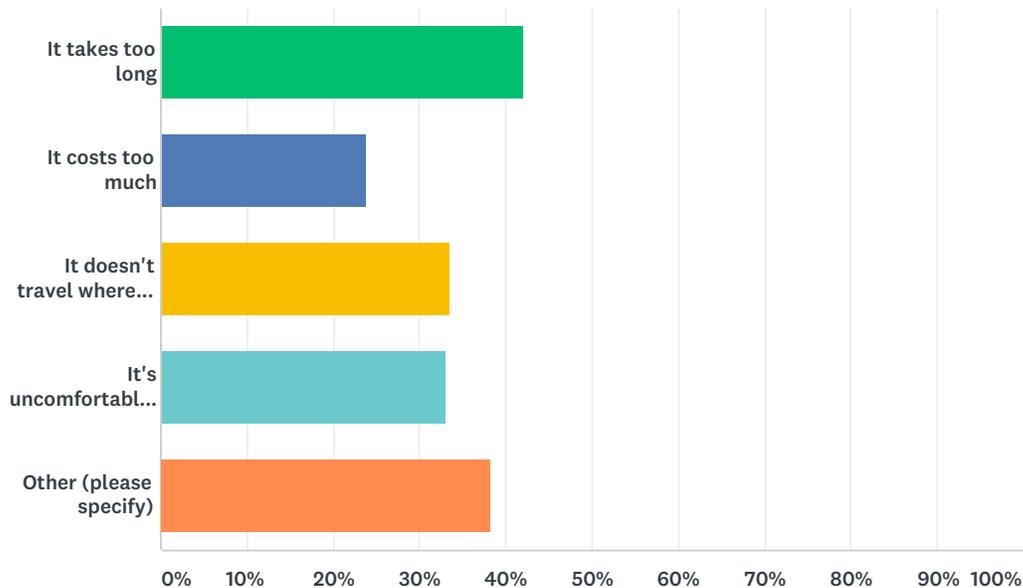
Answered: 984 Skipped: 6



ANSWER CHOICES	RESPONSES	
Yes	90.14%	887
No	9.86%	97
TOTAL		984

Q11 If not, please explain:

Answered: 188 Skipped: 802



ANSWER CHOICES	RESPONSES
It takes too long	42.02% 79
It costs too much	23.94% 45
It doesn't travel where I need to go	33.51% 63
It's uncomfortable and/or unsafe	32.98% 62
Other (please specify)	38.30% 72
Total Respondents: 188	

#	OTHER (PLEASE SPECIFY)	DATE
1	dont know	12/27/2017 11:25 AM
2	Need a car when on sac	12/24/2017 8:12 AM
3	family would drive me	12/22/2017 9:27 AM
4	We have to travel up to San Fransisco and back to Sacramento. Over 200 miles more than I should have to travel.	12/22/2017 7:04 AM
5	2 hour layover and I didn't know there was a train to reno. hmmm	12/21/2017 4:35 PM
6	Connections to other transit once you get there	12/21/2017 3:46 PM
7	Makes too many stops.	12/21/2017 12:04 AM
8	Not monetarily feasible or consistent	12/20/2017 9:30 PM
9	Smells like puke and shit	12/20/2017 9:15 PM
10	N/A	12/20/2017 12:26 PM
11	N/a. At this time	12/19/2017 7:36 AM
12	I'D RATHER DRIVE MYSELF AND BE ON MY OWN SCHEDULE	12/15/2017 5:51 PM

North State Express Questionnaire

SurveyMonkey

13	I would take my own car	12/14/2017 10:27 PM
14	Don't like going to downtown Redding, too many homeless and druggies	12/13/2017 5:19 PM
15	Drive my self	12/13/2017 1:54 AM
16	I have a vehicle	12/12/2017 4:43 PM
17	If there was another option except what there is now.	12/12/2017 3:41 PM
18	I only won't ride it if it becomes too unsafe or stinky with transients.	12/12/2017 3:07 PM
19	Unsure as to whether I would use transit to Sacramento.	12/12/2017 2:24 PM
20	Like convenience of my vehicle and I take my dogs sometimes.	12/12/2017 11:39 AM
21	As far as I know, there is no service to Sacramento airport	12/12/2017 11:04 AM
22	Greyhound has always felt unsafe to me and I always feel like its very unsanitary.	12/12/2017 10:16 AM
23	schedule conflict	12/12/2017 10:09 AM
24	I have a vehicle and like to be on my own schedule.	12/12/2017 9:12 AM
25	Almost 100% depends on the clientele in the cab and whether they are California's criminal/vagrant/addicted population	12/12/2017 9:10 AM
26	I go from Humboldt Co to the Bay Area and PDX.	12/11/2017 8:52 PM
27	I need my vehicle once I get to Sacto to get around to the things I want to do.	12/11/2017 7:18 PM
28	My schedule is too variable.	12/11/2017 7:01 PM
29	Private services are too expensive, greyhound is too uncomfortable - do we even have a station anymore?	12/11/2017 6:29 PM
30	Safety is my biggest concern	12/11/2017 6:28 PM
31	Doesn't stop in chico	12/11/2017 1:07 PM
32	i have a car	12/11/2017 12:14 PM
33	Greyhound Bus doesn't feel safe. Timing of train is bad for us here (3 a.m.?)	12/11/2017 11:53 AM
34	N/a	12/11/2017 12:19 AM
35	Mainly need it to the airport & back and for friends and family flying in to visit so we don't have to drive 5 hours round trip to pick them up/take them back.	12/10/2017 3:42 PM
36	It's not reliable	12/10/2017 3:12 PM
37	Travel with young kids	12/10/2017 2:12 PM
38	I'm interested in riding transit to sacramento	12/10/2017 11:06 AM
39	Be great if went from redding to sac. Airports	12/10/2017 9:52 AM
40	Depends on cost and Express status to SMF in particular.	12/10/2017 9:48 AM
41	Haven't needed to	12/10/2017 9:45 AM
42	M	12/10/2017 9:32 AM
43	Love traveling	12/10/2017 7:56 AM
44	Greyhound frequently stinks (literally smells bad). Both the patrons and the toilet. Connecting flights are unreliable and frequently delayed or cancelled.	12/10/2017 7:44 AM
45	Depends on times and cost.	12/9/2017 6:33 PM
46	I also want to go to cities north of Sacramento - Orville, Red Bluff, Chico, Marysville etc.	12/8/2017 5:29 PM
47	Need to have all my stuff in my car. Also, usually travelling on to Amador County.	12/8/2017 4:35 PM
48	Because I drive there.	12/8/2017 2:21 PM
49	Doesn't exist.	12/8/2017 10:12 AM
50	I own a car	12/8/2017 9:53 AM

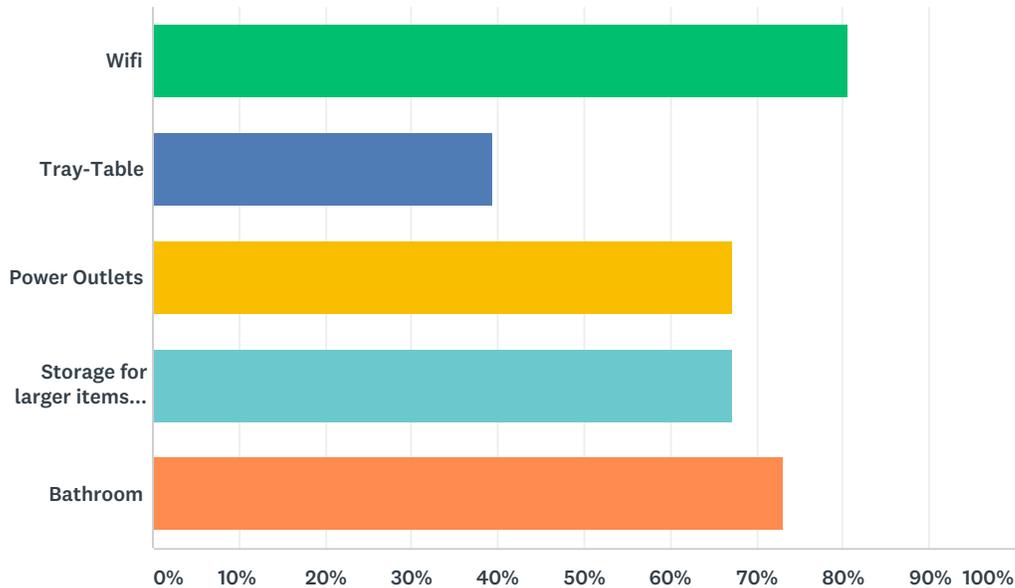
North State Express Questionnaire

SurveyMonkey

51	would have to connect with public transport in sac	12/8/2017 9:23 AM
52	The buses are not safe, the stations are not safe	12/7/2017 3:02 PM
53	I would take RDC Rail if several times per day	12/7/2017 11:30 AM
54	too large of a carbon footprint	12/7/2017 9:44 AM
55	I have a car.	12/7/2017 9:13 AM
56	It depends on time of day going and coming	12/6/2017 8:44 PM
57	A battery bus? ugggg	12/6/2017 6:31 PM
58	Not a typically a single destination trip i.e work, airport, other	12/6/2017 5:08 PM
59	unknown information	12/5/2017 4:44 PM
60	All of the above. Will possibly attract 'scary' types of people like the regular busses do.	12/5/2017 2:21 PM
61	Dont go enough. Need freedom when there	12/4/2017 7:42 PM
62	I am interested	12/4/2017 8:54 AM
63	I have a car.	11/30/2017 6:25 PM
64	Like having my car	11/30/2017 6:06 PM
65	I drive	11/30/2017 9:31 AM
66	Inconvenient	11/29/2017 10:41 PM
67	Doesn't go at the right times (train at 2AM?)	11/29/2017 9:56 PM
68	No	11/29/2017 8:57 PM
69	to get to transit I would need to drive my car a great distance from home to the tranist stop and in Susanville there are no 'long term parking areas' that are safe and secure and "free" places to park my vehicle.	11/29/2017 10:40 AM
70	currently it takes way too long have to go to Martinez	11/27/2017 3:36 PM
71	It takes too much time and doesn't travel WHEN I need to.	11/20/2017 5:36 PM
72	Personal Car	11/17/2017 7:58 AM

Q12 What amenities would you like on the bus? Please select all that apply.

Answered: 967 Skipped: 23



ANSWER CHOICES	RESPONSES
Wifi	80.56% 779
Tray-Table	39.30% 380
Power Outlets	67.22% 650
Storage for larger items like suitcases	67.22% 650
Bathroom	73.01% 706
Total Respondents: 967	

#	OTHER (PLEASE SPECIFY)	DATE
1	Absolutely need bathroom and suitcase space. Otherwise, I would not use the service.	12/23/2017 8:06 PM
2	Small trash can, recycle bin, snacks	12/22/2017 4:16 PM
3	A good cleaning before loading.	12/21/2017 4:35 PM
4	Music	12/21/2017 3:46 PM
5	Overhead lights and fans. Comfortable seats.	12/21/2017 12:04 AM
6	Safe	12/20/2017 11:39 PM
7	Cleanliness	12/20/2017 9:39 PM
8	Refreshments.	12/20/2017 9:30 PM
9	Noose to hang ourselves	12/20/2017 9:15 PM
10	Able to purchase water.	12/20/2017 11:54 AM
11	Clean	12/19/2017 6:05 AM
12	Bar	12/18/2017 5:52 PM

North State Express Questionnaire

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13	Keep it clean!!	12/18/2017 3:57 PM
14	All of the above +	12/18/2017 9:57 AM
15	Ability to strap in a car seat	12/17/2017 6:23 PM
16	Place for my walker	12/15/2017 2:07 PM
17	Storage for a briefcase	12/15/2017 12:55 AM
18	Simple snacks	12/14/2017 5:47 PM
19	Prefer a train	12/14/2017 5:42 PM
20	Cupholders!!!	12/13/2017 8:28 PM
21	Fan/Lights, Built in Media Player to stream videos	12/13/2017 5:55 PM
22	Footrest	12/13/2017 1:20 PM
23	More economic	12/13/2017 1:54 AM
24	Movies	12/12/2017 11:46 PM
25	Handicaped access	12/12/2017 8:22 PM
26	Cleanliness. Leg room. Arm rests. Ability to not be squished closely to someone you don't know.	12/12/2017 8:08 PM
27	Comfortable spread out seats. No cramming like the airlines.	12/12/2017 7:04 PM
28	Just comfortable seats for tall folks with long legs and bathroom for the lady's.	12/12/2017 5:55 PM
29	Adequate seat space. Comfortable and spacious. Clean.	12/12/2017 3:17 PM
30	Air freshener and proper security measures	12/12/2017 3:07 PM
31	To be honest, leather or non-cloth seats. I'm more concerned about germs, bedbugs, etc. and that would hinder me from using the transit.	12/12/2017 2:24 PM
32	Quick, clean, convenient	12/12/2017 12:29 PM
33	A stop every 1.5 hour for bathroom.	12/12/2017 12:17 PM
34	Water bottles available.	12/12/2017 12:15 PM
35	Facing seats for friends or families travelling together, with a table in between for playing games, working on laptops or tablets, etc.	12/12/2017 11:56 AM
36	another driver besides myself ;)	12/12/2017 10:03 AM
37	Kid-Friendly	12/12/2017 9:18 AM
38	Clean, modern bus, security.	12/11/2017 7:25 PM
39	Comfortable Seating	12/11/2017 6:33 PM
40	Snacks	12/11/2017 1:07 PM
41	bathroom would be nice, but not absolutely. especially if there are stops along the way	12/11/2017 11:00 AM
42	Connection to Chico	12/11/2017 10:53 AM
43	From my location, it's a 4 hr trip, amenities required	12/11/2017 7:57 AM
44	SAFETY!!!!!!!!!!!!!!	12/10/2017 8:58 PM
45	A dependable departure and arrival is all I ask for.	12/10/2017 7:43 PM
46	A bathroom would be nice but not necessary if the bus can make a stop once.	12/10/2017 3:42 PM
47	Just clean and friendly.	12/10/2017 12:07 PM
48	clean pillows, clean blankets	12/10/2017 11:57 AM
49	Bathroom could be contingent on how many stops the bus made.	12/10/2017 11:47 AM
50	Will be traveling to see family	12/10/2017 11:25 AM
51	Need buses that go direct without stops	12/10/2017 11:16 AM

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52	My husband needs medical at UC Davis and I can't drive there and back...to old and have to find someone to drive us.	12/10/2017 10:43 AM
53	Reclining seats.	12/10/2017 10:03 AM
54	Security guard for safety	12/10/2017 9:27 AM
55	Tablet mounts, bike racks, adjustable window covers (to block light), fresh air vents, adequate legroom, reclining seats with elevated leg rests, massaging seats.	12/10/2017 7:44 AM
56	Security. I won't take the Greyhounds because of the sketchy people.	12/9/2017 7:26 PM
57	All of the above.	12/9/2017 6:33 PM
58	bicycle rack	12/9/2017 12:23 PM
59	Love the option of doing other things than driving when making the trip.	12/9/2017 11:08 AM
60	snacks and or water	12/9/2017 10:39 AM
61	Not picky---just need to get there in an affordable method.	12/9/2017 8:26 AM
62	Snacks & water for purchase. Women's menstrual items available to buy in restroom.	12/9/2017 6:04 AM
63	Speed of travel	12/8/2017 9:06 PM
64	Bike rack	12/8/2017 9:05 PM
65	bikes would be nice	12/8/2017 7:06 PM
66	Coffee and/or water	12/8/2017 7:03 PM
67	Handicap assistance	12/8/2017 6:31 PM
68	Arm rests, leg support like a stool or recliner popout, cup holder, overhead light, security camera ?, under seat stowage storage. Changing table for babies.	12/8/2017 11:09 AM
69	I would like to take a bike along to Old Town	12/7/2017 11:26 PM
70	Electric bus no gas, diesel, or natural gas powered, just pure electric!	12/7/2017 9:11 PM
71	A food/drink option	12/7/2017 5:22 PM
72	Tv	12/7/2017 5:21 PM
73	Does not apply - I would never ride the bus.	12/7/2017 11:39 AM
74	It's a fact that RDC will get fare more riders than bus; but it has to travel frequently, so people don't have to wait "hours" to get the next train (or bus) home. Usually when I take a bus (usually Amtrak) to Sac, it's to keep going to a location in S. CA. The rail line that "used" to go from Chico to Reno, has been abandoned years ago; and going through Sac to Reno is a major added expense.	12/7/2017 11:30 AM
75	Safe, comfortable bus that 's not too expensive with reasonable hours.	12/7/2017 11:18 AM
76	- Ability to easily travel with a bike - Comfortable, roomy seats, with arm rests - Drink and snack service - like on the train and ferry (maybe purchased at bus stop location and carry-on) - Newspaper, magazines - Front of bus (or back of bus) screen read-out to show where you are in the travel route - Alerts to help passengers prepare to exit, like on the train and ferry. - Big, wide windows - Skylights - Ease of bag storage near your seat - Please no in-seat screens - movies or ads. - Wayfinding help for connections - maybe cards in the seats to show maps of the different destination locations in Sacramento - and how to get from the drop-off to ticket-purchase or taxi station, or different air terminals, etc.	12/7/2017 9:59 AM
77	Wheelchair accessability	12/7/2017 8:30 AM
78	movies	12/7/2017 5:40 AM
79	Or stops to use the bathroom	12/7/2017 12:07 AM
80	Spacious leg and arm room	12/6/2017 7:17 PM
81	None	12/6/2017 6:31 PM
82	Snacks, soda, water, TV plug-in audio, wider seats	12/6/2017 5:49 PM
83	Box Lunches or Similar Food Availability to Advance Order With Ticket	12/6/2017 4:28 PM

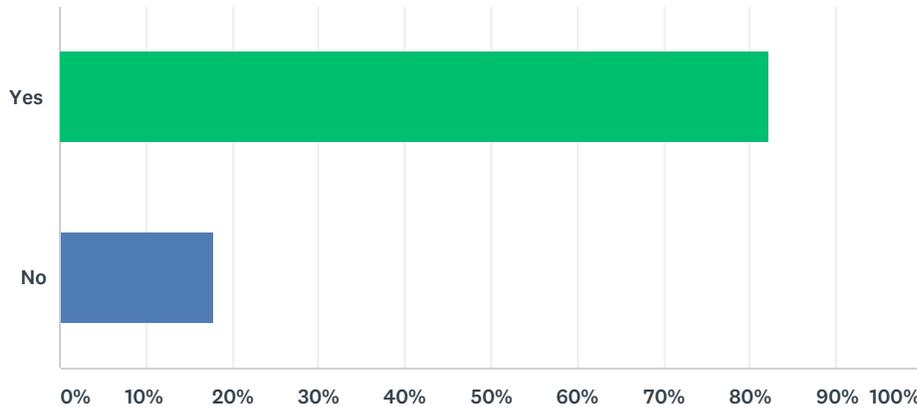
North State Express Questionnaire

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84	Snacks bar	12/5/2017 9:36 AM
85	Well lit areas	12/4/2017 11:48 PM
86	maybe lighting	12/4/2017 6:37 PM
87	Security official(s) besides the driver, and also security cameras, bus station announcements, ADA access features	12/4/2017 4:29 AM
88	A way to travel with an Emotional Support Animal over 25lbs would be nice.	12/4/2017 12:41 AM
89	Because of the time it takes to use public transport, it is nice to have all the amenities to work while on bus.	12/3/2017 7:32 PM
90	Would like amenities but affordable transportation to Airport would be main priority.	12/3/2017 8:58 AM
91	Leg room and seats large enough I have no chance of being crushed by a large person.	12/3/2017 2:36 AM
92	Security at loading and at destination	12/2/2017 9:47 PM
93	Reasonable times. Safety.	12/2/2017 9:15 PM
94	Bike rack	12/2/2017 6:46 PM
95	Lots of leg room and space between seats.	12/2/2017 8:36 AM
96	Bike rack or storage for bike, kid friendly	11/30/2017 11:27 PM
97	Wifi would be great but not as important as bathroom and plug in.. even usb plug ins only would be great. If your phone about dead on way home you could charge a little and kids can be entertained on trip	11/30/2017 10:44 PM
98	Clean, comfortable seats. Sometimes the seats on the Greyhound bus to Sacramento are worn & torn; also bus does not feel clean.	11/30/2017 9:44 PM
99	Pet-friendly	11/30/2017 8:44 PM
100	Tinted windows or shades for the bright sunlight, individual seats with arm rests, four-seater with table for groups, bike storage, reclining seats, controllable overhead lighting	11/30/2017 11:33 AM
101	Bike rack/bike storage compartment	11/30/2017 8:13 AM
102	Handicap access	11/29/2017 7:52 PM
103	I'd choose cheaper fares over WiFi and power outlets.	11/29/2017 7:01 PM
104	free entertainment (i.e. movies, video games, etc) similar to what is used by the airline industry	11/29/2017 10:40 AM
105	Comfy Chairs and snacks	11/17/2017 7:58 AM
106	No bathroom would be a dealbreaker.	11/15/2017 8:00 PM
107	Ability to take a bike	11/15/2017 8:00 PM

Q13 Would you consider traveling to Sacramento more often if an express bus route was provided? Please explain your reasoning.

Answered: 962 Skipped: 28



ANSWER CHOICES	RESPONSES
Yes	82.22% 791
No	17.78% 171
TOTAL	962

#	PLEASE EXPLAIN:	DATE
1	convenience of not dealing with traffic	12/26/2017 9:34 PM
2	Might go for shopping if I didn't have to drive or catch a ride	12/26/2017 12:29 PM
3	There isn't that much drawing me to Sac. due to the distance.	12/25/2017 8:24 PM
4	To go to and from the Airport	12/24/2017 12:05 PM
5	Maybe	12/23/2017 8:06 PM
6	Then I don't have to drive. I can use it for roundtrips to Sacramento International Airport at least twice a year!	12/22/2017 9:51 PM
7	Be nice not to drive	12/22/2017 9:49 PM
8	I would consider traveling by transit vs driving. I don't know that it would increase my frequency of travel.	12/22/2017 4:16 PM
9	For shopping and flying out of Sacramento airport mor often	12/22/2017 8:26 AM
10	Visit family more often.	12/22/2017 7:04 AM
11	If local options at a decient price where available it would be great during the winter months	12/21/2017 10:59 PM
12	Would be interested if I could get where I needed to go	12/21/2017 5:41 PM
13	only to get to reno. 36 to Susanville is way too scarry	12/21/2017 4:35 PM
14	Yes we would love to just go down to old town without the parking nightmare	12/21/2017 3:46 PM
15	I don't like traveling alone or at night.	12/21/2017 1:56 PM
16	The express bus is convienient and restful.	12/21/2017 1:45 PM
17	If it could be cost efficient to get to the airport I would rather take the bus than drive.	12/21/2017 1:34 PM
18	Hate to drive anymore	12/21/2017 1:19 PM

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19	I would like to go to Sacramento more often for fun.	12/21/2017 8:26 AM
20	i'm visually impaired and don't drive, greyhound is a LONG UNCOMFORTABLE trip	12/21/2017 7:53 AM
21	An express would be Great! I might travel more often if it went straight from Redding to the Airport and then into Sacramento	12/21/2017 12:04 AM
22	Takes the stress out of teavel	12/20/2017 10:58 PM
23	I would consider flying out of Sacramento more than the Bay Area	12/20/2017 9:30 PM
24	Oh hell yeah get me there tonight	12/20/2017 9:15 PM
25	no need to travel more often	12/20/2017 5:45 PM
26	Would be less hassle for parking and traffic	12/20/2017 5:24 PM
27	It would open up more options to attend concerts etc that I wouldn't enjoy driving home after.	12/20/2017 3:09 PM
28	I want to avoid leaving my car at the airport.	12/20/2017 2:20 PM
29	It would be more convenient. I don't care for the drive.	12/20/2017 1:56 PM
30	We have relatives and business needs in the area	12/20/2017 1:29 PM
31	more convinient	12/20/2017 1:25 PM
32	I often don't go, because I don't want to drive	12/20/2017 1:12 PM
33	If it's not too expensive could afford going more often	12/20/2017 1:09 PM
34	Don't have to deal with traffic	12/20/2017 12:32 PM
35	Able to shop more	12/20/2017 12:26 PM
36	More relaxing way to travel	12/20/2017 12:12 PM
37	Id be more likely to fly rather than drive to L.A. or Las Vegas. It would be easier to participate in events. Now total driving time, plus event time, is too long so we don't participate	12/20/2017 11:54 AM
38	would be able to attend more events due to unreliable vehicle	12/20/2017 10:23 AM
39	Only to airport	12/20/2017 9:33 AM
40	It would save on gas	12/20/2017 12:27 AM
41	I wouldn't want the trip to take even longer to stop 10 times along the way.	12/19/2017 11:35 PM
42	It would be nice to not have to drive and leave my car	12/19/2017 2:36 PM
43	I would love to shop and see some shows	12/19/2017 10:58 AM
44	And express route sounds more convenient and safe	12/19/2017 9:55 AM
45	My son could visit his family	12/19/2017 9:54 AM
46	We have two small kids, so express would be best	12/19/2017 7:54 AM
47	Go to baseball games	12/19/2017 7:35 AM
48	Convenient	12/19/2017 7:32 AM
49	Visit family more often	12/19/2017 6:27 AM
50	In general public transportation takes to long and doesn't go where you want	12/19/2017 6:05 AM
51	As I explained I fly in and out of redding via Sac airport	12/18/2017 6:10 PM
52	It would be easier (and hopefully more affordable) to travel to Sacramento if this service is implemented, so I could go on the weekends for leisure instead of just when I need to, I could go when I want to.	12/18/2017 6:03 PM
53	Cheaper faster	12/18/2017 5:52 PM
54	Friends and medical appointment	12/18/2017 3:53 PM
55	I dont like driving in sacramento the traffic is crazy id rathe be drove	12/18/2017 3:35 PM
56	Would love to shop there	12/18/2017 11:38 AM

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57	The convenience	12/18/2017 9:57 AM
58	Safer... easier to come back if hungover... don't have to drive	12/17/2017 10:01 PM
59	We have no other way	12/17/2017 9:07 PM
60	It would depend where the drop off is in Sacramento. My destination would be the Catholic Diocesan Office	12/17/2017 7:27 PM
61	Less time in vehicle with kids- but more time to interact with them if I'm not driving.	12/17/2017 6:22 PM
62	It would free up attention to devote to cobductibg business via internet, etc.	12/17/2017 12:03 PM
63	so much easier being independent getting to the airport	12/16/2017 6:10 PM
64	If I didn't lose the 2+ hrs driving and could be productive during that time I would.	12/16/2017 11:28 AM
65	To visit family.	12/16/2017 7:48 AM
66	To Sacramento Airport and visit family.	12/16/2017 12:15 AM
67	flying in from Pheonix to visit family	12/15/2017 8:23 PM
68	My son is disabled...i am a elder/senior	12/15/2017 2:07 PM
69	Don't care for driving, Get very tired.	12/15/2017 2:07 PM
70	I would do more business there.	12/15/2017 10:08 AM
71	Keep in touch with relatives.	12/14/2017 10:02 PM
72	Restaurants..shopping..	12/14/2017 5:55 PM
73	It would save my car miles and be fun	12/14/2017 5:47 PM
74	If convenient and timely, I would use it.	12/14/2017 5:43 PM
75	I don't like bus transit	12/14/2017 5:42 PM
76	Less stress and wear & tear on vehicle.	12/14/2017 4:08 PM
77	I would consider taking a bus to the airport so my family does not have to drive me	12/14/2017 3:40 PM
78	engage in activities and events	12/14/2017 1:34 PM
79	To airport possibly	12/14/2017 1:26 PM
80	Cheaper	12/14/2017 12:51 AM
81	The wear and tare on my car. Also, if transportation girls to the airport it would be nice to not store my car or pay parking at airport.	12/13/2017 9:56 PM
82	It would be amazing to have an easy way to commute for day/2 day girls trips into Sac! A group of 6 is hard to for into only one car.	12/13/2017 8:28 PM
83	It would likely be cheaper than the gas I spend in my own car	12/13/2017 7:33 PM
84	I only travel there to get to the airport as it is TOO expensive to fly out of Redding.	12/13/2017 6:33 PM
85	So I don't have to drive myself	12/13/2017 5:55 PM
86	I only go to Sacramento to fly for the holidays. I don't expect that number too raise.	12/13/2017 4:46 PM
87	Since Penair left Redding I have been driving to Portland. I would probably fly out of Sac. Also, my daughter would be able to go to conventions with more of her friends.	12/13/2017 1:56 PM
88	It would be great to have someone else do the driving after a day of sightseeing and shopping	12/13/2017 1:20 PM
89	Would travel more often if I didn't have to drive and could avoid wear-and-tear on my vehicle.	12/13/2017 12:10 PM
90	I don't like to leave my car at the airport for over a week.	12/13/2017 12:08 PM
91	I only travel to Sacramento if we have conferences there.	12/13/2017 11:20 AM
92	I like having someone else drive.	12/13/2017 9:53 AM
93	Having a flight out of Sac would be less expensive than flying from Redding. The time would also be productive - I could work on the bus	12/13/2017 5:49 AM

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94	I can't go down unless someone else is with me, the trip is just too long for driving by myself	12/13/2017 5:45 AM
95	More economic	12/13/2017 1:54 AM
96	Wouldn't need to pay for parking at SMF	12/12/2017 10:09 PM
97	It's nice to get to the city but the drive is long, and it's terrible to drive tired.	12/12/2017 9:54 PM
98	Unsure	12/12/2017 9:00 PM
99	to visit my daughter. she could also catch there and come here. also to the airport. we travel several times a year.	12/12/2017 8:22 PM
100	If it was affordable. Example: Allentown to NYC bus round trip \$48, buses leave regularly from both directions.	12/12/2017 7:04 PM
101	Ease and convenience.	12/12/2017 5:55 PM
102	I would love to save the expense of gas and storage of my vehicle.	12/12/2017 5:00 PM
103	sometimes we fly out of Reno, but would consider SMF more often if cost effective public transportation (cheaper than driving and parking)	12/12/2017 3:51 PM
104	Wouldn't take as long as it does now.	12/12/2017 3:41 PM
105	More likely to use SMF exclusively as my airport	12/12/2017 3:36 PM
106	Avoid driving. More pleasant journey.	12/12/2017 3:17 PM
107	For airport travel and going to the capitol building to protest	12/12/2017 3:07 PM
108	Shopping, dining, recreation and museums.	12/12/2017 2:53 PM
109	Ability to complete work tasks en route	12/12/2017 2:43 PM
110	I don't need to go to Sacramento too often	12/12/2017 2:24 PM
111	More time spent with family and leisure time shopping.	12/12/2017 1:22 PM
112	I only use the airport 1-3 x a year	12/12/2017 12:56 PM
113	I don't enjoy driving. I like Sacramento.	12/12/2017 12:55 PM
114	But would be happy to catch a ride rather than drive it	12/12/2017 12:29 PM
115	Especially for service connecting to SMF.	12/12/2017 12:15 PM
116	It would be nice to attend more events there.	12/12/2017 12:05 PM
117	If it costs less than the price of gas to get there I would be highly inclined to use it more. It would also be very useful in getting to the airport so I would not have to pay to store my car during longer trips.	12/12/2017 11:57 AM
118	I used First Class Shuttle several times a year to go to the SAC airport and it is no longer operating. It did not go to the Amtrak station in SAC, so if this new line does, I would ride it even more often because I use Amtrak even more than flying.	12/12/2017 11:56 AM
119	No reason to go more often.	12/12/2017 11:39 AM
120	We take many trips through Sacramento airport	12/12/2017 11:26 AM
121	It it was convenient and affordable I would go more often.	12/12/2017 11:12 AM
122	The Sacramento airport would be more accessible.	12/12/2017 11:04 AM
123	Save me the hassle of driving, parking, etc.	12/12/2017 11:00 AM
124	I fly in/out of Sacramento Airport at least 4 times/year. If reliable bus service was available, that could reduce my driving and parking costs and also be environmentally responsible.	12/12/2017 10:28 AM
125	Save mileage on my car and gas	12/12/2017 10:16 AM
126	It would be great to have a direct route to SMF if the bus was safe and clean. We fly out of Sacramento often and it would be nice not to have to leave a car at the airport.	12/12/2017 10:16 AM
127	So as not to pay for parking at the airport	12/12/2017 10:11 AM
128	my unpredictable schedule	12/12/2017 10:09 AM

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129	site seeing, air port (no parking fee)	12/12/2017 10:03 AM
130	affordable transport to Sacto is a no brainer for me	12/12/2017 10:03 AM
131	It would eliminate long-term parking concerns and costs at airport, as well as concern with driving while jetlagged.	12/12/2017 9:57 AM
132	I would go more often, but Amtrak's current routes are long and not direct.	12/12/2017 9:48 AM
133	Possibly	12/12/2017 9:40 AM
134	It would make in person business meetings more accesble	12/12/2017 9:30 AM
135	To/from airport	12/12/2017 9:22 AM
136	Would allow me to work while travelling, would likely be cheaper and no parking at the airport	12/12/2017 9:22 AM
137	It would be great if I were going to travel. It would save me a lot of headaches about either getting someone to take me to Sacramento or having to find parking while I travel.	12/12/2017 9:22 AM
138	For flights	12/12/2017 9:18 AM
139	Don't travel enough	12/12/2017 9:17 AM
140	I would still make the same amount of trips to Sacramento.	12/12/2017 9:14 AM
141	No need	12/12/2017 9:13 AM
142	I don't utilize the bus, but think it would be great for others.	12/12/2017 9:12 AM
143	Convenience, less wear and tear	12/12/2017 9:10 AM
144	Parking at SMF is expensive and driving yourself before and after can add alot of stress to the trip.	12/12/2017 9:10 AM
145	Save gas and mileage on my car	12/12/2017 9:07 AM
146	If it was easier to get there , I would go visit friends more often	12/12/2017 9:00 AM
147	I would not travel more often. As it is, when I wantneed to go, I just pick up and go; but, if there were reliable transportation from Redding to Sacramento, especially the air port, I would take it. It would have to be timely so I could meet flight connections. But, I go when I go and would appreciate more convenientefficient way to travel	12/12/2017 8:54 AM
148	Driving and parking are stressful, waste of resources.	12/12/2017 8:04 AM
149	A non-express route would take too long	12/11/2017 11:46 PM
150	Would like to family & friends more often but too far to drive.Riding is better bcz I can do other things.	12/11/2017 10:52 PM
151	Would go for shopping and entertainment	12/11/2017 9:01 PM
152	don't need to go more often	12/11/2017 8:51 PM
153	Sick of driving solo	12/11/2017 8:42 PM
154	I frequently fly from Redding but flights would be cheaper from Sacramento. Also I would probably go down to meet friends for socializing.	12/11/2017 7:44 PM
155	Less travel time	12/11/2017 7:38 PM
156	Being legally blind it is very difficult for me to get to Sacramento at the moment.	12/11/2017 7:30 PM
157	We tend to save up reasons to go until we can justify the cost of the trip. I would go today just to shop at IKEA if there was a safe, affordable bus and then Uber to IKEA	12/11/2017 7:25 PM
158	The need to get to the airport and not have to leave a car while you are gone.	12/11/2017 7:24 PM
159	Maybe...	12/11/2017 7:02 PM
160	If it went to the airport.	12/11/2017 6:44 PM
161	It would be nice to know there was a one way trip to the airport.	12/11/2017 6:33 PM
162	How long would this take? Would it be going to large medical centers?	12/11/2017 5:56 PM
163	Airport Parking can be prohibitive	12/11/2017 5:00 PM
164	Do not like the drive	12/11/2017 2:49 PM

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165	Airport shuttle service would be great	12/11/2017 12:41 PM
166	maybe sometimes	12/11/2017 12:14 PM
167	The drive is so long that if I didn't have to drive myself it would make the trip 10x's better!	12/11/2017 12:04 PM
168	Yes...would go to have lunch with friends, to shop and to go to performances if the timing and cost was right.	12/11/2017 11:53 AM
169	If the means of travel is comfortable and cost affective I would use it for all my personal and somtimes business travels.	12/11/2017 11:44 AM
170	medical appointments only	12/11/2017 11:24 AM
171	As a no-car family, any easy public transportation is a plus!	12/11/2017 10:59 AM
172	If I could get a connection or parking at Orland	12/11/2017 10:53 AM
173	But would be more likley to not drive if flying	12/11/2017 10:20 AM
174	For shopping	12/11/2017 9:49 AM
175	Shopping!	12/11/2017 9:34 AM
176	Airport routes still don't go where I do	12/11/2017 7:57 AM
177	It would be the same. Mostly for airport runs	12/11/2017 7:56 AM
178	For leisure activities and to visit friends	12/11/2017 7:49 AM
179	I would visit family in Folsom if I could just take a bus to Amtrak Station in Sacramento's where I can catch the light rail.	12/11/2017 2:57 AM
180	It would save me airport parking fees for longer trips from SMF to Southern California	12/11/2017 12:49 AM
181	It would be way less of a hassle	12/11/2017 12:09 AM
182	I don't have a car and would like to visit Sacramento	12/10/2017 11:55 PM
183	It's an affordable optionn	12/10/2017 11:49 PM
184	An express bus route would be so convenient for the north state!	12/10/2017 11:46 PM
185	I like to shopping or visit.	12/10/2017 11:13 PM
186	Absolutely! I currently keep travel to Sacramento minimal due to a lack of travel options, but would likely use an express bus to travel to the airport in Sacramento, rather than the Redding airport, which can be more limited in options and more pricey.	12/10/2017 11:07 PM
187	Would consider the bus if it takes a similar amount of time as driving	12/10/2017 9:48 PM
188	I would save on gas expenses and wear and tear of my own vehicle	12/10/2017 9:28 PM
189	Back pain, I prefer to not drive myself	12/10/2017 9:03 PM
190	Depends on safety...	12/10/2017 8:58 PM
191	Would fly out of SMF more	12/10/2017 8:08 PM
192	I would be more eager to travel that distance is I weren't the driver.	12/10/2017 8:05 PM
193	I would like to visit the museums, the state fair, River Cat games, Kings games, and take more SMF flights.	12/10/2017 7:43 PM
194	I visit family in Redding 2-3 times a year. I would like transport to and from Sacramento Airport.	12/10/2017 6:45 PM
195	Less gas	12/10/2017 5:15 PM
196	I would go more often.	12/10/2017 4:50 PM
197	Less delay, quicker drive time	12/10/2017 4:40 PM
198	Maybe, it depends on convenience, cost, and comfortability.	12/10/2017 4:30 PM
199	would go more often if I didn't have to drive	12/10/2017 4:05 PM
200	I usually have to rent a one-way car so family can still utilize the larger car while I'm away. I travel to SMF and back 3-4 times monthly.	12/10/2017 4:00 PM

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201	I prefer to have my own transportation around the city.	12/10/2017 3:42 PM
202	More efficient mode of transportation.	12/10/2017 3:28 PM
203	If it was convenient and safe I would prefer take a shuttle to Sac for cheaper and more reliable flights.	12/10/2017 3:27 PM
204	To SMF	12/10/2017 3:27 PM
205	Flying in and out of Sacramento would be so much more reasonable	12/10/2017 3:12 PM
206	Susanville is more a part of Nevada	12/10/2017 2:55 PM
207	Save on gas	12/10/2017 2:44 PM
208	I would fly more often. The drive is taxing.	12/10/2017 2:11 PM
209	more frequent for grocery shopping and dining	12/10/2017 2:11 PM
210	Less wear and tear and on my personal vehicle	12/10/2017 1:58 PM
211	Easier, faster, reliable	12/10/2017 1:35 PM
212	I would fly out of SMF more often.	12/10/2017 1:32 PM
213	Prefer mass transit	12/10/2017 1:14 PM
214	The 2.5 hours could be productive.	12/10/2017 12:50 PM
215	I go there for specific reasons	12/10/2017 12:49 PM
216	Would love to use it for shopping!	12/10/2017 12:23 PM
217	We have to go regardless of transportation but this service was a great asset to us and our community.	12/10/2017 12:07 PM
218	better to rest on the bus than drive the 5, destinations like Arden Faire mall and SMF are a no-brainer	12/10/2017 12:01 PM
219	The added effort and cost of paying for parking etc at the airport can be inconvenient, especially with a baby and baby gear.	12/10/2017 11:57 AM
220	Not more often, but would consider bus in lieu of driving to the airport.	12/10/2017 11:47 AM
221	Timing is everything	12/10/2017 11:46 AM
222	I would use a bus route to get to and from Sacramento Airport and to spend day trips for shopping and sightseeing.	12/10/2017 11:36 AM
223	Depends on the price	12/10/2017 11:16 AM
224	It would get me to sacramento quicker and I wouldn't have to drive my vehicle. Allowing me to relax while traveling.	12/10/2017 11:06 AM
225	I have soecific reasons for going to sac, so the need to go would not change.	12/10/2017 10:23 AM
226	Instead of being dropped off by car, I would take the express bus.	12/10/2017 10:15 AM
227	Depending on how long it would take to get to Sacramento, it would be fun to not have to drive and would potentially be cheaper than gas for my gas-guzzler vehicle. So if it's cheaper, and not terribly long, I would love to explore Sacramento more. Tons of great restaurants there that I'd love to try but can't because it's too expensive to get there and takes too long.	12/10/2017 10:03 AM
228	Go on more missions trips	12/10/2017 9:52 AM
229	we would go for more leisure activities.	12/10/2017 9:48 AM
230	My family doesn't always want to go with me or can't and it would be better to not have to driv alone or to worry about parking at the airport once I arrive.	12/10/2017 9:46 AM
231	Would love to relax then go shopping then come back in a day or two	12/10/2017 9:45 AM
232	I might fly out of SMF more often, if there was an express bus to the Airport.	12/10/2017 9:43 AM
233	It would save me money on gas and parking fees if there was a shuttle	12/10/2017 9:32 AM

234	Because I and many of my friends are not from Redding and travel Home, finding a ride to the airport can be hard/time consuming or parking at the airport is very expensive. But with a shuttle I wouldn't have to worry about finding someone to take me or paying high prices for parking.	12/10/2017 9:11 AM
235	Would like to connect to southwest flights.	12/10/2017 8:55 AM
236	To the Airport	12/10/2017 8:13 AM
237	Visit family in Socal or other states.	12/10/2017 7:59 AM
238	My sister lives there	12/10/2017 7:56 AM
239	I would love to be able to take rapid transit to Old Town, medical offices, the Zoo, downtown, and various other destinations on a more regular basis.	12/10/2017 7:44 AM
240	See friends	12/10/2017 7:29 AM
241	Great for air travel	12/10/2017 6:33 AM
242	Driving takes up personal attention I could be giving other work.	12/10/2017 1:23 AM
243	Maybe, need more facts	12/10/2017 12:06 AM
244	I would need to get to the airport either way.	12/9/2017 10:47 PM
245	Really need it for air service and meetings	12/9/2017 10:45 PM
246	Because I do not like to drive because of traffic	12/9/2017 10:37 PM
247	If the Cost was less than driving or would allow for sleeping/work on the return trip.	12/9/2017 8:36 PM
248	Wud be easier to travel on flights	12/9/2017 8:04 PM
249	Ease of travel	12/9/2017 7:37 PM
250	Less travel time	12/9/2017 7:26 PM
251	Would never fly out of Redding	12/9/2017 6:58 PM
252	I would go just for the day, if I didn't have to drive my car, look/pay for parking, etc.	12/9/2017 6:52 PM
253	I only go when I need to use the airport.	12/9/2017 6:33 PM
254	Just to airport.	12/9/2017 6:21 PM
255	To coincide with doctors	12/9/2017 6:06 PM
256	I would if it went to the airport. Greyhound and Amtrack are inconvenient because they don't go to the airport.	12/9/2017 5:36 PM
257	Take to airport, fairs, concerts, and malls	12/9/2017 5:36 PM
258	Might take pleasure trips	12/9/2017 5:21 PM
259	I don't want to be on any longer than necessary.	12/9/2017 5:19 PM
260	Amtrak and Greyhound aren't convenient enough.	12/9/2017 4:59 PM
261	Airport	12/9/2017 2:02 PM
262	Direct route to airport then downtown would be great	12/9/2017 1:07 PM
263	Not having to drive to SMF for a flight, paying for parking, and not having to drive back home after an exhausting flight would be nice. Better medical services options in Sacramento	12/9/2017 12:46 PM
264	I wouldn't have to drive myself and pay for parking at the airport	12/9/2017 11:53 AM
265	My travel plans out of Sac would remain unchanged.	12/9/2017 11:36 AM
266	If comparable to personal vehicle cost. Would be convenient to have someone else drive.	12/9/2017 11:09 AM
267	Having been in the UK, love the option of public transport, would like to support it.	12/9/2017 11:08 AM
268	I could get a connection to the bay area	12/9/2017 11:05 AM
269	Family/travel connections	12/9/2017 10:39 AM
270	If the timing was right	12/9/2017 10:09 AM

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271	Would consider more flights from Sac Airport	12/9/2017 9:46 AM
272	Besides airport would consider shopping, lunch, entertainment overnight stays in Sacramento.	12/9/2017 9:02 AM
273	Medical care	12/9/2017 8:57 AM
274	Just looking for fast easy connection to airport to avoid driving.	12/9/2017 8:44 AM
275	To avoid high cost of RDD-SFO airfares and SMF parking.	12/9/2017 8:22 AM
276	Home straight to airport.....that's ideal.	12/9/2017 7:53 AM
277	Our visits to Sacramento are limited because we don't like the drive.	12/9/2017 7:29 AM
278	It depends on cost. Having transportation to the airport and not having to park there would be beneficial.	12/9/2017 7:14 AM
279	Trying 2 get a ride or borrow a car is nearly impossible. Taking the bus all the way includes a couple bus transfers and a lot of wait time in between those buses scheduled departures.	12/9/2017 6:04 AM
280	At times it might prove a more efficient option.	12/8/2017 11:55 PM
281	I think I'd mainly use it for the airport shuttle for my family and visitors	12/8/2017 11:28 PM
282	I would be able to visit my family in Sacramento more often. Driving long distance causes me lot of anxiety.	12/8/2017 11:24 PM
283	Possibly once or twice a year more to shop	12/8/2017 11:19 PM
284	Get places on time	12/8/2017 11:15 PM
285	I wouldn't use the bus anyway.	12/8/2017 10:39 PM
286	Driving is harder as I age.	12/8/2017 9:53 PM
287	Because I wouldn't have to actually drive and I don't like driving at night.	12/8/2017 9:37 PM
288	I already fly in and out of Sacramento as much as possibly	12/8/2017 9:06 PM
289	Cheaper and don't have to worry about parking	12/8/2017 9:05 PM
290	Driving is a drag	12/8/2017 8:55 PM
291	I don't have any reason to go to Sacramento except to fly.	12/8/2017 8:40 PM
292	I'm a big guy, 6-7 450 lbs and I don't want to be stopping in every town on the way down.	12/8/2017 8:12 PM
293	Easier, more convenient	12/8/2017 7:15 PM
294	I am flexible with time (retired)	12/8/2017 6:31 PM
295	Visiting in addition to airport.	12/8/2017 6:00 PM
296	If it went to the airport.	12/8/2017 5:01 PM
297	Sounds like a great idea. Once you're in the city, it is pretty easy to get around on Lyft or public transpo	12/8/2017 4:41 PM
298	Don't need to go more often and not interested in going other than by car.	12/8/2017 4:35 PM
299	To the airport for my college age child and for family trips	12/8/2017 3:48 PM
300	If it was faster and affordable, I would consider it. Especially if I was going to fly out of Sacramento.	12/8/2017 1:42 PM
301	I have a finite need for traveling to sac. But I think a quick bus ride to the Sac airport would be a huge plus for Redding, especially one that makes me feel like I'm reducing my carbon footprint	12/8/2017 1:11 PM
302	It is often not economical to make the trip so activities have to be scheduled far in advance and lumped into one day	12/8/2017 12:31 PM
303	Nice to not fight traffic. Can give attention to restless children in tow. Enjoy the scenery.	12/8/2017 11:09 AM
304	I would have access to wider pool of medical specialists.	12/8/2017 10:12 AM
305	I don't have a need to	12/8/2017 9:53 AM
306	convenience.	12/8/2017 9:33 AM

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307	Easier	12/8/2017 9:28 AM
308	I wouldn't go more often, but would try to use transit service	12/8/2017 9:23 AM
309	I dont enjoy public transportation.	12/8/2017 8:15 AM
310	Express generally means more expensive.	12/8/2017 6:19 AM
311	I don't have any need to go more often	12/8/2017 4:27 AM
312	I don't need to go often, but would use for SAC airport.	12/8/2017 2:21 AM
313	Leisure	12/7/2017 11:26 PM
314	I would definitely use it to get to the airport and back.	12/7/2017 10:49 PM
315	Must operate on time, be reliable and safe.	12/7/2017 10:14 PM
316	If it was reasonably inexpensive and comfortable it would make the trip seem less foreboding.	12/7/2017 9:46 PM
317	As business requires	12/7/2017 9:27 PM
318	Day trips would be fun! Cheaper than leaving car at the airport	12/7/2017 9:00 PM
319	To take a Greyhound to the airport is too lengthy a trip with all the extra stops. An express would shorten the duration making it more feasible..	12/7/2017 8:55 PM
320	As needed to get to SAC airport. A lot of people used shuttle.	12/7/2017 8:37 PM
321	I yrav	12/7/2017 8:35 PM
322	If transit were available and reasonably priced, would use.	12/7/2017 7:48 PM
323	Ease of travel	12/7/2017 7:44 PM
324	To go shopping	12/7/2017 7:37 PM
325	Have friends who live in Sacramento but driving there is a pain because they don't have sufficient parking and I have to park my car on the street where I cannot see it.	12/7/2017 7:35 PM
326	need a stop at Sacramento airport	12/7/2017 7:00 PM
327	Driving over 2 hours to a decent airport is tiring.	12/7/2017 6:58 PM
328	There are a lot of interesting things I would like to see in Sac, from the capitol to shopping to visiting historic sites.	12/7/2017 6:35 PM
329	I wouldn't have to drive, the convenience, varied times available	12/7/2017 6:29 PM
330	To the airport	12/7/2017 6:06 PM
331	Shopping, airport, kids	12/7/2017 6:05 PM
332	I would fly out of SMF instead of RDD	12/7/2017 5:59 PM
333	So long as the price reflects the fact that likely other transportation will be needed once we get to sac. Assuming we are not going just for the airport.	12/7/2017 5:44 PM
334	I would fly out of Sacramento International Airport more often if there was public transportation from Redding	12/7/2017 5:35 PM
335	Airport and shopping	12/7/2017 5:29 PM
336	I would take the bus rather than drive to the airport	12/7/2017 5:26 PM
337	I go often	12/7/2017 5:24 PM
338	Quick trips	12/7/2017 5:23 PM
339	My family only has one vehicle and scheduling can be problematic.	12/7/2017 5:22 PM
340	That would be fantastic as long as it's much cheaper the that crappy greyhound bus	12/7/2017 5:21 PM
341	We need to fly often but usually use Redding airport because parking is so expensive and the drive adds so much to a long travel day.	12/7/2017 5:03 PM
342	If i had better access, id fly and shop there more often. Lego store for the win!	12/7/2017 4:51 PM
343	See family more	12/7/2017 4:45 PM

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344	not traveling alone and convenience	12/7/2017 4:36 PM
345	to airport, downtown.	12/7/2017 4:12 PM
346	Convenience, Affordability	12/7/2017 3:52 PM
347	Shopping	12/7/2017 3:19 PM
348	Hate the drive	12/7/2017 3:18 PM
349	I only go to visit family or for work.	12/7/2017 3:04 PM
350	Non express trips take too long to be economical	12/7/2017 3:02 PM
351	Access to airlines with multiple schedules	12/7/2017 2:55 PM
352	I could go more than for travel to airport or dr but could shop too	12/7/2017 2:49 PM
353	I would visit family and go shopping more often,and when my daughter arrives at airport she can ride train to me instead of my driving down and back up here..but she would probably arrive and leave for Florida flights early morning	12/7/2017 2:40 PM
354	Yes for airports	12/7/2017 12:43 PM
355	Same frequency	12/7/2017 12:37 PM
356	Car sickness	12/7/2017 12:29 PM
357	I would fly out of Sac more instead of San Fran	12/7/2017 12:07 PM
358	I have no need to go to Sac more often than I currently go.	12/7/2017 11:39 AM
359	If the timing was right and a stop at the airport, I would love to not drive to Sacramento	12/7/2017 11:37 AM
360	we frequently used the airport shuttle service that is now closed. this would be a great service to the greater Redding area.	12/7/2017 11:34 AM
361	Would make it easier	12/7/2017 11:32 AM
362	I don't like driving, but there is currently not a cheaper, similarly timed option. If an Express route started in the morning and at night, I absolutely would use it.	12/7/2017 11:30 AM
363	RDC Train	12/7/2017 11:30 AM
364	Would be nice to not have to drive.	12/7/2017 11:21 AM
365	I would use a more efficient transit system if it were to depart at normal times instead of the middle of the night.	12/7/2017 11:04 AM
366	It would save on travel and I would be more inclined to fly from there instead of SFO	12/7/2017 10:27 AM
367	Not allowed to take Amtrak to Sac, must buy ticket to davis because they are prohibited from selling a bus only ticket.	12/7/2017 10:07 AM
368	Difficult travel is a barrier for me and my family to travel for meetings and entertainment. If we had a quicker, comfortable travel option we would attend meetings and go for fun trips much more often.	12/7/2017 9:59 AM
369	I like to fly out of the Sacramento airport but don't want to drive.	12/7/2017 9:28 AM
370	YES! I would fly out of Sac much more often instead of SFO or RDD. I'd also go to Sac for more recreational activities: Theater, concerts, etc.	12/7/2017 9:24 AM
371	Would be more likely to make lesure trips to Sacramento. Travel to the airport will be easier and less stressful if the bus system is safe and inexpensive.	12/7/2017 9:20 AM
372	Something new to do. Would not be often.	12/7/2017 9:13 AM
373	I only go to Sacramento to fly somewhere .	12/7/2017 9:01 AM
374	Faster	12/7/2017 7:12 AM
375	It would be more convenient	12/7/2017 12:07 AM
376	We are a one car family and it would be more accessible	12/6/2017 11:46 PM
377	Maybe	12/6/2017 10:38 PM

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378	I prefer to have the flexibility of my own car.	12/6/2017 9:54 PM
379	Airport	12/6/2017 9:50 PM
380	would be able to get to Airport and also shop, etc. in Sacto.	12/6/2017 9:31 PM
381	It's be easier for families with one car to have different plans.	12/6/2017 9:18 PM
382	Would visit there more often	12/6/2017 9:12 PM
383	If it's cheaper than gas and parking.	12/6/2017 8:19 PM
384	would be more inclined to travel to see the sights in Sac	12/6/2017 7:57 PM
385	I don't like driving and avoid it as much as possible. If I could take public transportation, then I could work while I ride	12/6/2017 7:50 PM
386	Would go for fun more often	12/6/2017 7:46 PM
387	More time for taking care of business in Sacramento	12/6/2017 7:18 PM
388	Effective and efficiently	12/6/2017 7:17 PM
389	Would visit friends there more often.	12/6/2017 7:09 PM
390	Not on an electric bus!!!!	12/6/2017 6:31 PM
391	Easier to get to and from the airport	12/6/2017 5:56 PM
392	The round trip wears me out and I can't do much while I am driving	12/6/2017 5:54 PM
393	Now we are 75 and 77 it is too tiring to drive and deal with city traffic	12/6/2017 5:49 PM
394	We need an airport shuttle	12/6/2017 5:33 PM
395	Direct transportation would be desirable	12/6/2017 5:23 PM
396	I would not travel more or less but would probably use bus if service was provided at a reasonable price.	12/6/2017 5:14 PM
397	I don't want to spend the money.	12/6/2017 5:12 PM
398	Sometimes I skip business trips because the drive cuts into work time. I can do productive work while on the bus.	12/6/2017 4:28 PM
399	I wouldn't have to worry about parking.	12/6/2017 4:11 PM
400	Visit more often to see my kids and grandkids	12/6/2017 3:54 PM
401	No more driving!	12/6/2017 3:34 PM
402	It would help with going to the airport and with finding parking in Sacramento. It would also cut down on driving tired.	12/6/2017 2:33 PM
403	I might be more inclined to go more often if I didn't have to drive myself.	12/6/2017 12:30 PM
404	When I go, I have to go but would like other options as to how I travel.	12/6/2017 11:30 AM
405	environmental impact, wear and tear on vehicle, safety	12/6/2017 11:16 AM
406	My car is old and somewhat unreliable.	12/6/2017 11:13 AM
407	It would be easier and more comfortable	12/6/2017 10:20 AM
408	My car is not reliable.	12/6/2017 9:47 AM
409	I constantly go to the airport and having this service would help depending the time of day.	12/5/2017 8:05 PM
410	Getting to the airport.	12/5/2017 4:00 PM
411	It would provide another option!	12/5/2017 3:48 PM
412	Would not be comfortable using tgem.	12/5/2017 2:21 PM
413	I like to visit my brother more often!	12/5/2017 9:36 AM
414	As a hub to other places without having to leave my vehicle in Sacramento. For instance, the bus tours to Reno that go out of Sacramento. Or the Megabus to San Francisco.	12/5/2017 7:21 AM

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415	I travel based on business needs.	12/4/2017 9:34 PM
416	I wouldn't have to park or someone wouldn't have to give me a ride	12/4/2017 7:20 PM
417	It is exhausting to drive there and back in one day	12/4/2017 7:00 PM
418	I go as much as a need to but would happily drive less and use transit	12/4/2017 6:01 PM
419	Convenience	12/4/2017 2:08 PM
420	I don't enjoy the drive	12/4/2017 8:54 AM
421	Easier travel	12/4/2017 4:29 AM
422	Quick is good, but cost is my primary reason for driving.	12/4/2017 1:26 AM
423	Driving to sacramento is horrifying, but really we are a single car famuly, parking is a pain, and we often have young family members come from redding or Sac to chico to stay with us and usually have to pick them up.	12/4/2017 12:41 AM
424	I would love to attend events, shows, shopping and more in Sacramento. It's just too far away to be feasible. And, driving there for a flight out of SMF makes for a long, exhausting day. Coming home late after a day of air travel is dangerous on that long, dark drive up I-5.	12/3/2017 9:18 PM
425	I go to Sac for specialized health care and occasional handy work. I share my care with my husband and sometimes have to leave for days and can't take the car.	12/3/2017 8:31 PM
426	I would stop flying from Redding.	12/3/2017 8:10 PM
427	Need a stop at SAC airport	12/3/2017 8:00 PM
428	Dont have to fine a ride	12/3/2017 5:00 PM
429	I do not drive, I'm in a wheelchair and an express bus would be convenient and I could go more often and visit family and shop	12/3/2017 1:36 PM
430	parking cost to much.	12/3/2017 12:49 PM
431	Family members would use it.	12/3/2017 12:47 PM
432	Airport service.	12/3/2017 9:52 AM
433	I don't like driving my personal vehicle and leaving it parked while I fly out of Sac.	12/3/2017 5:33 AM
434	Would be easier and less expensive to fly from there than Humboldt.	12/3/2017 2:36 AM
435	I wouldn't go more often, but I'd rather be on comfortable transit than driving	12/3/2017 12:48 AM
436	That would be amazing. Please!!!!	12/2/2017 10:16 PM
437	I would go a lot	12/2/2017 10:08 PM
438	Safe reliable transportation allowing me to save gas.	12/2/2017 9:47 PM
439	For airport	12/2/2017 9:35 PM
440	Right know from Redding you have to go thru Chico takes extra time.	12/2/2017 8:18 PM
441	Driving is so exhausting and expensive. Also, don't know where to park the car most times.	12/2/2017 7:42 PM
442	Tour Sacramento or catch Amtrak.	12/2/2017 7:12 PM
443	Would do more visiting ang concerts	12/2/2017 6:46 PM
444	Family	12/2/2017 4:57 PM
445	Don't like driving with so many big rigs on I-5. Also concerned about driving in fog.	12/2/2017 2:44 PM
446	I have family in Sacramento that I would visit more often. Sacramento has cultural aspects such as galleries and music that our ar a lacks.	12/2/2017 12:51 PM
447	I value my time, and if the trip were quick enough, I'd gladly use the service. Otherwise I'll drive.	12/2/2017 6:52 AM
448	Would definitely utilize express round trip transportation to the airport because we're tired of driving.	12/2/2017 12:58 AM

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449	My mom lives near Sac. We have two cars but only one of them are trustworthy for long-distance drives. So I would appreciate a ride to Sacramento and my mom could pick me up. I would see her more often.	12/1/2017 10:16 PM
450	Don't like driving get others to drive me.	12/1/2017 9:11 PM
451	Car not in good shape	12/1/2017 6:20 PM
452	AmTrak buses are terrific and run on time, but my family cannot use them to get to Sacramento because Amtrak requires a train portion on your trip to be able to use their bus.	12/1/2017 4:10 PM
453	I travel to Sacramento often then either need to rent a car or have someone pick me up to go up to Redding from the airport. This bus will be more convenient for everyone.	12/1/2017 11:31 AM
454	I have family I'd visit more often if there was a service to get there and back.	12/1/2017 11:27 AM
455	Only travel as needed	12/1/2017 10:01 AM
456	Convenience.	12/1/2017 8:01 AM
457	It would be a great way to get to the airport without worrying about a car. Also, you could travel with children and just enjoy the time with them instead of driving.	12/1/2017 6:17 AM
458	Less stress	11/30/2017 10:44 PM
459	Would have most of my medical care in one place	11/30/2017 10:15 PM
460	Events, shopping, getting to the airport or commuter train to the Bay Area.	11/30/2017 9:44 PM
461	Visit friends, shop, go to venues.	11/30/2017 9:30 PM
462	To visit family	11/30/2017 8:41 PM
463	Dont like driving	11/30/2017 8:02 PM
464	It's too far to trust my life to a stranger.	11/30/2017 7:25 PM
465	Currently Amtrak bus takes too long so would consider if travel time reduced	11/30/2017 7:10 PM
466	Easier to get to the Bay Area from Sacramento.	11/30/2017 5:37 PM
467	Can't drive in the dark! And long trips	11/30/2017 1:10 PM
468	I-5 is faster than going through Chico	11/30/2017 11:33 AM
469	For pleasure	11/30/2017 11:06 AM
470	If its easier, quicker, and cheaper than greyhound I'll definately use the service.	11/30/2017 8:41 AM
471	Easier way to see family, get to medical appts (if reliable)	11/30/2017 6:58 AM
472	Would be nice to minimize mileage on my car and see family more often	11/29/2017 11:41 PM
473	I wouldn't have to pay for parking	11/29/2017 10:48 PM
474	More opportunity to sleep/do work instead of wasting a day	11/29/2017 9:56 PM
475	If cost was reasonable, I would use it for SFO flights	11/29/2017 9:09 PM
476	Old Sacramento	11/29/2017 8:22 PM
477	I generally go for work-related reasons. That would not increase.	11/29/2017 8:06 PM
478	I'd use it to travel into San Francisco as well.	11/29/2017 7:01 PM
479	Would plan travel out of Sac vs Rdd (too expensive and unreliable) or Sfo	11/29/2017 6:10 PM
480	see response to item 11	11/29/2017 10:40 AM
481	Depends on where it goes from	11/27/2017 2:31 PM
482	If the duration of the trip is too much longer than driving, I would continue driving my own vehicle.	11/25/2017 10:52 PM
483	It's not a realistic trip from Crescent City.	11/20/2017 5:36 PM
484	convenience	11/17/2017 2:32 PM
485	If an express bus route was provided going to Sacramento, yes I would travel there often and it will save me gas money and miles from my personal car.	11/17/2017 7:58 AM

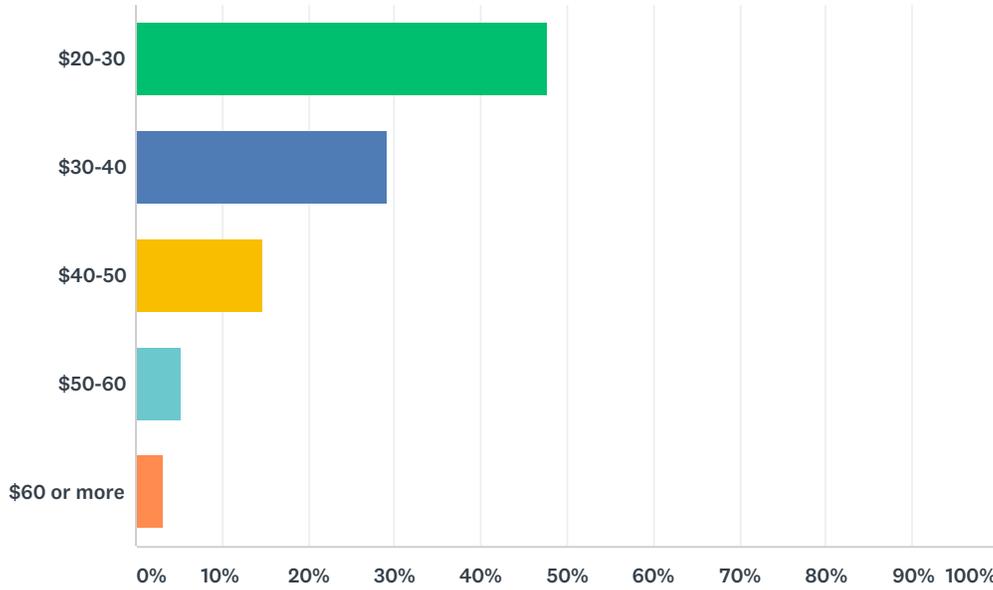
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486	Time is key. The less time it takes, the more likely I will be to use the bus.	11/15/2017 9:55 PM
487	Concerts, Events, connections for air and rail.	11/15/2017 8:00 PM
488	If schedule worked for trip purpose	11/15/2017 8:00 PM
489	Love to avoid parking expenses and being productive instead of driving	11/15/2017 7:51 PM
490	I hate driving.	11/15/2017 6:30 PM

Q14 How much are you willing to pay for a direct route ticket to Sacramento via a shuttle bus?

Answered: 957 Skipped: 33



ANSWER CHOICES	RESPONSES	
\$20-30	47.75%	457
\$30-40	29.15%	279
\$40-50	14.73%	141
\$50-60	5.22%	50
\$60 or more	3.13%	30
TOTAL		957

Q15 Additional Comments:

Answered: 248 Skipped: 742

#	RESPONSES	DATE
1	14 wasn't clear if this would be the price one way or round trip. I would primarily be interested in using a shuttle bus service to and from the airport if the times were somewhat in line with my flight times.	12/25/2017 8:24 PM
2	This would be a great service for Redding residents. Pick up at Redding airport to go to Sacramento Airport would be great.	12/23/2017 8:06 PM
3	I'd go shopping to Sac more often if we had the bus services.	12/22/2017 9:51 PM
4	My trips to Sacramento are usually to the airport or to visit my sister in El Dorado Hills. I sometimes take the Amtrak bus to catch the train to the Bay Area	12/22/2017 11:29 AM
5	This would be awesome	12/22/2017 8:26 AM
6	Please don't forget about Lassen County if this comes to fruition	12/21/2017 10:59 PM
7	Definitely would be interested if it went to the airport	12/21/2017 5:41 PM
8	25.00 never 30.00 plus bus rider rewards	12/21/2017 4:35 PM
9	I think being able to connect with transit once you get there is important as well as multiple drop off locations in sacramento	12/21/2017 3:46 PM
10	The Corning Intermodal Transportation Center was built specifically for this type of service.	12/21/2017 1:45 PM
11	I fully support this for the people of the North State who are locked in because of transportation issues.	12/21/2017 1:34 PM
12	Definitely need connector to SMF from Chico. Has to be reliable, multi times a day and affordable. Thank you	12/21/2017 8:38 AM
13	I don't go to Sac very often because driving is stressful. Current public transportation is Greyhound which has its own unique stressors. Amtrak goes through Chico in the wee hours of morning. I take the airport shuttle to SMF when flying but would like an alternative to that.	12/21/2017 8:26 AM
14	PLEASE !!!!! THIS WOULD BE AWESOME !!! TO BE ABLE TO HAVE A STEADY SAFE COMFORTABLE WAY TO TRAVEL !!!! THIS WOULD MAKE ME FEEL LIKE I'VE GAINED BACK SOME INDEPENDENCE !!!!	12/21/2017 7:53 AM
15	I would ride to and from the airport if I felt like it was an upscale, safe ride with possible twice daily service that was on time, reliable, and direct from Redding to the airport. Maybe one other brief stop in Red Bluff. I do not want to stop a lot of places.	12/21/2017 12:04 AM
16	To go to Redding I flew last time but. There is no direct flight from San Jose. So I go to San Francisco to take the flight.	12/20/2017 9:39 PM
17	Driver MUST BE Class B qualified and current in all physical capabilities, and knowledgeable of their responsibilities.	12/20/2017 9:30 PM
18	Bus is for poor people real travelers drive or walk	12/20/2017 9:15 PM
19	I had previously used the shuttle that came from Redding and picked up at the Hampton Inn. Oftentimes the return from Sacramento was too early (my flight arrived too late in the afternoon for me to utilize the shuttle at times).	12/20/2017 8:55 PM
20	Would be amazing for airport access as well as a later night option for returning home from concerts at Golden1 Center.	12/20/2017 3:09 PM
21	Definite interest in airport service	12/20/2017 2:21 PM
22	N/A	12/20/2017 12:26 PM
23	shuttle service to airport would be great	12/20/2017 12:10 PM
24	How about express service to Las Vegas, Reno, San Francisco, Los Angeles?	12/20/2017 11:54 AM

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25	I hope this comes to pass as a form of transportation	12/20/2017 12:27 AM
26	Will be traveling for business soon about three days per week, would use this service if it left early enough.	12/19/2017 7:55 AM
27	Please keep the cost down in order to keep more people on the bus	12/19/2017 7:36 AM
28	This is such a great idea!!!	12/19/2017 7:32 AM
29	This would be a wonderful addition for people traveling to the airport , I would love it	12/19/2017 7:31 AM
30	Better connecting existing public transportation is a great idea	12/19/2017 6:05 AM
31	Currently, every time I go to Sacramento or am traveling from Sacramento back to Chico, I have to pay \$80 one-way to take North Valley Shuttle. This is very expensive for me. I would love a cheaper, fast way to get to Sacramento. I would go more often if I didn't have to pay \$160 to go there and back every time.	12/18/2017 6:03 PM
32	This would be great for retirees with family in Sac region.	12/18/2017 3:57 PM
33	From Eureka, it's hard to get anywhere without taking ridiculously long time and wacky routes, that's why I just drive. Would love to just relax though!	12/18/2017 11:38 AM
34	Good luck with this. Is definitely needed and would be a good way to travel to the airport at Sacramento, providing you plan on stopping there.	12/17/2017 11:47 PM
35	Please do this! It would be grand!	12/17/2017 10:01 PM
36	Will the bus go anywhere in Sacramento? Or to the airport?	12/16/2017 3:09 PM
37	I grew up in Redding and lived, schooled and worked there for 55 yrs. Now live in Arizona and fly from Phoenix to Sacramento several times a year to visit my family. A shuttle to and from Sacramento Airport would be a great benefit for any family visiting Redding	12/15/2017 8:23 PM
38	Currently spend entire day transporting college student to airport. Would love express option	12/15/2017 2:20 PM
39	A monthly round trip bus pass would be good... It cost less than 15 per day from ocean side to San Diego for 2	12/15/2017 2:07 PM
40	It would be very helpful to a lot of people that live in the North states and need to travel to Sacramento.	12/15/2017 10:08 AM
41	Also would like easy connections to other transit like a bus	12/15/2017 12:55 AM
42	\$5.00	12/14/2017 10:27 PM
43	\$50-60 one way. Round trip say less \$70-75	12/14/2017 5:47 PM
44	Since Redding air service is so unreliable and inconvenient to my destinations and schedules, Sac Intl Airport would be a nice alternative if competitive, all things considered.	12/14/2017 5:43 PM
45	I would consider a train	12/14/2017 5:42 PM
46	A reward program would also be great.	12/14/2017 4:08 PM
47	Hopefully, the bus could pickup/drop off in Red Bluff, CA	12/14/2017 2:08 PM
48	is the cost one way or round trip? (double the one way cost). One problem will be how people get around Sac after taking the bus there. Might provide info on public trans. on the bus or at the pickup/drop off points.	12/14/2017 1:34 PM
49	I believe a bus or twice a month would benefit those of us who need to go to Sac area. Everyday would be overkill.	12/13/2017 10:52 PM
50	Would like round trip. \$50-\$70.	12/13/2017 9:28 PM
51	If you're looking for support, I'd highly consider reaching out to the Bethel Church community in Redding, California (if you haven't done so). They get a lot of conference attendees and visitors in general who fly from all over the country and internationally, year-round. They'd be your target audience and greatest consumers. Also, I would not pay more than a RT ticket of \$40-60 because that's how much it costs for gas in my vehicle. Have you considered including Davis, California for students who call Redding home? They'd probably utilize this service for weekends home or the holidays and breaks.	12/13/2017 5:55 PM
52	Include Senior rates	12/13/2017 11:20 AM

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53	Please make sure it goes up to Humboldt County.	12/13/2017 2:24 AM
54	Lest do it	12/13/2017 1:54 AM
55	If the bus arrived and left from the airport. SMF	12/12/2017 9:00 PM
56	Even though I travel to Sacramento for family often, I'd be primarily interested in this service for trips to the airport.	12/12/2017 8:08 PM
57	Sometimes one way transportation's are needed for like trips from Sacramento International.	12/12/2017 5:55 PM
58	I would travel to Sacramento more with a service like this.	12/12/2017 5:00 PM
59	Would need to have multiple options available on Fridays, Saturdays, Sundays	12/12/2017 3:51 PM
60	The above would be one way fare. I would hop on that bus in a minute if it was a nice, comfortable, safe ride to the airport or to visit friends and family in Sacto. Beats a long, boring, solitary drive.	12/12/2017 3:17 PM
61	I can get to Sacramento and back for \$40 comfortably and privately. I would not pay more than that to be amongst the public for longer than it would take me by myself. Also, cheapest rates would get the worst people. I personally would only utilize it if it was \$30-40. Cheap is good for low income though. I'm on both sides of the fence about using this service. I would need more information.	12/12/2017 3:07 PM
62	Acquaintances have told me they would like a shuttle/express service to Sac Metro Airport and were sorry to see the last service end a while back. I myself would like the Express bus option to visit Sac for the other reasons in 13 above, plus occasional flight connections once a year or so.	12/12/2017 2:53 PM
63	Consider multi-ticket discounts (other discounts - incentives) for families / groups.	12/12/2017 2:43 PM
64	The bus service as an starter is a great snail idea, but still, is insufficient for the long term needs of the North State Communities, The county supervisors should start looking more seriously at the possibility of having a domestic airport servicing Southern California and Nevada, a municipal airport with the actual service has a negative economic impact for Shasta's neighboring counties. If Redding as one of the biggest cities north of Sacramento neglects in offering a more viable means of transportation for businesses to explore opportunities in the North State, Redding will always be known as the city full of outlaws plagued with criminals and drug addicts because the city does not have an industry base that can generate tax funds to take care of these social issues. Redding needs a domestic airport, we already have two municipal airports, I don't understand the logic for this, Saint George Utah NV, a smaller retiree's city offers flights to Salt Lake City, Provo and Las Vegas at affordable price. a very large percentage of residents in Redding have roots in Southern California and other states a municipal airport will unlock the economic doom that Redding is experiencing at the present time. This is my humble opinion.	12/12/2017 1:22 PM
65	Or less (is that RT or each way?). It costs me less than \$50 to drive there RT and almost always travel with others (including kids). Would really like affordable option for our family to get to Sac Airport from Redding, and also to Amtrak in Sac. Even better would be daytime, on time, train from Redding.	12/12/2017 12:29 PM
66	We travel with two small children, so the cost would have to be low enough that all of us could travel for the same or less than driving ourselves.	12/12/2017 12:20 PM
67	\$20 to 40 is ok, considering that gas is going up and it would save on long term parking.	12/12/2017 12:17 PM
68	I'd be interested in an annual pass, good for a certain number of R/T travel to SMF.	12/12/2017 12:15 PM
69	If I were going to the airport I would consider paying a little more for a ticket in order not to incur parking charges for a car.	12/12/2017 12:05 PM
70	I am very excited about this new bus line. I am trying to use more public transit for environmental reasons, especially the Amtrak out of Sac to visit family, and this bus will offer the flexibility that the Amtrak bus to Sac does not. I would also use it to go to the airport, like I used to use First Class Shuttle before they shut down. I can even see my husband and I use the bus for a fun day trip to Sacramento Old Town, or even for an over night trip utilizing hotel shuttle service from the airport.	12/12/2017 11:56 AM
71	Question 14 isn't clear whether it's one way or round trip?	12/12/2017 11:47 AM
72	I am a Medical Social Worker with a local hospital and see a number of patients that would benefit by being able to use good bus service to the Redding/Sacramento area for medical services.	12/12/2017 11:39 AM

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73	I use to use a van service to the airport. Unfortunately they went out of business. If there was a service, I would probably work around their schedule as I do with airline schedules. I prefer not to place miles on my own car too.	12/12/2017 11:26 AM
74	Assuming Question #14 means one-way trip.	12/12/2017 11:12 AM
75	I'd be willing to pay a surcharge if I could bring a bike box on the bus as well.	12/12/2017 10:28 AM
76	It will be helpful for me especially for the airport, but also be able to plan leisure trips to Sacramento.	12/12/2017 10:03 AM
77	This would be great!	12/12/2017 10:03 AM
78	I would absolutely love to have this service! I would travel down a lot more.	12/12/2017 9:48 AM
79	I think it is a great idea. Once it is available many people will use it. It sure beats renting for a car from SMF or parking your car for 2 weeks at the airport.	12/12/2017 9:41 AM
80	Transport to the airport would be great! I normally drive to LA, but would fly from Sac if there was bus service. Paying for gas and parking makes it cheaper to drive now, but if we had bus service I would fly instead. My daughter goes to college in southern CA and when she flies home someone has to take the day off to pick her up and take her back to the airport. It would be nice if there was an airport shuttle.	12/12/2017 9:22 AM
81	Hopefully there would be more than two trips daily. A few stops in downtown as well as the airport. This would be very helpful and I am guessing many students would benefit as well. Thank you for considering.	12/12/2017 9:22 AM
82	A group rate would be nice. I have a large family.	12/12/2017 9:18 AM
83	This would be fabulous!	12/12/2017 9:15 AM
84	This is a great idea. Redding used to have a shuttle service to the Sacramento airport, but that has since gone away. It would be helpful for Redding to have this transit option to Sacramento, especially when heading to the Sacramento airport. That would take away the burden of having to worry about parking your car at the airport and just worry about getting to Sacramento and back when travelling.	12/12/2017 9:14 AM
85	It's a great idea	12/12/2017 9:10 AM
86	I have absolutely no interest in this proposition if it used by Northern California's drug addicted, vagrant population. I will not put my self in the position to be trapped on a bus where I have to worry about my belongings being stolen if I sleep, go to the restroom, etc. That will kill this opportunity faster than anything but most are probably afraid and/or feel guilty to say it. I would say they can't afford it but agencies are buying bus tickets for this population to ship their problems out of town.	12/12/2017 9:10 AM
87	I think this is a great idea and I would utilize the transport especially to the air port in Sacramento when I have to fly.	12/12/2017 8:54 AM
88	As my husband and get on in years, (77 & 71 now) it will be so much easier for us to take a bus to the airport. I used the First Class Shuttle and liked the service. I really miss it. It was cheaper for me to use the shuttle than to leave my car in the economy lot for extended trips. We also would be inclined to go to Sacramento for an outing more often. Visiting family would use the bus as opposed to renting a car at the airport or having us go pick them up. sure hope this goes through.	12/11/2017 9:01 PM
89	This is great but it confounds me why you'd include Del Norte Co and ignore Humboldt, which has a far larger population and would use this service daily.	12/11/2017 8:52 PM
90	The bay area?	12/11/2017 7:30 PM
91	I'd rather pay less than \$20 each way. Private shuttles charge \$60-100 on way, but a bus should be more efficient and cost effective than that. \$20-30 ROUNDTRIP is what I would expect to pay.	12/11/2017 7:29 PM
92	As close to zero as possible. If and only if it went directly to the airport.	12/11/2017 6:44 PM
93	My trips are to Redding, CA but most times I fly to Sacramento and then have to find a ride to Redding or make the 10 hour drive myself. So if there was this transportation then I wouldn't drive and that would cut my travel time in half!	12/11/2017 12:04 PM
94	This would be a very beneficial accommodation that many would use. Especially when going on longer travel.	12/11/2017 11:44 AM

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95	Thank you for making this a possibility!	12/11/2017 9:34 AM
96	I've taken the North State Shuttle but it's expensive. I'd be willing to pay for a tank of gas and a reasonable per hour rate for the driver. Perhaps with a standard size bus, there would be enough passengers to bring the price to something reasonable. I also would love it if Amtrak would bring the San Joaquin commuter train up to Oroville some time(s) during the day (as opposed to the Coast Starlight in Chico in the wee hours of the morning). Thanks for thinking about this and I hope it comes to fruition.	12/11/2017 2:57 AM
97	If it costs more than \$50 I'd only use it for my longer trips which happen around 3 times a year, because it wouldn't really save me money if I'm leaving my car at the airport for a day or two.	12/11/2017 12:49 AM
98	\$20 is a lot for some patrons. Maybe sell a 'book' of tickets for \$10-15 each.	12/10/2017 11:46 PM
99	Was paying \$65 to first class shuttle	12/10/2017 8:08 PM
100	I would use this mostly to and from the Sac airport. As such dependability, punctuality and multiple times would be helpful.	12/10/2017 8:05 PM
101	Nov. 29, 2017 I flew back from Boise, ID. I took 2 transit buses to the Greyhound station that has moved from downtown to Richard st. I believe the Greyhound bus from Sac to RDG is very limited. I strongly feel this service will be popular. 7days/wk We will use this bus.	12/10/2017 7:43 PM
102	Its usefulness, to me, is in how long the trip to/from Sac Airport to Redding would take as well as cost.	12/10/2017 6:45 PM
103	Please please please get a bus going to the Sac Airport. We are trapped here without the Shuttle we used to have. United Air to San F is too expensive. Everyone I know and all my family would definitely use a bus to the airport. We are just waiting because no one wants to drive their car or rent a car from Sac to Redding. Getting out of Redding by air right now is a nightmare.	12/10/2017 6:19 PM
104	Thank you for thining of this and developing it!	12/10/2017 4:40 PM
105	Based on the stated top speed/performance of the electric bus demo that visited Redding I don't think it is suitable/fast enough for intercity travel on I5.	12/10/2017 4:05 PM
106	This is so needed! Airport express. Even RDD to SMF without a thousand stops.	12/10/2017 4:00 PM
107	This would be a great service to many people I know from Redding and for all the international people who travel here every year.	12/10/2017 3:42 PM
108	I would take Greyhound more frequently now, but the schedules run too late. Need route during mornings and afternoons	12/10/2017 3:28 PM
109	I wouldn't pay more than \$30/person because round trip for our car is \$50 in gas.	12/10/2017 2:15 PM
110	Great idea if it picks up from places like red bluff.	12/10/2017 1:35 PM
111	Thank you for even being interested in doing survey.	12/10/2017 1:14 PM
112	Used to take 1st Class Shuttle. Please be aware I will not support an endeavor that has affiliation, or demonstrates preference (ie reduced rates) to Bethel Church.	12/10/2017 1:07 PM
113	I would be willing to pay \$15 one way and \$30 return for an open ended ticket	12/10/2017 12:49 PM
114	It's gonna be hard to have frequent enough shuttles to meet various needs, very early for SMF and late returns, to say nothing of BIG delays in multiple drop-off and pick-up points... SMF, mid-town, UCD Medical Center or Sutter, mall, etc. IF the bus does not take me where I want to go, requiring local transport, I will still drive. If it meets a convenient train to SF that would be a major plus	12/10/2017 12:01 PM
115	I used to use First Class Shuttle from Redding to SMF. I didn't always choose it to get to the airport and back, but it was a great option.	12/10/2017 11:57 AM
116	If the price is similar to the price of parking (usually for a week) and gas I might use it when travelling to the airport alone, as long as the time was appropriate and it didn't take more than 3 to 3 1/2 hours. Thank you.	12/10/2017 11:20 AM
117	Round trip tickets need to be available. The less stops the better	12/10/2017 11:16 AM
118	If this was available I am certain more people would be interested, especially if shopping was included.	12/10/2017 10:43 AM
119	This is so needed! It's always incredibly hard to find rides to the airport for most people I know.	12/10/2017 10:15 AM
120	we would prefer faster train travel from Redding.	12/10/2017 9:48 AM

Attachment A

121	I'd definitely make use of this service personally and for my visitors who fly into Sacramento airport.	12/10/2017 9:46 AM
122	I would definitely ride a transit bus to the SMF airport on a regular basis, despite having my own car; saving on gas, parking and the long drive from where I live (4 hours, one way to SMF) would be a great benefit to me. I would also encourage other people from my area to do the same, so I would "spread the word" if such service was to be made available. We would also have out of town visitors use this service, if it was available, as it would be much more convenient than having to drive all the way to SMF airport to pick them up, or drop them off.	12/10/2017 9:43 AM
123	Students at the Shasta college Tehama Campus could use this bus to connect to Redding campus for job training programs. Great demand!	12/10/2017 8:55 AM
124	Transportation to Sacramento Airport would be so helpful	12/10/2017 8:49 AM
125	This is desperately needed! I'm forwarding this survey to several friends that would love to take advantage of this on a regular basis (8-10+ times a year).	12/10/2017 7:44 AM
126	Must stop at Airports	12/10/2017 12:06 AM
127	Centralized Terminal for easy access to light rail, Amtrak and Airport connection.	12/9/2017 10:59 PM
128	Cost per individual vs. family is a consideration. A higher individual fare with a group discount might maximize usage. I am not sure if this route makes sense now, but should be considered once fully autonomous busses are available. In the past, I rented cars for this route as the transit options were more expensive and less flexible than a one-way car rental. It costs less than \$30 for a one way trip in a minivan (fuel use only) for up to 8 people. If tickets would need to be significantly more than \$30 per person, I would probably not use the route much.	12/9/2017 8:36 PM
129	A stop at the airport would be very beneficial and valuable to me.	12/9/2017 7:26 PM
130	I loved the former van shuttle to the airport. I would prefer something like that. But this might work.	12/9/2017 6:33 PM
131	The \$20-30 is one way so it would be \$40-50 for roundtrip	12/9/2017 5:21 PM
132	Weekend bus transportation availability would be nice. Early AM and late return service would be ideal for those who just need a day in Sacramento for medical appointments, sports/entertainment events or shopping. I hate driving back home to Redding really late tired and when drunk drivers are lurking on the interstate because of that, I often cut my day trip shorter than I like.	12/9/2017 12:46 PM
133	What a great idea!	12/9/2017 11:36 AM
134	Depends on amenities and the times that the transit is operable.	12/9/2017 11:09 AM
135	It would make the most sense for a long airtrip for a single traveler, as leaving a car can add up, reasonable as economy parking is. It's also a good option for travelers to Redding, so we don't have to jump in the car and drive 2 hours to the airport to get them...	12/9/2017 11:08 AM
136	this is so much needed especially to the airport. It is hard for seniors to have to drive to Sac. I utilized the shuttle all the time before it stopped.	12/9/2017 11:05 AM
137	There definitely is a need for a shuttle from Redding to Sacramento and back esp if there was multiple times of departure and return.	12/9/2017 10:39 AM
138	Is the ticket cost one way or round trip? I based my answer on one way	12/9/2017 8:57 AM
139	I travel for business and just want a quick easy shuttle to the airport to avoid driving. The rate would have to be competitive with the IRS mileage rat. That's about \$165 for a round trip, plus you end up with \$25 per day for parking.	12/9/2017 8:44 AM
140	The cost and hassle of driving when flying out of Sacto is the main problem. I don't like leaving my car in the lot, or the price to park it there. Anything cheaper would be greatly appreciated. Driving 2 plus hours after flying all day is also a problem.	12/9/2017 8:26 AM
141	This is badly needed. We have used the Amtrack bus, but it is very inconvenient to get to the airport. We would fly more if it was easier.	12/9/2017 7:29 AM
142	Great idea! I look forward to seeing what will come of this...Make it happen. ??	12/9/2017 6:04 AM
143	The more direct the route to and from Sacramento airport the better	12/8/2017 9:06 PM
144	Hope it happens	12/8/2017 9:05 PM
145	This service is a wonderful dream. Hopefully we have it soon.	12/8/2017 8:54 PM

146	Please make sure there's enough leg room. Like I said, I'm a big guy, six foot seven inches tall and four hundred and fifty pounds. I've ridden the Amtrak and Greyhound bus before and there's hardly any leg room. Thank you.	12/8/2017 8:12 PM
147	Needs to be more affordable than driving my own car.	12/8/2017 7:57 PM
148	One way 20-30....round trip 30-40	12/8/2017 7:15 PM
149	new granddaughter in Sacramento so more trips planned	12/8/2017 7:06 PM
150	Why not consider one or two Amtrak daytime runs?	12/8/2017 7:03 PM
151	Travel to American Legion Convention which is held once a year .	12/8/2017 6:38 PM
152	That is one-way.	12/8/2017 6:31 PM
153	Fare should be equivalent to the Amtrak bus fare.	12/8/2017 5:29 PM
154	Thank you for floating this idea. I hope it comes to fruition!	12/8/2017 4:41 PM
155	I think this is an unnecessary drain on taxpayer money. Use the money to improve the roads instead.	12/8/2017 2:21 PM
156	My main concern is transit time. The only existing service to Sacramento airport takes forever because of the multiple stops.	12/8/2017 1:50 PM
157	The ticket price should include round trip	12/8/2017 12:31 PM
158	Would like to see a discount for 2 or more and reduced fares for kids	12/8/2017 12:25 PM
159	Safe, well-lighted depots w restrooms n water fountain nearby. Lockable storage, bike lock, security cameras, comfortable seats with flexible head rests for short people like me. Even my Subaru doesn't truly accommodate neck comfort. Thank you.	12/8/2017 11:09 AM
160	cost is one-way, I'm assuming...	12/8/2017 9:23 AM
161	Roundtrip should not be too much more (buy one, get half) and be flexible in scheduling (not same day).	12/8/2017 6:19 AM
162	This is a super idea. Redding used to have a shuttle to SAC airport, but i believe no longer.	12/8/2017 2:21 AM
163	I might be willing to pay more as well. I hope this comes to fruition; it would be very helpful to have it available. Gets people out of their cars and helps on parking at the airport. Please do this!	12/7/2017 10:49 PM
164	God	12/7/2017 9:25 PM
165	The fare to Sacramento downtown, on a 35 foot electric express bus should be less than \$20. If the route is keep full, holds about 40 people seated, each paying \$20 would be about \$800 each way from Redding. Cost to operate this bus would be about \$0.20 cents/mile, 162 miles to Sac = about \$31 one way! This does not factor in the cost of an operator or cost of the bus. The cost of the coach could be offset somewhat by tax credits, government incentives and Federal government & CA aid. Plus if RABA supplies the operator, their drivers work at the low end of what most cities pay for an operator. So running an electric bus to Sacramento is very economical. Especially when you consider the new electric buses RABA is buying can run 350 miles on one charge!! Details on their new coaches coming in is at: https://www.proterra.com/performance/fuel-economy/	12/7/2017 9:11 PM
166	I have an economical car, but when it's raining, foggy or dark I have a hard time seeing the road.	12/7/2017 9:00 PM
167	Seems like a good idea!	12/7/2017 8:37 PM
168	I travel to ga. Once the year	12/7/2017 8:35 PM
169	Regular route and times would have to be accessible to Medical facilities and other local public transportation. Rides to the Airport would have to have space for luggage, golf clubs, etc.	12/7/2017 7:35 PM
170	stop at Sacramento airport is critical.	12/7/2017 7:00 PM
171	Would NOT pay more the \$20-30 to ride a bus from Redding to Sacramento for the fact that I would be in such a tight place with total strangers. You can't control other people's actions or hygiene on public transportation.	12/7/2017 6:29 PM
172	this would be a great help to us who need medical care in sacramento	12/7/2017 5:52 PM
173	Redding needs bus service to the Sacramento Airport!	12/7/2017 5:35 PM

North State Express Questionnaire

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174	Maybe have a daily "runner bus" and a business class bus for work computers heading g to the airport. Two different price ranges.	12/7/2017 5:29 PM
175	Hope this works out !	12/7/2017 5:22 PM
176	It only costs me about 40 round trip in gas but would save if had to park at airport	12/7/2017 4:38 PM
177	Would be interested in one to SFO also.	12/7/2017 4:30 PM
178	Make a discount rate for disabled, seniors and veterans wanting to travel to Sacramento.	12/7/2017 3:27 PM
179	Response to Q14 based on one-way. This is based on traveling alone. If traveling with 2 or more, I'd have to have some sort of discount, as the cost competitiveness with auto travel decreases with every additional passenger in my party.	12/7/2017 12:37 PM
180	Needed since we have little to no flights out of Redding	12/7/2017 12:07 PM
181	Question \$14 should have a button for zero. I feel that this idea has been tried and failed by private companies, and there is no reason to believe the outcome of this would be any different, beyond the huge expense that will have been lost by the government. Also, if this idea were to go forward, it would negatively impact the Redding Airport, which we cannot afford to have happen.	12/7/2017 11:39 AM
182	I do not believe that bu service would benefit this route. Business people prefer either driving or train. The cost of Greyhound and frequency of their buses is sufficient to handle the lower income riders. RDC (train) even would not break even for this route.	12/7/2017 11:30 AM
183	This would be a great service for my elderly mother that wants to visit me in Redding. She is not comfortable with Greyhound and the Amtrak hours are impractical.	12/7/2017 11:18 AM
184	Wheelchair access would be appreciated.	12/7/2017 10:12 AM
185	Since Amtrak's CapCorridor and feeder buses were taken over by a BART-led JPA, the fares have become cost prohibitive. Much cheaper to drive, and obviously, more convenient. If you create this service, it should serve both SMF and Sacramento's train station for links to non-middle of the night rail service to the Bay Area. Tough decision about routing though as doubtful Chico riders would transfer from a feeder bus, and routing through Chico would make for a longer ride time from Redding.	12/7/2017 10:07 AM
186	Please add direct route service to San Francisco. We travel to SF once or twice per month and must travel by car. We have no use for the car once we are there - and it's a burden to find long-term parking.	12/7/2017 9:59 AM
187	I currently drive to Sacramento, stay at a motel that features (Park & Fly) over \$200.00 for that part of the trip . If the service was timely and ran on a regular schedule I would consider using it.	12/7/2017 9:01 AM
188	Approach Southwest or Alaska airlines to subsidize some of the cost to SMF. Good for their business I would think.	12/7/2017 7:50 AM
189	round trip?	12/6/2017 9:31 PM
190	Friends need transportation from Sacramento airport to visit us. We need it to connect flights out of Sac airport. Also to visit Sacramento for leisure-concerts	12/6/2017 9:21 PM
191	I'm assuming you are asking about one-way fares. Would pay more for round trip, of course.	12/6/2017 8:51 PM
192	This is just what Redding needs! Thank you for starting a conversation about it!	12/6/2017 7:50 PM
193	Round trip ticket	12/6/2017 7:46 PM
194	Senior discount would be helpful.	12/6/2017 7:09 PM
195	This service would mainly be useful for our family if the shuttle connected with Sacramento Airport. We fly out at least twice a year, some years more. Hope it works out. Thank you!	12/6/2017 7:00 PM
196	twenty bucks round trip	12/6/2017 6:31 PM
197	A stop at SMF at terminal B to access Southwest Airlines would help	12/6/2017 5:54 PM
198	Use Anderson Safeway as pickup location.	12/6/2017 5:49 PM
199	We really need to replace the airport shuttle. My guess is that the bus would be used more for that purpose than any other purpose.	12/6/2017 5:33 PM
200	This is a much needed service. I hope it is more than once or twice per day.	12/6/2017 4:28 PM

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201	Maybe a stop in Anderson Ca so wouldn't have to go to Redding esierfor me to get a ride because I'm handicapped	12/6/2017 3:54 PM
202	Round trip?	12/6/2017 1:03 PM
203	My answer for #14: A train ticket from Dunsmuir to Sacramento costs \$33.00 if not refundable and \$63.00 if it is refundable for a coach seat. Business class is \$58.00. The train departure is at 12:35 AM and arrives at 6:15 AM if there are no delays. You need to make the cost of a ticket more attractive than the train fare.	12/6/2017 12:30 PM
204	Would be most convenient if it were to the airport as RDD options severely limited.	12/6/2017 11:30 AM
205	Obviously, these questions are not designed for people who live in small, rural, communities that are more than an hour away	12/4/2017 7:00 PM
206	It would be better for the bus to travel on 99 and 70 moving through the main centers of population. Having to take a shuttle bus to I5 is going to turn people off. It would give me great reservations.	12/4/2017 6:43 PM
207	Seating for the tall, seat dimensions available as information online	12/4/2017 6:37 PM
208	I already use Amtrak bus to connect to Capitol corridor train regularly, which works fine for that. But would love a fast and reliable transit to the Sac airport or to downtown Sac that did not require the purchase of a train ticket.	12/4/2017 6:01 PM
209	I know it's not about transportation from Paradise, but there needs to be a cheaper way to get to and from Chico at other clock hours. Thanks.	12/4/2017 8:50 AM
210	Please, make this happen. My family needs this. Health has become an issue affecting independent travel, and this service would help immensely. Thank you.	12/4/2017 4:29 AM
211	20-30 would be nice, but is happily pay closer to 50 if I was able to bring my ESA that is over 25lbs with room for at least some luggage.	12/4/2017 12:41 AM
212	Connections to the airport are very important. Connections to Amtrak as well. I used to take the train to San Francisco all the time, then they changed the schedule.	12/3/2017 9:49 PM
213	We need transportation to the airport. Flying out of Redding is costly and not dependable. Plus, it makes for much longer travel times with transfers and layovers.	12/3/2017 8:10 PM
214	I fly out of Sac usually once a year with my family. It's a \$180 cab ride down there from here. Cab will cover 4 of us so per person shouldn't be above ~\$40 or it would be cheaper to cab. I don't know what lyft/uber charges. I usually get rides from family or friends, and give them \$80-\$100. Would love to see some sort of bus service happen.	12/3/2017 7:42 PM
215	The length of time that I have to park and price of shuttle bus would determine whether I would drive and park or take a shuttle. Chico is SO ISOLATED. I cannot believe there is not commercial air service or reliable shuttle. I tried the shuttle and they do not understand the needs of travelers. That was a \$80 mistake as I was unable to make the connection due to flight delay and then they are just unreasonable. WORST EVER!	12/3/2017 7:32 PM
216	I usually fly out of San Francisco because that's the only option for our airport but this service would offer more options.	12/3/2017 6:38 PM
217	I have a one-and-only grandson in Texas. I fly there about 3-4 times a year for about one week. The cost of parking runs around \$80 per trip, so I would want to pay less than that for the bus. If it only goes to the Sac airport once a day (and back), then this might not work for me, since I book the cheapest flight possible, which can be any time of the day or evening.	12/3/2017 1:58 PM
218	I might and have paid more, but would use it less often if it were more costly.	12/3/2017 11:41 AM
219	Question 14 does not specify whether ticket is one way or round trip. I would be willing to pay \$40-\$50 for round trip.	12/3/2017 8:58 AM
220	I may no longer have an automobile soon.	12/3/2017 5:33 AM
221	Better transit thru Humboldt to other airports, not just Sac would be awesome too.	12/3/2017 2:36 AM
222	Deeply grateful for this initiative!	12/2/2017 10:16 PM
223	Why not run a motor car on the RR tracks to Sac.	12/2/2017 8:18 PM
224	What about a bus to Redding, Ca or up to Medford?	12/2/2017 7:42 PM

North State Express Questionnaire

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225	A bus to the airport would be great.	12/2/2017 12:51 PM
226	\$10 - \$15	12/2/2017 8:36 AM
227	The trip must be quick and without delays for me to use your service.	12/2/2017 6:52 AM
228	Great idea. Can't wait to see how it plays out. Fast easy access to SMF would be great.	12/1/2017 10:33 PM
229	Stops at the major medical centers will be important. It is always a struggle for my dad to get to the va hospital	12/1/2017 6:20 PM
230	My family uses AmTrak to get from Chico to Richmond/Oakland. We would like to able to use that quality of bus for SMF.	12/1/2017 4:10 PM
231	Please get some type of transportation to the Sac airport	12/1/2017 10:11 AM
232	Half price kids tickets or free for kids under 12 would be a good incentive for families	11/30/2017 11:27 PM
233	If there was a few disabled seats ans easy access it would be great for people to go to drs there. Also if it had 3 to 5 different location drop offs.and pick up for in Sacramento only. Only 1 in redding.	11/30/2017 10:44 PM
234	This is a wonderful transportation option. Opens possibilities of studying at UCD!	11/30/2017 10:42 PM
235	This would enable disabled vets to get care needed at Sacramento VAMC.	11/30/2017 10:15 PM
236	Thank you for even considering this!	11/30/2017 9:44 PM
237	Round trip	11/30/2017 11:06 AM
238	I have a car but it isn't in the best shape so I don't drive to Sac, but my family needs to get down there to use the airport twice in the summer and twice in the winter so we catch the bus.	11/30/2017 8:41 AM
239	Would be a great service. Living on the north coast definitely makes travel expensive and time consuming, which eventually limits travel out of county.	11/29/2017 11:41 PM
240	Would much prefer something through chico, many of us make the commute from Redding to Chico each day, a transition service that at least covers them both would be a godsend	11/29/2017 11:18 PM
241	It should stop at the airport, UC Davis medical center, and downtown Sacramento. For question 6, it wasn't clear to me whether you meant what time I wanted to leave Sacramento by or what time I wanted to be back in Redding.	11/29/2017 8:06 PM
242	Round Trip fares for day trips? It'd need to be affordable for my family or I'd continue to drive. One way to the airport would be awesome though!	11/29/2017 7:01 PM
243	connections to remote areas like Del Norte will need to be improved, as I can't get to Redding from Crescent City right now	11/27/2017 3:36 PM
244	I think that this is a great service for people who are closer to the Redding area.	11/20/2017 5:36 PM
245	The cost matter to a lot of people especially if they cannot afford \$30.00 or higher. The cost maybe the disadvantage for most people.	11/17/2017 7:58 AM
246	Good Luck! Thanks,	11/15/2017 9:55 PM
247	Please bring the service soon!!!	11/15/2017 8:00 PM
248	I would not pay 20-30 for a one way trip. Cheaper and more convenient to drive.	11/15/2017 8:00 PM

ATTACHMENT B

Ridership Estimation Methodology and Ridership Memo

NORTH STATE INTERCITY BUS RIDERSHIP ESTIMATION MODEL METHODOLOGY

This memo summarizes the approach for assessing service feasibility and estimating ridership for each of the applicable service types and offers preliminary ridership estimates by corridor for priority corridors in the North State Region.

RIDERSHIP ESTIMATION

Ridership estimation is a challenge in areas with limited existing transit service. Therefore, a multi-pronged approach will be used to assess potential ridership and determine transit service feasibility using socioeconomic adjustments (e.g. household income, population and job density, vehicle ownership) to understand transit ridership propensity. Once adjustments have been made to the model, the potential ridership demand estimate will be considered along with potential evaluation metrics such as community support (through commitments from feeder transit agencies), number of beneficiaries (ridership estimation), affordability/cost savings, and complexity of service operations. When considering potential ridership, additional factors such as potential partnerships with major trip generators such as universities or large employers within the study area may influence future demand for this transit service.

Step 1: Activity Node Identification

The first step of the ridership estimation involves identification of origin-destination zones and key gateways based on development of the proposed North state intercity bus route. These zones include a backbone corridor from Redding to Sacramento, with stops at Red Bluff and Williams, and connecting feeder services with Trinity, Humboldt, Siskiyou, Lake, Mendocino and Lassen County, among others. The proposed route also considers multiple stops in Sacramento based on key transportation connections: the Airport, the Amtrak Station, and Sacramento Regional Transit.

To provide a frame of reference for trip origin volumes associated with these zones, additional Census data will be compiled, looking at density of all populations, youth populations, seniors, people with disabilities, household income level, and households with no vehicles. In this screening process, zones with a certain population density (e.g. median or mean) will be

prioritized along with zones with higher concentrations of youths, seniors, people with disabilities, and households with no cars. This information helps us understand trip origins, or where people live and often begin their trips and the potential propensity for these people to choose to take transit.

In addition to population data (origins), local data and US Census data will be used to identify key destinations, including job density and activity nodes such as businesses employing 100 or more people, colleges and universities, medical facilities, and areas of employment growth. The data also helps identify potential opportunities for targeted partnership approaches to commuter benefits and transit services that also serve the wider regional needs.

Step 2: Preliminary Route Development

For the zones that are identified in Step 1, Nelson\Nygaard will draw upon GPS and locational data via StreetLight data to identify origin-destination (O-D) pairs with the highest rates of trip making by time of day. We will use matrices to identify travel patterns. Corridors that are already identified as preliminary routes by the North state project team will be prioritized. These nodes include the following:

Figure 1 Core Service

	Redding	Anderson	Red Bluff	Corning	Orland	Williams	Sacramento
Redding							
Anderson							
Red Bluff							
Corning							
Orland							
Williams							
Sacramento							

We will also look at the travel patterns for the following potential feeder routes¹ connecting to the core service:

1. Eureka (Del Norte) – Arcata (Humboldt) – Weaverville – Redding
2. Yreka – Weed – Mt. Shasta – Dunsmuir – Redding
3. Alturas (Modoc) – Burney – Redding
4. Red Bluff – Corning – Orland – Willows - Williams
5. Yuba City – Williams
6. Colusa (Mendocino) – Lakeport – Clearlake (Lake) – Williams

These preliminary routes are illustrated in Figure 2, and will be updated as needed. This step will include a sensitivity analysis to understand how volumes change according to time of day and day of the week, so that ridership can be based on typical travel patterns.

¹ These routes are subject to change in response to ongoing bus service route development by the project team.

NS EXPRESS BUSINESS PLAN | DRAFT RIDERSHIP ESTIMATION METHODOLOGY
Shasta RTA

Figure 2 Proposed Feeder Routes for Ridership Evaluation

	Yreka	Weed	Shasta Lake	Eureka	Arcata	Weaverville	Redding	Anderson	Red Bluff	Corning	Orland	Chico	Yuba City	Colusa	Lakeport	Clearlake	Williams	Sacramento
Yreka	x																	
Weed		x																
Shasta Lake			x															
Eureka				x														
Arcata					x													
Weaverville						x												
Redding							x											
Anderson								x										
Red Bluff									x									
Corning										x								
Orland											x							
Chico												x						
Yuba City													x					
Colusa														x				
Lakeport															x			
Clearlake																x		
Williams																	x	
Sacramento																		x

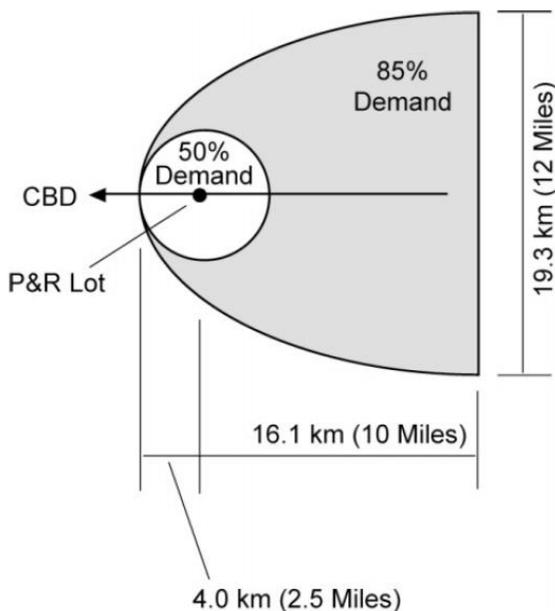
Optional Step 2b: Stop Catchment Area Refinement

This step is an optional step to further refine the previously determined stops by catchment areas. For each of the corridors shown in Figure 1, Nelson\Nygaard will work with SRTA and other project stakeholders to confirm appropriate stop catchment areas based on:

- Proximity to concentrations of population, employment, and institutions
- Proximity to existing fixed-route transit, nodes, park-and-ride facilities, and
- Impact on total travel time (distance off route).

For each stop location, we will start with a 10-minute walk (using an assumed travel speed of 3 miles per hour for walking) or a 10-minute ride (using an assumed travel speed of 20 miles per hour along the street network.) In local transit, the catchment area takes into account that 50% of the parking demand is typically generated within a 2.5-mile radius and that an additional 35% comes from an area defined by a parabola extending 10 miles upstream of the lot with a chord of 12 miles (Figure 3). Because this is intercity travel, we will look at a 20-mile catchment area.

Figure 3 Estimated market catchment area at Seattle area park-and-ride lots



Source: National Research Council. *TCRP Report 100: Transit Capacity and Quality of Service Manual, 2nd Edition*. Washington, D.C., 2004, pp. 3-15 – 3-16.

Step 3: Origin-Destination Transit Mode Share Analysis

Using the defined zones or catchments for each origin and destination, the total commuter transit trip ridership will be estimated using StreetLight data. This is used to understand the total number of trips between each location from which ridership may be estimated by applying the transit mode share from the Census to the total number of trips estimated by county.

Step 4: Socioeconomic Adjustments

In order to account for different propensities to take transit, the Census data will be used to understand the employment mix within each destination zone. Relative to the area-wide mode shares, transit mode share for HBW trips is adjusted at varying rates based on earnings (1.3% for low-income, -0.1% for moderate income, and -0.5% for high income). These thresholds will correspond to income levels specific to the zones involved in the analysis. These adjustments are be used to estimate low and high rates of transit trips per person.

Step 5: Transit Ridership Estimates

Based on the calculations, total ridership estimates for the various corridors will be estimated, and highlight those with the highest potential ridership. Some of the areas served are very small; as such, ridership demand estimated may be examined balancing potential number of beneficiaries against assessed potential need.

City/Town	Population 2016
Yreka	7,596
Weed	< 5,000
Shasta Lake	10,162
Eureka	27,226
Arcata	17,974
Weaverville	< 5,000
Redding	91,808
Anderson	10,232
Red Bluff	14,158
Corning	7,535
Orland	19,033
Chico	91,567
Yuba City	66,845
Colusa	5,937
Lakeport	< 5,000
Clearlake	15,053
Williams	5,192
Sacramento	495,234

Source: U.S. Census

ATTACHMENT C

Coach and Transit Bus Facts



North State Express Business Plan

Deployment of Commuter and Feeder/Transit Bus Options

1. Overview – Available Electric Buses

Electric public transit vehicles produce no tailpipe emissions but are responsible for some greenhouse gas (GHG) and criteria air emissions via the electric power generation that is required to charge the vehicles’ batteries. While it is still relatively early days for battery electric vehicle transit buses (E-Buses), original equipment manufacturers (OEMs) have already deployed several models with various configurations designed to complete similar duty cycles as traditional transit buses. **Table 1** below lists currently available zero-emission buses in the 20’+ foot E-bus market. Manufacturers of these buses include BYD, Complete Coach Works, GreenPower, Gillig/BAE, Motiv, New Flyer, Nova Bus, Phoenix, Proterra, and Zenith Motors. All of these manufacturers have transit buses available that can serve Shasta Regional Transportation Agency (SRTA) and its neighboring transit agencies that operate feeder buses. Several of the manufacturers have also coach buses available or in development that can serve the intercity bus service between Redding, CA and Sacramento, CA.

Most of the below listed transit electric buses come in a “full-sized” battery option that is designed to operate over a full day’s duty cycle and recharge overnight. While most of these OEMs claim a daily expected range of at least 140 miles for the transit buses, industry range research suggests that healthy skepticism of OEM estimated range figures is warranted. However, it should also be noted that battery chemistries are improving at a fast pace and battery prices are falling earlier than predicted – both of these forces make E-buses an increasingly appealing and cost-effective option for transit agencies. While it is not the purpose of this report to explore in depth the claimed range figures of electric bus OEMs, **Table 3** depicts some limited range projections for available E-bus options.

OEM	Model/Type	Length	Battery Capacity	Charging
BYD	K7	30'	197 kWh	Depot/En Route
	K9s	35'	270 kWh	Depot/En Route
	K9	40'	324 kWh	Depot/En Route
	K11	60'	591 kWh	Depot/En Route
	C6/Coach	23'	135 kWh	Depot/En Route
	C9/Coach	40'	365 kWh	Depot/En Route



	C10/Coach	45'	394 kWh	Depot/En Route
CCW	ZEPS	30'-40'	375 kWh	Depot/En Route
Ebus	Ebus22/40 Composite	22'-40'	>130 kWh	Depot/En Route
Gillig/BAE	Electric Trolley	30'		Depot/En Route
GreenPower	EV250	30'	210 kWh	Depot
	EV300	35'	260 kWh	Depot
	EV350	40'	320 kWh	Depot
	EV400	45'	320 kWh	Depot
	EV450	60'	400 kWh	Depot
	EV500/Coach	45'	400 kWh	Depot
	EV550/Double Decker	45'	>478 kWh	Depot
Motiv	Shuttle Bus	30'	100-120 kWh	Depot
New Flyer	XE35	30'	100-200 kWh	Depot/En Route
	XE40	40'	100-300 kWh	Depot/En Route
	XE60	60'	480 kWh	Depot/En Route
Nova Bus	LFSe	40'	<100 kWh	En Route
Phoenix	Shuttle Bus	30'	102-120 kWh	Depot
Proterra	Catalyst FC. XR, E2	35'	79-440 kWh	Depot/En Route
	Catalyst FC. XR, E2	40'	79-660 kWh	Depot/En Route
Zenith Motors	Shuttle Bus	24'	52-62 kWh	Depot

Table 1: Available E-bus options in 2017

In addition to the buses listed above, other buses are currently in development or are undergoing updates (i.e. model improvements with larger battery capacities). Examples of current options that could serve the *Express Route between Redding and Sacramento* are the following:

- BYD 45' High Floor Coach
- GreenPower Double Decker and Synapse Shuttle; E-Coach (in development)
- Motor Coach Industries (MCI) E-Coach (in development)
- Proterra – Van Hool Coach Bus (in development)



Figure 1: MCI Battery Electric Coach (in development) and BYD C10 Battery Electric Coach

Due to the various bus configurations and available optional equipment, OEMs are hesitant to provide a price for a “standard” bus, as no official quote with exact specifications from the OEMs was requested for this report. However, while current E-bus model pricing data obtained directly from E-bus OEMs are not presented in this analysis, pricing data that can help transit agencies understand the differences in prices among E-bus OEMs and across model varieties within each OEM’s offerings have been included in the table below. For example, 2015 pricing data submitted to the State of Washington reveals the following data on E-bus and, as a reference, diesel hybrid options:

OEM	Model/Type	Length	Price
BYD	Heavy Duty, En-Route & Plug-In Electric	30'	\$ 450,000
BYD	Heavy Duty, En-Route & Plug-In Electric	35'	\$ 595,000
BYD	Heavy Duty, En-Route & Plug-In Electric	40'	\$ 779,000
BYD	Heavy Duty, Coach	45'	\$ 750,000
BYD	Heavy Duty, En-Route & Plug-In Electric	60'	\$ 1,199,000
Gillig	Heavy Duty Coach, Allison Hybrid	30' Low Floor	\$ 628,922
Gillig	Heavy Duty Coach, Allison Hybrid	35' Low Floor	\$ 636,872
Gillig	Heavy Duty Coach, BAE Hybrid	35' Low Floor	\$ 599,472
Gillig	Heavy Duty Coach, Allison Hybrid	40' Low Floor	\$ 641,072
Gillig	Heavy Duty Coach, BAE Hybrid	40' Low Floor	\$ 603,627
GreenPower	Heavy Duty, Plug in Electric	30'	\$ 606,838
GreenPower	Heavy Duty, Plug in Electric	30'	\$ 606,838
GreenPower	Heavy Duty, Plug in Electric	40'	\$ 788,688



GreenPower	Heavy Duty, Plug in Electric	45'	\$ 905,650
GreenPower	Heavy Duty, Coach	45'	\$ 885,560
GreenPower	Heavy Duty, Plug in Electric	60'	\$ 1,038,600
New Flyer	Heavy Duty Coach, Allison Hybrid	35' Low Floor	\$ 623,195
New Flyer	Heavy Duty Coach, BAE Hybrid	35' Low Floor	\$ 567,927
New Flyer	Heavy Duty Coach, Allison Hybrid	40' Low Floor	\$ 628,195
New Flyer	Heavy Duty Coach, BAE Hybrid	40' Low Floor	\$ 572,927
New Flyer	Heavy Duty Coach, Allison Hybrid	60' Low Floor	\$ 940,688
New Flyer	Heavy Duty Coach, BAE Hybrid	60' Low Floor	\$ 865,452
New Flyer	Heavy Duty, En-Route Electric	40'	\$ 785,000
Nova	Heavy Duty Coach, Allison Hybrid	40' Low Floor	\$ 673,923
Nova	Heavy Duty Coach, BAE Hybrid	40' Low Floor	\$ 676,604
Nova	Heavy Duty Coach, Allison Hybrid	60' Low Floor	\$ 934,476
Nova	Heavy Duty Coach, BAE Hybrid	60' Low Floor	\$ 920,764
Proterra	Heavy Duty, Plug in Electric	40'	\$ 759,000
Proterra	Heavy Duty, En-Route Electric	40'	\$ 779,000

Table 2: Bus pricing and classification according to Washington State Department of Enterprise Services Master Contract, 2015

1.1 Electric Bus Projected Range

As mentioned above, this analysis does not tackle the issue of projected electric bus driving range in detail. The research and analysis that has been done on this topic already has suggested that OEM-stated ranges should be treated with skepticism. For example, *average* bus range data may be useful for public transit agencies, but a far more useful figure is *reliable* range, or range that a user can depend on achieving every day (rather than on an “average” day). For the purpose of this analysis, **Table 3** below, presents a simple formula that projects bus ranges based on battery sizes/capacities and projected consumption (kWh/mile)¹:

¹ In this analysis “charge buffer” specifies the depth of discharge that a battery should be drawn down to. In this case, the remaining 10% of battery life is not used; this is generally done to preserve battery longevity.



$$\text{Projected Bus Range} = \left(\text{Battery Size} \times 90\% \text{ Charge Buffer} \right) / \text{Projected Consumption (kWh/mile)}$$

40-Foot E-Bus Model	Battery Size (kWh)	Consumption (kWh/mile)	Expected Daily Range (miles)
BYD	324	1.8-2.5	117-162
Proterra (slow-charge)	330	1.8-2.5	119-165
New Flyer	300	1.8-2.5	108-150
GreenPower	320	1.8-2.5	115-160
Complete Coach Works	375	1.8-2.5	135-188

Table 3: Expected daily driving range for currently available 40-foot E-Buses

In the above figure, a range of expected battery consumption for 40-foot E-buses is given at 1.8 kwh/mile – 2.5 kwh/mile.² This results in a range of projected driving ranges for the above listed buses. As can be seen, these ranges differ slightly between bus models, and will differ even more for the models that offer significantly larger battery sizes as an option (like Proterra). Several of these OEMs (as can be seen above in Table 1), offer smaller-battery fast-charge models. These buses have smaller battery storage because it is expected that they charge while en-route, and therefore require smaller batteries. However, these buses do require additional and potentially expensive charging infrastructure compared to slow-charge models in a depot setting.

There are several factors that affect an E-bus’s energy consumption, and therefore affect driving range. These include:

Driver Characteristics: Drivers of transit buses are generally accustomed to operating traditionally fueled buses, which have large gas tanks and significantly longer daily driving range than E-buses. For this reason, they have not learned to rely on conservative driving techniques that could extend the range of E-buses. These techniques include slower, smoother accelerating, using regenerative

² Battery consumption (kWh/mile) is another topic studied extensively that is not discussed at length in this analysis. The projected range of consumption for a 40-foot E- bus of 1.8 kWh/mile to 2.5 kWh/mile comes from a combination of Altoona results (The Federal Transit Administration (FTA) reports ranges for new model E-buses they test by measuring the kWh/mile consumption for three different simulated transit type service cycles/test phases (Central Business, Arterial, and Commuter)), academic articles, OEM claims, and experiences of CALSTART’s own electric bus tests. Furthermore, this projected battery consumption is for a 40-foot bus only. This consumption would need to be adjusted downward or upward depending on route characteristics, bus type and speed etc.



braking (whenever possible), and strategically using auxiliary loads (such as HVAC). An intentional shift in driver training and behavior could yield significant benefits for transit operators switching to E-buses.

Auxiliary Loads: Due to limited battery storage, conservative and intelligent use of auxiliary loads on E-buses is much more important than on ICE vehicles. For example, HVAC use on a cold or hot day results in a significantly lower driving range with a E-bus than if the bus were operated on a temperate day with no heating or cooling requirements. Other auxiliary loads that draw battery power and therefore impact driving range include internal and external lighting and vehicle communications.

Passenger Load/Vehicle Weight: Buses that carry high passenger loads generally see increased battery energy consumption, and therefore diminished range. For this reason, E-bus manufacturers generally invest more money into decreasing vehicle weight than do traditional bus manufacturers.

Route Characteristics: Hilly routes draw more battery energy than flat routes, therefore resulting in decreased vehicle driving range. In addition, routes that require constantly variable speeds and more stops reduce vehicle driving range compared to routes with more steady driving speeds and less stops. This is generally why routes served by coach buses see better fuel/battery efficiency than city transit routes, despite the fact that coach buses are generally larger and heavier than transit buses.

1.2 Available Charging Options

Various charging options and power levels exist for charging buses either with a conductive (physical connector) or an inductive (electromagnetic field) charger.³ E- buses are charged mainly in two ways – either en-route (also known as opportunity charging), or overnight at a bus depot.

As several OEMs have developed their own chargers and connectors (couplers, overhead charging mechanisms, and wireless pads), standardization and interoperability has become a challenge. Examples of chargers are: Proterra Overhead Fast Charger (450kW), WAVE Wireless Charger (50-250kW), and BYD Depot Charger (50-200kW). A common charging coupler that is currently interoperable between several OEMs is the SAE J1772 Combined Charging System (CCS) that utilizes direct current as the charging mode. Three additional separate SAE standard committees have been established with the goal to set standards that satisfy customers' needs and that OEMs can agree upon. The SAE standard committees are listed here below:

SAE J3105 (Overhead Fast Charging)

Electric Vehicle Power Transfer System Using a Mechanized Coupler: This standard covers physical, electrical, functional, testing and performance requirements for a high power mechanized conductive power transfer system that can transfer DC power. The standard committee is currently evaluating different charging power levels and designs. The voltage levels on the infrastructure side

³ Chargers are also known as Electric Vehicle Service Equipment (EVSE) in situations where the charging mode is AC and the charger is located on the vehicle.



that are being evaluated are 250 – 1000VDC and a current level of (1) up to 600 Amps and (2) up to 1500 Amps. Consensus over what the interoperable standard should be has not yet been reached.

SAE J3068 (Depot Charging)

Electric Vehicle Power Transfer System Using a Three-phase Capable Coupler: This standard covers the physical, electrical, functional, testing and performance requirements for high power conductive power transfer that can utilize three-phase AC power. The standard committee is evaluating voltage levels up to 600 VAC.

SAE J2954 (Wireless Charging, predominantly en-route)

Wireless Power Transfer for Light-Duty Plug-In/ Electric Vehicles and Alignment Methodology: This standard defines and covers interoperability, electromagnetic compatibility, minimum performance, safety, and testing for wireless charging of electric vehicles. Standardizing the wireless power transfer through wireless charging allows for a convenient way to charge a vehicle by just parking it over the charging pad. The standard is designed for stationary applications when the vehicle is not in motion.

2. E-Bus Charging Stations and Downtime Parking

2.1 Site Analysis and Recommendation

Four main charging locations have been identified as suitable locations for the coach service buses planned to serve the express route. In Redding, CA, the Redding Area Bus Authority (RABA) Transportation Center, RABA Maintenance Facility and Turtle Bay Exploration Park have been identified as possible charging locations for the five coach buses. In Sacramento, the only option identified is the existing bus yard operated by Sacramento Regional Transit (RT) at N Street and 29th.

Due to the long distance the buses will be travelling, it is advised to have backup charging locations along the express route as well. One or two locations midway in, for example, Orland and Williams could initially function as backup stations to guarantee the successful operation of the buses and offer emergency charging when needed. The initial backup stations could be situated at transit feeder locations close to the I-5 backbone that later could be used for charging of feeder E-Buses or be designed in a way that allows charging of light duty vehicles as well.

According to Redding Electric Utility, the utility has enough capacity to provide the needed energy for the five buses at all three suggested sites. Enough capacity exists also at the RT bus yard for this initial deployment. As the buses will not be charged at the same time, a minimum service demand of 400kW (AV480V-3Phase)⁴ will suffice for this first deployment. However, for future proofing purposes, that allows additional E-Buses to utilize the same charging network, it is recommended

⁴ Two 200kW chargers operating simultaneously



that possible infrastructure upgrades are sized larger than the current minimum demand for the five coach buses.

Infrastructure upgrades are needed at all proposed charging locations in order to accommodate the fast chargers in this project. In addition to transformer upgrades that can provide the 480V service, third party upgrades related to switchboards, distribution panels, and conduits and wire are needed. The section here below talks about each location in more detail.

RABA Transportation Center and Maintenance Facility

Both RABA locations currently have a service voltage of 208V. The utility can upgrade the transformers for free to accommodate the needed 480V service voltage, however, this will affect the currently installed infrastructure at the sites. Per the conversations with the utility, it is recommended that an additional transformer is installed at either site to serve the new charging load. Redding Electric Utility charges \$25k for the installation of a new transformer. In addition to this change, third party contractors need to install switchgear, panels, conduits and wire to accommodate the charging installation.

Turtle Bay Exploration Park

The Turtle Bay Exploration park currently has a dedicated 480V service for the newly built hotel. However, according to the Redding Electric Utility, there is not enough capacity available to add the charging load to the existing transformer. Therefore, the only option for the Turtle Bay location is to add a new transformer for \$25k in the same way as for the other RABA locations.

Sacramento RT (N Street and 29th)

Sacramento RT currently has a capacity of 1000kW available at their transit site under the Capital City Freeway. The current infrastructure has been dimensioned to satisfy the need for the CNG compressor that operates during the night-time. According to Sacramento Municipal Utility District (SMUD), the least cost for upgrading and accommodating chargers at this location is \$200k. There is plenty of capacity to spare during the day time when the CNG compressor is idle, however, during the night-time the coach buses would need to be slow-charged to limit the power draw.

Site	Current Service Voltage	Current Infrastructure Sufficient for Charging	Minimum Power Need
RABA Transportation Center	208	No	400kW
RABA Maintenance Facility	208	No	400kW
Turtle Bay	480	No	400kW
Sacramento RT Bus Yard	480	No	400kW

Table 4: Current Service Voltage at Charging Locations



2.2 Cost Analysis of Utility Requirements for Proposed E-Bus Charging Locations

The coach buses will be charged during the day time and night time in Redding, and Sacramento. According to the preliminary schedule, here below, the shortest amount of time available for a full charge is approximately three hours. Peak electricity demands are expected to occur when a bus leaves either Redding or Sacramento, and is charged at the destination on max power in order to be ready to make the opposite route either north, back to Redding, or south, back to Sacramento. On these occasions, it can be estimated that a 200kW demand is created. Moreover, the buses will be charged on average once daily at each location and travel the distance between Redding and Sacramento twice. The following sections will discuss the electricity costs for each utility.

E-Bus Charging Needs	
On-way mileage	175 miles
Fuel Efficiency	2.3kWh/mile
Demand	200kW

Table 5: E-Bus Charging Needs

For the purposes of the electricity costs, it is assumed that buses travel 175 miles one way for a total of 350 miles per day. The average fuel efficiency of the E-Bus of 2.3kWh/mile is used to estimate the total energy need at each charging location. Based on daily service between Redding and Sacramento, the buses need a total of approximately 48,000 kWh of energy per month. Testing will be needed for more accurate fuel economy data; however, preliminary analysis show that no major elevation differences exists on the route, per the Google Earth elevation profile below. This should be considered to be favorable for the operation of the E-Buses.



Figure 2: Elevation Profile – Redding to Sacramento

Per the preliminary schedule below four buses could operate four southbound and four northbound trips daily. It is recommended that one bus is kept as a reserve to guarantee continuous service.

The estimated times to charge each bus for the service below are:

- Bus #1: 5 hours (in Sacramento)
- Bus #2: 6 hours (in Redding)



- Bus #3: 4 hours (in Sacramento)
- Bus #4: 3 hours (in Sacramento)

Once the buses arrive to their starting locations they can be slow charged overnight at a lower demand.

<u>Stop</u>	<u>Trip 1</u>	<u>Trip 2</u>	<u>Trip 3</u>	<u>Trip 4</u>
<u>Southbound</u>				
Redding	5:00 AM	10:10 AM	2:00 PM	5:05 PM
Orland	6:00 AM	11:10 AM	3:00 PM	6:05 PM
Sacramento International Airport	7:30 AM	12:40 PM	4:30 PM	7:35 PM
Sacramento Amtrak Station	7:50 AM	1:00 PM	4:50 PM	7:55 PM
7th & Capitol Stop	8:00 AM	1:10 PM	5:00 PM	8:05 PM
<u>Northbound</u>				
7th & Capitol Stop	8:00 AM	1:10 PM	5:00 PM	8:00 PM
Sacramento Amtrak Station	8:10 AM	1:20 PM	5:10 PM	8:10 PM
Sacramento International Airport	8:30 AM	1:40 PM	5:30 PM	8:30 PM
Orland	10:00 AM	3:10 PM	7:00 PM	10:00 PM
Redding	11:00 AM	4:10 PM	8:00 PM	11:00 PM

Figure 3: Preliminary Schedule for Express Service

Redding Electric Utility – Rate Schedule

Based on the total kWhs that the buses need for charging, the rate schedule for the locations in Redding fall under a Large Commercial Service E7 or E8. Per the utility rate description, a demand meter must be installed in this case since the monthly energy need will consistently be above 15,000 kWh. The following describes the rate schedule and associated charges in more detail:

- Network Access Charge: \$140
- Energy Charges: \$0.1679 and per kWh for the first 15,000 kWh in billing period
\$0.0809 per kWh for all additional kWh in billing period
- Demand Charge: The Demand Charge (\$/kilowatt or \$/kW) for service billing demand shall be the lesser of:
a: \$ 29.65 per kW
Or
b: \$ 32.95 X ((Total kWh-15,000)/Total kWh) per kW

Total monthly energy cost for charging at Redding: \$9,895

A new simplified rate structure for Large Commercial Service has been proposed by the Redding Electric Utility. The changes are listed here below. The simplified rate would result in moderate cost savings as indicated below:



Network Access Charge:	\$140
Energy Charges:	\$0.098 per kWh
Demand Charge:	\$20/kW

The monthly energy cost for charging at Redding: \$8,873

Sacramento Municipal Utility District (SMUD) – Rate Schedule

The charging activities for the coach buses will fall under the Large General Services Time of Use rate (GUS-L) at the Sacramento RT location. The following information pertains to this rate:

System Infrastructure Fixed Charge:	\$106.85
Site Infrastructure Charge (\$ per 12-month max kW of contract capacity):	\$3.98

Energy Charges:

Winter Season (October 1 through May 31)

On-Peak:	\$0.1067/kWh
Off-Peak:	\$0.0846/kWh

Summer Season (June 1 through September 30)

Super Peak:	\$0.1662/kWh
On-Peak:	\$0.1327/kWh
Off-Peak:	\$0.1062/kWh

Total monthly energy cost for charging at Sacramento RT: \$7,424⁵

SMUD offers also special charging rates for commercial customers. According to SMUD, a fast charger incentive is available for up to \$100,000 for reach DC fast charger installation. At the time of writing this report it is unclear if this incentive is available for transit agencies.

2.3 Cost Analysis of Infrastructure Needs for Proposed E-Bus Downtime Parking Locations

In addition to the transformer upgrades and associated costs to get the needed switchboards and conduits in place, SRTA needs to reserve resources to pay for the charging equipment. There are several charging options available for transit authorities as discussed in the preceding section. The current trend is to install DC chargers with standard J1772 CCS couplers pictured here below. This standard is used by ABB, Chargepoint and others. BYD has traditionally supplied its AC chargers together with its buses as one package. However, the challenge with installing BYD’s own

⁵ Electricity cost \$/kWh estimated as average of Super-Peak, On-Peak and Off-Peak



proprietary chargers is that they are only compatible with BYD buses. Recent discussions with BYD have indicated that they are open to use the interoperable CCS standard if/when needed. Installing charging infrastructure compatible with the CCS standard will allow for charging of other vehicles as well such as light-duty vehicles.



Figure 4: J1772 CCS Plug and Receptacle⁶

The following sections list the chargers currently available for SRTA. Due to the fast turnaround of the coach buses high-power chargers need to be installed. It is estimated that the buses need approximately 400kWh after each one-way trip. Per the preliminary schedule, the shortest down-time is around three hours after the bus arrives. This type of scenario would create a power draw resulting in demand of around 150kW.

Charger	Connection Method Between Charger and Bus	Output Power	Output Current
ABB	CCS-1 and CCS-2	Modular: 50kW, 100kW, 150kW	DC
BYD	Proprietary and CCS*	Modular: 100kW, >200kW	AC and DC*
Chargepoint	CCS-1 and CCS-2	Modular: 62.5kW, 125kW**	DC

Table 6: Available Fast Chargers

ABB – Depot Charging

ABB’s depot charging solution allows up to three electric buses to be connected and charged sequentially while parked. Key benefits for the system are: small infrastructure footprint, easy to upgrade power capacity on site, OCPP compliant for remote management, and remote diagnostic and service. The list price for ABB’s power converter is \$60,000 for a 50kW power converter module and \$100,000 for a 150kW power converter module; each charge-box cost \$5,500.



⁶ <https://www.proterra.com/technology/chargers/>



Chargepoint – Depot Charger

Chargepoint’s depot charging solution allows for up to 125 kW charging if two of their stations are interconnected. Key benefits of the station(s) is that they allow for fixed maximum power output per station, and the system can dynamically manage the power distribution per station. The list cost per station is \$40,800. Chargepoint have also more powerful stations available in their Power Cube configuration. The power outputs per station that is connected to a Power Cube can be up to 400 kW.



BYD – Depot Charger

BYD currently supplies their proprietary AC chargers together with their buses. As mentioned in the previous sections, BYD is prepared to equip the possible coach buses for SRTA with CCS compatible (SAE compliant) charging receptacles. BYD can supply up to 200 kW per charging station with its current setup.



3. E-Bus Needs and Cost Analysis

This section discusses the capital needs for the initial deployment of five coach buses to serve the Redding to Sacramento express route. Currently, several manufacturers are planning or already have coach bus models available that they claim can go up to or over 200 miles per charge. BYD is one manufacturer that has a 45ft Motor Coach available for testing in early January 2018. BYD has also announced that they will have a version with an improved battery chemistry available in the first quarter of 2018 that can go up to 300 miles on one charge. Other manufacturers, as listed in the overview above, that have coach bus options that are still under development are: Motor Coach Industries (MCI), GreenPower and Proterra-VanHool. It is expected that all of these coach buses will be able to complete the distance required for the express service when they are available.

3.1 E-Bus Needs

The capital needs inventory here is based on available pricing data from select resources and CALSTART internal reports. The price for the coach bus is estimated at \$750,000⁷ per bus for this analysis. Research indicates, that the buses will vary in pricing from the mid- \$700,000 to up to \$900,000 depending on battery capacity and other auxiliary equipment.

SRTA Express Route Capital Cost Analysis			
Item	per Unit	Qty.	Total Price
Coach Buses	\$750,000	5	\$3,750,000

⁷ Discussions with BYD and Washington State Department of Enterprise Services Master Contract, 2015



Redding Infrastructure			
Transformer Upgrade	\$25,000	1	\$25,000
Charger	\$80,000	1	\$80,000
Other Non-Recurring Costs*	\$125,000	1	\$125,000
Sacramento Infrastructure			
Transformer Upgrade/Power house	\$200,000	1	\$200,000
Charger	\$80,000	1	\$80,000
Other Non-Recurring Costs*	\$50,000	1	\$50,000
TOTALS			\$4,310,000
*cost associated to upgrades to/installation of switchgear cabinets, charger switchgear cabinet, distribution wiring, power distribution equipment labor, and other needed upgrades to the bus maintenance bay			

Table 7: Capital Cost Analysis

The table below lists total operational expenses due to maintenance⁸ and electricity costs for one year of service as the buses travel 252,000 miles. It is worth noting that the electricity costs are high due to the relatively high demand rates. The electricity costs depend on utility rate and charging pattern. For a reference, California Air Resources Board has listed in their Advanced Clean Transit Cost Assumption Model, a cost for electricity of \$0.25/kWh when a bus is charged in a depot setting under a five-hour period. In the current modeling for the SRTA Express Service, a cost of \$0.18 is used as the average.

SRTA Express Route Operational Cost Analysis - 1 Year			
Item	\$/mile	miles	Total Cost
Average Maintenance Cost	0.60	504,000	\$302,400
Average Electricity Cost	0.41	504,000	\$206,640
TOTALS			\$509,040

Table 8: Operational Cost Analysis

3.2 Capital Cost Analyses

Battery Leasing vs. Ownership

The most significant cost component for E-buses are the batteries that are used for energy storage. To help reduce the high incremental cost of E-buses, some OEMs⁹ are offering battery lease programs as a financing option. The benefit of a lease program is that the E-bus can often be acquired with the same cost as a conventional diesel bus, while the leasing fees for the battery can

⁸ Average maintenance cost for E-Bus per California Air Resources Board Advanced Clean Transportation Cost Assumption Model
⁹ BYD & Proterra.



be recorded as operational costs and taken from the operational budget in the same way as diesel fuel costs, for example. A lease program also removes some of the risks from the transit authority and transfers them to the OEM that is responsible for the performance and the warranty of the battery. The FTA has confirmed that federal funds can be used for battery leases.¹⁰ Various federally supported financing mechanisms for public transportation are available such as: capital leasing, revenue bonds, debt service reserve, public-private partnerships, the Transportation Infrastructure Finance and Innovation Act (TIFIA), and state infrastructure banks.¹¹

E-Bus batteries are especially well suited to be leased as they potentially need to be replaced, depending on their lifecycle, which renders a certain flexibility desirable (i.e. battery technology is still rapidly evolving and no current E-Buses have been in actual operation for their entire lifetime; costs are projected to decrease as technology is maturing). While batteries have a warranty, leasing them removes any additional maintenance costs associated with their performance that otherwise would be levied on the transit operator. An additional direct benefit with leasing is that there are no upfront sales tax payments, as well as no disposal processes that the transit agency must directly undertake once the batteries are not performing and have reached their end of service life. However, cons associated with leasing include (1) a higher cost paid over time due to financing charges and ancillary costs, and (2) the transit agency does not have any equity in the battery. In addition, the transit operators are solely reliant on the OEM to respond and maintain the batteries when needed.

For planning purposes, the SRTA and the feeder transit agencies should have a clear understanding of the lease term, associated payments and other costs, and types of maintenance and service that are included (if any). Further analysis of specific routes that would utilize E-buses with leased batteries is also warranted to understand what the specific benefits of leasing vs. buying could be.

Traditional lease structures¹² that can apply for battery lease situations are listed here below. The following criteria, among others, should be further evaluated as they impact the lease classification: transfer of ownership, purchase option, economic life, and asset value.

- Financial/Capital Lease: Some of the ownership risk and benefits are transferred to the lessee. Traditionally no maintenance services are included in this type of lease. The finance/capital lease is usually fully amortized (i.e. the lease payments cover the entire equipment cost). A bank or leasing company is usually the party who buys the equipment that is then leased to the lessee. Cancellation is typically more challenging as the bank or leasing company must be fully paid off before the lease can be cancelled. From an accounting perspective, a lease is considered a capital lease when the lease terms equal or

¹⁰ California Air Resources Board – Advanced Clean Transit Regulation, Discussion Draft, 2015.

¹¹ Federal Transit Administration – Options for Financing Public Transportation in the United States.

¹² Conditions and accounting rules for leases dependent on lease classification.



exceeds 75 percent of the asset's useful life and/or when the present value of the lease payments equals or exceeds 90 percent of the total cost of the asset.

- Operating Lease: No ownership is assumed by the lessee under an operating lease and the lease can generally be cancelled if needed before the lease term ends. The right to operate the equipment is transferred to the lessee and the equipment is returned at the end of the lease to the lessor. Operating leases include both financing and maintenance services and the associated costs for these are built into the lease payments. Operating leases are traditionally not fully amortized (i.e. operating/service lease payments do not fully cover the entire equipment cost) and are consequently not offered for the full expected life of the equipment. When a lease is classified as an operating lease, the lease payments can be covered as operating expenses. From an accounting perspective, the lease can be classified as an operating lease when the lease term is less than 75 percent of the asset's useful life and/or when the present value of the lease payments is less than 90 percent of the total cost of the asset.

A net present value analysis¹³ in the figure below shows that the buy option is more cost competitive overall than the lease option. In this analysis a discount rate of 7% has been used to demonstrate the impact of the time value of money. It has further been assumed that the battery lease program cost will decrease at year 6 (the midpoint of the lease) as battery prices continue to decline. The analysis has been done for a period of 12 years that is aligned with the full life of a bus.

As the buy option can generally be more cost competitive from a net present value analysis perspective, it is noteworthy that the main advantage a transit authority has when leasing batteries is that it can utilize some of the available grants to cover these operational/lease costs and thus deploy more buses as the upfront capital expenses are lower. Depending on the OEM, several innovative funding structures might be available to help transit agencies deploy larger quantities of E-Buses. One scenario could be to use 5307 and/or 5339 Urbanized Area Formula Grants for the initial base E-Bus model that does not include the battery packs and then lease the batteries through a lease program/Battery Service Agreement with set monthly/annual installments and fund the lease with Low-No funds.

¹³ For the cash flow analysis for the buy option no tax savings or write down allowances/depreciation expenses have been taken into account, as it is assumed that a transit authority is not able to take advantage of these. Also, no residual value is assumed, and the disposition costs of old batteries have not been accounted for. In a similar way, for the cash flow analysis for the lease option, no tax savings for the battery lease payments have been incorporated in the calculations. Also, special equipment, chargers, and charger installation costs have not been included in the net present analysis model as these are the same for both buy and lease options.



General Assumptions		
E-Bus Cost	\$	750,000
E-Bus w/o Battery Cost	\$	500,000
Battery Cost	\$	250,000
Term (Service Life)		12 years
Market Value at End of Term	\$	-
Discount Rate		7%

Lease Option		
Lease Payments (years 0 to 6)	\$	40,000
Lease Payments (years 7 forward)	\$	35,000
Total Payments	\$	(990,000)
Net Present Value	\$	(841,826)

Buy Option		
Battery Replacement (midlife, year 6)	\$	(75,000)
Total Payments	\$	(825,000)
Net Present Value	\$	(799,976)

Table 9: Battery lease-buy analysis

The following are excerpts from the Low or No Emission (Low-No) Program FY 2017 Notice of Funding Opportunity Announcement that support leasing:

- Page 19448; Eligibility Information – 2. Cost Charing and Matching: “the maximum Federal participation in the costs of leasing or acquiring a transit bus financed under the Low-No Program is 85 percent of the total transit bus cost”
- Page 19448; Eligibility Information – 3. Eligible Projects: “Purchasing or leasing low or no emission buses”, “acquiring low or no emission buses with a leased power source”



- Page 19451; Application Review – iv. Local Financial Commitment: “Applicants must identify the source of the local cost share and describe whether such funds are currently available for the project or will need to be secured if the project is selected for funding. FTA will consider the availability of the local cost share as evidence of local financial commitment to the project.”; “In addition, an applicant may propose a local cost share that is greater than the minimum requirement or provide documentation of previous local investments in the project, which cannot be used to satisfy local matching requirements, as evidence of local financial commitment.”; “FTA will also note if an applicant proposes to use grant funds only for the incremental cost of new technologies over the cost of replacing vehicles with standard propulsion technologies.”

In addition to the FTA Lo-Now program, leasing is also supported thorough the HVIP program:

- Page 38; 5. Battery Leasing: “Arrangements in which a vehicle, with the exception of the battery, is purchased and the battery is leased to the vehicle purchaser may be allowed by the CARB Project Liaison on a case-by-case basis if the battery lease term is a minimum of three years.”

The 5307 Urbanized Area Formula Grants also support leasing of capital assets as long as the applicant can prove that it is more cost effective. Battery lease expenses can be covered up to 80% by 5307 funds.

3.3 Total Cost of Ownership Analysis

E-Buses are more expensive to purchase than their traditionally fueled counterparts, but are generally less expensive to operate with respect to fuel and maintenance costs. A 12-year total cost of ownership (TCO) analysis has been included below to illustrate the difference between operating the express service with an E-Bus vs. a diesel bus. The following represents basic assumptions made in the TCO analysis¹⁴:

	E-Bus	Diesel
Fuel Efficiency	2.3kWh/mile	5.0 MPG
Purchase Price	\$600,000	\$425,000
Fuel Price	\$0.18/kWh	\$2.10/gal
Bus Maintenance Costs	\$0.60/mile	\$0.80/mile
Daily Operating Range		350 miles
Annual Bus Mileage		126,000 miles

Table 10: Assumptions for TCO analysis between a coach E-Bus and a diesel bus

¹⁴ For the TCO model the price for the coach E-Bus has been adjusted downward \$150k per the new zero-emission bus voucher amounts (HVIP); the model uses a discount rate of 7%; an annual electricity cost increase of 3% and diesel cost increase of 7%; the assumed maintenance cost increase is 0%

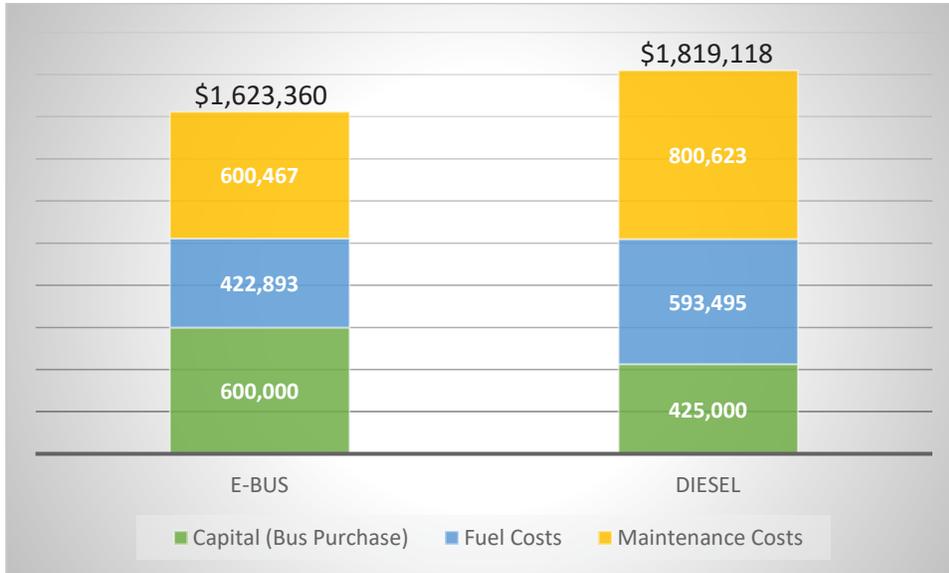


Figure 4: TCO 12-year service life comparison between an electric and a diesel bus

As can be seen from the TCO analysis, the 12-year cost of operating the E-Bus is lower than the cost of operating a diesel bus. The analysis employed here does not include any charging/fueling infrastructure; however, it must be noted that the new HVIP incentives for E-Buses also include a component for charging infrastructure of \$30,000 per bus that has been put in place to further incentivize transit agencies to operate E-Buses. When SRTA deploys five electric coach buses, a total of \$150,000 can be collected through the HVIP program for charging infrastructure.

ATTACHMENT D

Transit Stop Location Information Sheets

I-5 Backbone

North Valley Feeder

Charging Sites

I-5 Backbone

- Redding - Downtown Transit Center
- Red Bluff - Hampton Inn and Suites
- Williams - Woodland Community College, Colusa County Campus
- Sacramento International Airport
- Sacramento Downtown - 7/8th & Capitol Mall
- Sacramento Valley Station

Redding - Downtown Transit Center

Summary:

Also known as the *RABA Passenger Terminal*, the Redding Downtown Transit Center will serve as the northern terminus of the I-5 Backbone Line and a primary bus stop offering transit connections, customer amenities, and complete bus maintenance services. The Transit Center is the regional bus stop for Far Northern California with transit service connections available to Modoc, Lassen, Plumas, Trinity, and Humboldt Counties. The Transit Center is located across the tracks from the Amtrak Station, however, there is no connection between the trains and the buses since the Coast Starlight trains are scheduled to stop during the overnight hours. Amtrak Thruway buses serves the Transit Center.

Location: 1620 Yuba Street, Redding, CA 96001

Existing Land Use: Public Facility: Transportation Passenger Terminal

Site Features:

- Twelve customer gates
- Customer service windows
- Canopied waiting areas with benches
- Passenger restrooms
- Passenger parking
- Vending machines and close walking distance to numerous restaurants
- Bike racks
- In central Downtown Redding

Transit Connections:

Redding Area Bus Authority (RABA), with service to:

- Anderson Commuter Anderson – Redding
- Burney Express Burney – Redding
- Crosstown Express Downtown -Mt. Shasta Mall
- School Express Downtown -Shasta College
- RABA 2 Downtown
- RABA 5 Downtown - Goodwater Ave via Hartnell
- RABA 7 Downtown - North Point Plaza - Shasta College
- RABA 11 Downtown - Mt. Shasta Mall via Cypress, Hilltop
- RABA 14 Downtown - Mt. Shasta Mall via North Point Plaza
- Trinity Transit Redding Line Weaverville - Redding
- Sage Stage Alturas - Redding Route Tue: Alturas - Redding
- Greyhound Bus Service
- Amtrak Thruway 3 Redding - Chico - Davis - Sacramento - Stockton
- SIRPTP Redding Route Susanville - Chester - Red Bluff - Redding

Road Accessibility to:

- Oregon Street/Tehama Street/State Route CA 44: (3-4 signals)
- Exit 678/ CA-44/ Shasta Street/ Oregon ST: 3 miles (2-3 signals)

Charging Station:

Currently, the Transit Center does not have a charging station. However, the North State Intercity Bus system will include an overhead fast-charger at the Transit Center, as well as an overhead fast-charger and plug-in depot charger 2.4 miles away at the Shasta County Maintenance Yard. The Maintenance Yard will also offer bus storage and maintenance facilities.

Utility Provider:

The City of Redding Department of Public Works provides storm drain, wastewater, water utilities and solid waste services including garbage, green waste and recycling services.

Existing Electricity Provider: REU - Redding Electric Utility

Infrastructure needs: City of Redding



Red Bluff – Hampton Inn and Suites

Summary: The proposed bus stop at the Hampton Inn and Suites hotel in Red Bluff offers customers a range of amenities and convenient access to Interstate 5 from its location on Adobe Road. The hotel offers safe parking, restrooms, and transit connections to Tehama Rural Area Express (TRAX). Comfortable waiting accommodations are available in the lobby, and the hotel is within short walking distances to coffee shops and restaurants. This bus stop will not require a charging station.

Location: 520 Adobe Road, Red Bluff, CA 96080

Existing Land Use: Hotel (Freeway Oriented Commercial)

Site Features:

- Partnership opportunity with Hampton Inn & Suites, which offers secure site with ample parking, restrooms and an AC lobby.
- Close walking distance to restaurants and coffee shops
- Potential to offer park n' ride packages
- Minimal to no infrastructure improvements cost

Transit Connections:

- Tehama Rural Area Express (TRAX)

Road Accessibility to:

- Highway 36/Fortuna On/Off Ramps: 0.7 miles (no signals)
- Adobe Rd On/Off Ramps: 0.8 miles (2 to 3 signals)

Charging Station:

A charging station is not required at this bus stop.

Utility Provider:

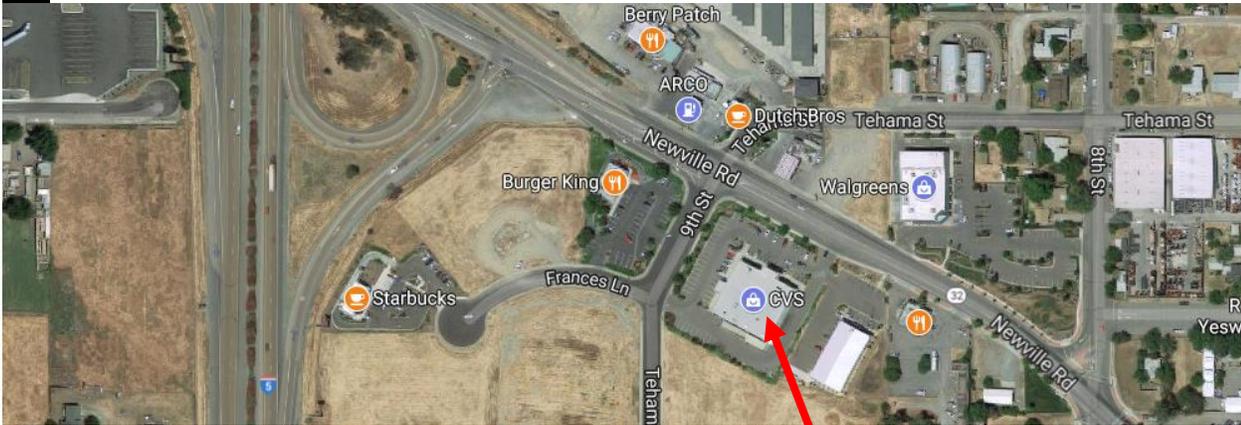
The City of Red Bluff Department of Public Works provides storm drain, wastewater, and water supply services. Solid waste and recycling services are contracted with Waste Management.

Existing Electricity Provider: PG & E

Infrastructure needs: City of Red Bluff Department of Public Works



Orland:



Location:

- 869 Newville Rd

Land use:

- Commercial

Property Characteristics:

- Partnership opportunity with CVS Pharmacy which offers secure site with ample parking, restrooms and an AC lobby.
- Potential to offer park n' ride packages.



Transit Connections:

- Glenn Ride

Accessibility:

- Exit 619 for CA- 32 / Turn right onto CA – 32/ Newville Rd (1 stop sign)
- Exit 619 for CA – 32/ Turn left onto Newville Rd (2 stop signs)

Charging Station: No

Utility Provider: N/A

Existing Electricity Provider: N/A

Infrastructure needs:

- Transit Shelter

Williams – Woodland Community College, Colusa County Campus

Summary: A bus stop in Williams will strategically serve the Backbone Line by providing a connection to the Lake and North Valley Feeder Lines, and a required opportunity charging station. The optimum location currently being explored is at the Colusa County Campus of Woodland Community College. This site offers customer amenities that include safe parking, solar power, and restroom facilities, as well as convenient access to Interstate 5 and State Route 20. Dining opportunities are not within close walking distance.

Location: 99 Ella Street, Williams, CA 96080

Existing Land Use: Institutional - education

Site Features:

- Improved bus pullout along Ella Street
- Improved parking lot with canopy-mounted solar panels

Transit Connections:

- Colusa County Transit (bus stops on Ella Street pull-out)

Road Accessibility to:

- Interstate 5 and State Route 20
- Direct frontage access to Ella and Marguerite Street

Charging Station:

An overhead fast-charger may be installed at this stop.

Utility Provider: City of Williams

Existing Electricity Provider: PG&E

Infrastructure needs: City of Williams Department of Public Works



Sacramento International Airport

Summary: A bus stop at the Sacramento International Airport will strategically serve the Backbone Line by providing transit access to a key transportation hub for travelers from throughout Northern California. Additionally, the bus stop will serve visitors to Sacramento by providing transit access to destinations in the north state for multiple purposes including tourism and commerce. Other than arriving via air travel, I-5 provides direct automobile access to the airport. Amenities include ample parking, restrooms, and dining services within the secure environment of two airport terminals. The bus stop at the Sacramento International Airport is one of four stops in the Sacramento area that serve the North State Intercity Bus System. Access to the Sacramento International Airport is available to all travelers on the North State Intercity Bus System via its location on the Backbone Line. An opportunity charger station is not proposed at this stop.

Location: 6900 Airport Blvd, Sacramento, CA 95837

Existing Land Use: Transportation Facility

Site Features:

- Direct access and interchange with Interstate 5
- Two airport terminals with wide range of amenities
- Ample parking and drop-off zones for transit buses at terminals
- Connections to air travel.
- Category 5 - Nonprofit - Publicly Owned Transit
- Exempt from the "Per Trip Fee"
- Insurance Requirements for vehicles with a seating capacity of 16 passengers or more: \$5,000,000
- Registration of all vehicles and drivers with Airport

Transit Connections:

- Backbone Line
- Yolobus
- Off-Airport Taxis and Shuttles

Road Accessibility to:

- Interstate 5, separate interchange with Airport Blvd.

Charging Station:

A charging station is not required at this bus stop.

Utility Provider:

Sacramento County Airport System.

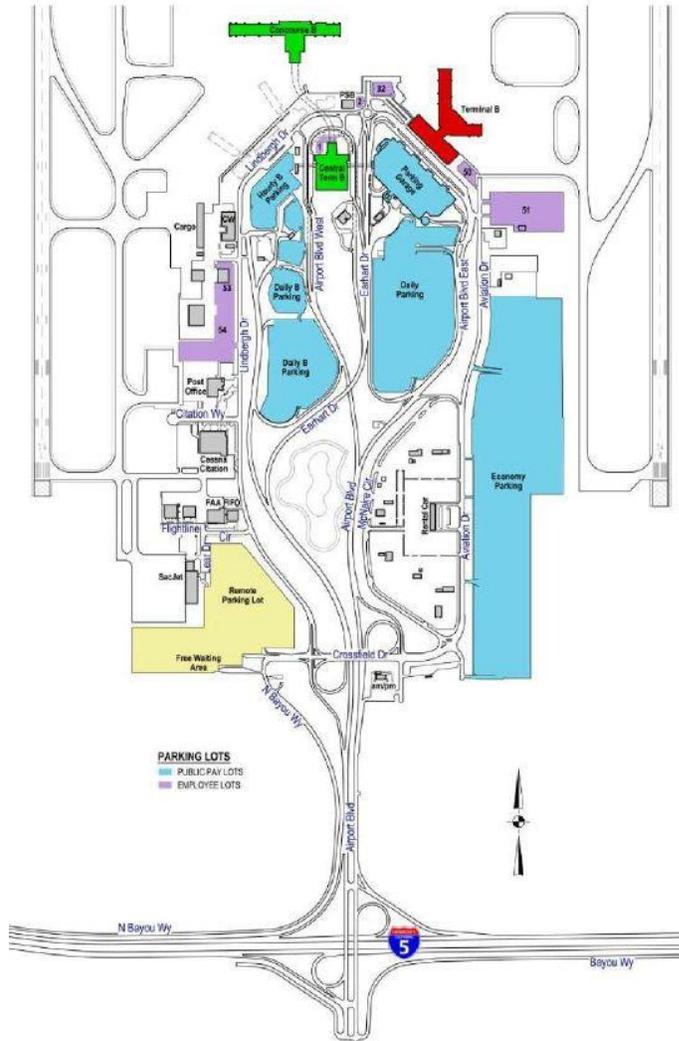
Airport maintenance functions under the direction of the Sacramento County Airport System are divided into three groups: Airfield Maintenance, responsible for the upkeep of the airfield and landside grounds; Equipment Maintenance, responsible for maintaining the Airport's fleet of vehicles including shuttle buses; and General Services, responsible for such functions as electrical, plumbing, painting, and sanitary engineers.

Existing Electricity Provider: Power is supplied to the traction power substations by the local utility,

Sacramento Municipal Utilities District (SMUD) at either 12 kV or 21 kV, 60 Hz.

Infrastructure needs: The Sacramento County Airport System Planning and Design division is responsible for planning, design and construction activities, and is comprised of 3 sections:

- Planning and Environment
- Design and Development
- Construction Management



AIRPORT ROADS AND PARKING LOTS



SACRAMENTO INTERNATIONAL AIRPORT

Sacramento Downtown - 7/8th & Capitol Mall

Summary: Several bus stops are located along 7th St, 8th St, and Capitol Mall at this site. Through a partnership with Sacramento Regional Transit, the North State Intercity Bus Backbone Line will stop at one or more of these bus stops.

Location: 7th St at Capitol Mall and 8th St & Capitol Mall, Sacramento, CA 95814

Existing Land Use: Transportation facility located in the City of Sacramento TC-SPD (Transportation Corridor/Special Planning zoning district)

Site Features:

- Improved bus pullouts
- Covered benches

Transit Connections:

- Sacramento Regional Transit Light Rail
- Sacramento Regional Transit Buses

Road Accessibility to:

- Interstate 5, State Route 99, Interstate 80, US 50

Charging Station: A charging station is not required at this bus stop, but will be located at the nearby Sacramento Regional Transit service yard.

Utility Provider:

City of Sacramento

Existing Electricity Provider: PG&E

Infrastructure needs: City of Sacramento
Department of Public Works



Sacramento Valley Station

Summary: The historic Depot Building at Sacramento Valley Station will serve as the southern terminus of the Backbone Line. In addition to providing connections to Sacramento Regional Transit (RT) Light Rail and the Amtrak Thruway Motorcoach, the station building has undergone a full restoration, which includes +/-25,000 square feet of mixed-use leasable space for offices, restaurants, and retail. The project is in a prime location, close in proximity to the Golden 1 Center, DOCO, and the planned Sacramento Railyards development. The station connections with the Sacramento will have an opportunity charger. The potential partnership is with Sacramento Regional Transit, located at N St and 29th St.

Location: 401 I Street, Sacramento, CA 95814

Existing Land Use: Transportation facility located in the City of Sacramento TC-SPD (Transportation Corridor/Special Planning zoning district

Site Features:

- Improved Bus Parking
- Improved vehicle parking lot
- Air-conditioned lobby
- Restrooms

Transit Connections:

- Sacramento Regional Transit Light Rail
- Amtrak Thruway Motorcoach: Bakersfield, Merced, Oakland, Reno/Sparks, San Jose, Stockton, San Francisco and more
- Capital Corridor
- San Joaquins
- Coast Starlight
- California Zephyr
- Future California High Speed Rail lines

Road Accessibility to:

- Interstate 5, State Route 99, Interstate 80, US 50

Charging Station: A charging station is not required at this bus stop, but will be located at the nearby Sacramento Regional Transit service yard.

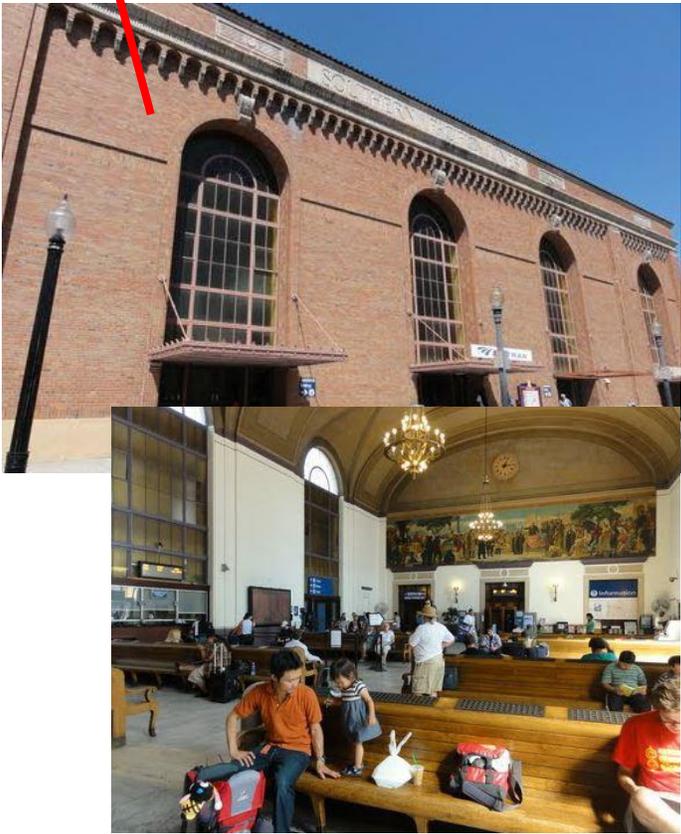
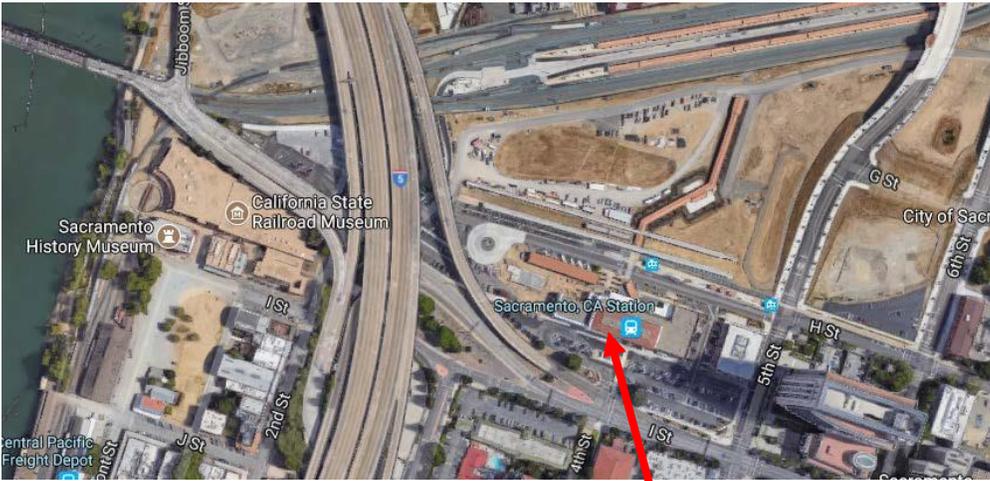
Utility Provider:

City of Sacramento

Existing Electricity Provider:

PG&E

Infrastructure needs: City of Sacramento Department of Public Works



North Valley Feeder Stops

■ Corning

■ Orland (See I-5 Backbone)

■ Chico

■ Willows

Corning:



Location:

1081 Solano St # A, Corning, CA 96021

Land use:

- Industrial

Property Characteristics:

- Partnership opportunity with Hometown Café, which offers secure site with ample parking, restrooms and an AC lobby.
- Potential to offer park n' ride packages.

Transit Connections:

- Tehama Rural Area eXpress

Accessibility:

- Exit 631 for Corning Rd / Turn left onto Corning Rd / Continue onto Solano St.
- Exit 631 for Corning Rd / Turn right into Corning Rd / Continue onto Solano St.

Charging Station: No

Utility Provider: N/A

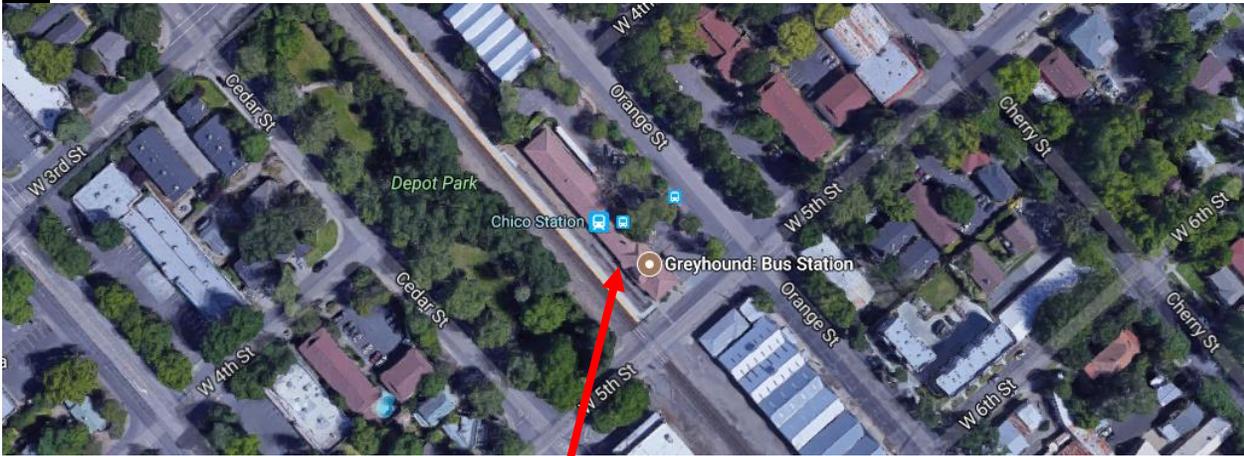
Existing Electricity Provider: N/A

Infrastructure needs:

- Transit Shelter



Chico:



Location:

- 450 Orange St, Chico, CA 95928

Land use:

- PFS Public Facilities & Services

Property Characteristics:

- Partnership opportunity with the Chico Station which offers secure site with ample parking, restrooms and an AC lobby.
- Potential to offer park n' ride packages.



Transit Connections:

- Greyhound
- B-Line

Accessibility: Access to State Route 32

Charging Station: No

Utility Provider: N/A

Existing Electricity Provider: N/A

Infrastructure needs:

- Little to no improvement

Willows:



Location:

- Walmart Supercenter: 470 Airport Avenue, Willows, CA 95988

Land use:

- Commercial / Industrial Combining

Property Characteristics:

- Partnership opportunity with Glenn Ride and Walmart, which offers secure site with ample parking, restrooms and an AC lobby.
- Already offers a park n' ride service.



Transit Connections:

- Glenn Ride

Accessibility:

- Exit 603 / Turn right onto CA-162 / Turn right onto Airport Avenue

Charging Station: No

Utility Provider: N/A

Existing Electricity Provider: N/A

Infrastructure needs:

- Transit Shelter

Charging Locations

■ Redding

■ Sacramento

■ Willows

Sacramento

Summary: Plug-In Depot chargers will be installed in Sacramento Regional Transit's maintenance yard. I-5 Backbone buses will charge at this location before returning to Redding.

Location: Underneath Capital City Freeway (I-80), bound by Capitol Ave, N St, 29th St, 30th St.

Land Use: Transit Maintenance Yard

Routes Served:

- I-5 Backbone

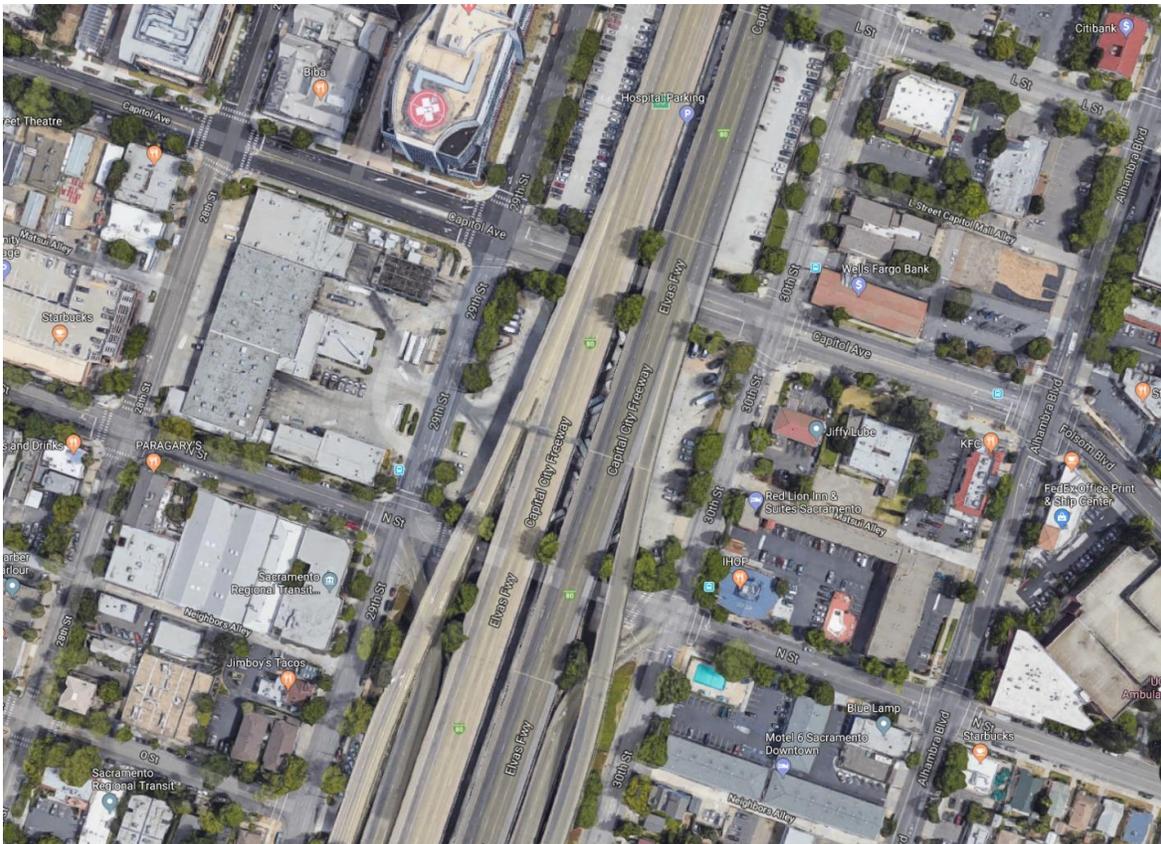
Accessibility: Interstate 5, State Route 99, Interstate 80, US 50

Solar Canopy: No

Utility Provider: City of Sacramento

Existing Electricity Provider: PG&E

Infrastructure needs: **Two** Plug-In Depot Chargers



Willows

Summary: Two Plug-In Depot chargers will be installed at the Glenn County Maintenance Yard in Willows. The charger will serve the North Valley Feeder line.

Location: Glenn County Yard: 777 N Colusa St, Willows, CA, 95988

Land Use: County Maintenance Yard

Routes Served:

- North Valley Feeder

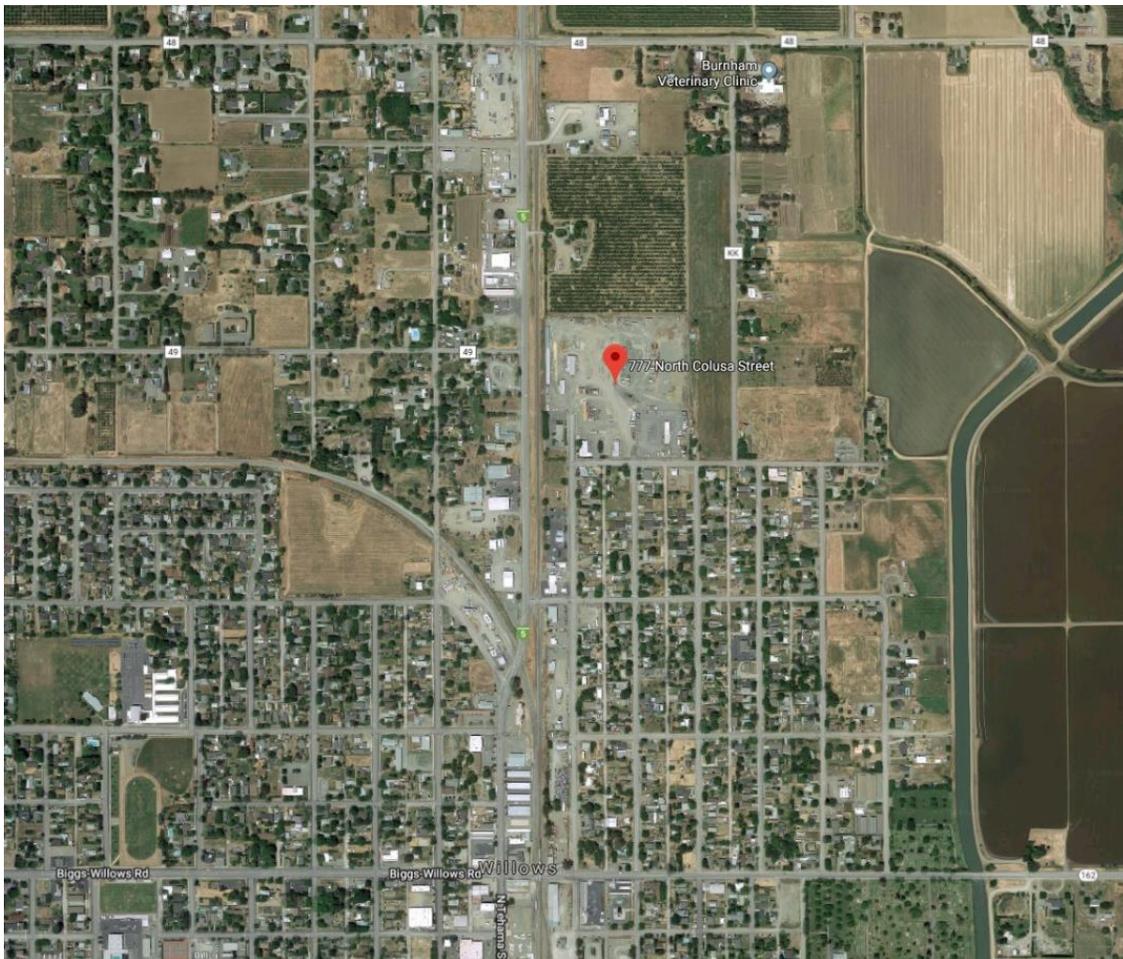
Accessibility: Interstate 5

Solar Canopy: No

Utility Provider: City of Willows

Existing Electricity Provider: PG&E

Infrastructure needs: Two Plug-In Depot Chargers



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ATTACHMENT E

Local Transit System Connections

The North State Express Project is coordinated with local transit agencies throughout Northern California to ensure efficient connections with existing transit systems. New North State Intercity Bus routes that are established will provide support connections within the North State Intercity Bus network and new routes to new destinations. The North State Intercity Bus system is anticipated to improve the following connecting transit systems by attracting new riders and related revenue.

[Trinity Transit](#)

Trinity Transit's Redding Line connects Weaverville to Redding, allowing passengers from Humboldt and Trinity counties to access the North State Intercity Bus. The Redding Line makes two round trips daily, Monday through Friday.

A rider travelling from Weaverville to Sacramento would be able to board either eastbound bus from Weaverville and reach the Redding Downtown Transit Center in time to board the North State Intercity Bus I-5 Backbone Line. Trip 1 of Trinity Transit's Redding Line reaches the Transit Center at 8:24 am, allowing time to board the North State Intercity I-5 Backbone Trip 2. The Redding Line's second trip arrives at 12:09 pm, which leaves over two hours before the North State Intercity Bus's 2:37 pm departure.

Riders travelling from Sacramento to Weaverville would take the North State Intercity Trip 2, arrive in Redding at 2:35 pm, depart on the Redding Line at 3:45 pm, and arrive in Weaverville at 4:42 pm.

[Humboldt Transit Authority](#)

Riders departing from Arcata board Humboldt Transit Authority's Willow Creek - Arcata Route at the Arcata Transit Center on a weekday. From Willow Creek, passengers ride Trinity Transit's Willow Creek Line to Weaverville, where they connect to Trinity Transit's Redding Line. It is possible to travel from Arcata to Sacramento in one day by leaving Arcata at 8:20 am or Willow Creek at 9:15 am, arriving in Redding at 12:09 pm, and boarding the North State Intercity Bus at 2:12 pm.

A trip from Sacramento to Arcata would have to be split up into two days, as the only through trip from Redding to Arcata leaves Redding at 10:30 am, before the first trip of the North State Intercity Bus arrives from Sacramento.

[Del Norte: Redwood Coast Transit Authority](#)

Passengers from Del Norte County would first ride the Smith River / Arcata Bus operated by Redwood Coast Transit Authority to Arcata, transfer to Humboldt Transit Authority's Willow Creek - Arcata Route, travel to Weaverville on Trinity Transit's Willow Creek Line, and then connect to Trinity Transit's Redding Line. It is not currently possible to complete the entire trip from Del Norte County to Redding in one day. A rider would have to spend a night in Arcata, Willow Creek, or Weaverville if they intend to connect to the North State Intercity Bus from Del Norte County.

Although travelling from Del Norte to Redding is not possible in one day, riders can reach all connections in one weekday on a trip from Redding to Del Norte County. However, under the current North State Intercity Bus schedule, riders would have to spend a night in Redding before boarding the following day's Trinity Transit trip 1.

Ridership between Del Norte County and Sacramento is projected to be very low, but the North State Intercity Bus will open this possibility.

Mendocino-Lake (Phase II)

The Lake Line of the North State Intercity Bus System would connect passengers with Lake and Mendocino Counties. Riders who wish to travel to Mendocino County from Sacramento will arrive at Clearlake Walmart, then take Lake Transit route 4 to Lakeport, where they can connect to Route 7. Route 7 travels between Lakeport in Lake County and Ukiah in Mendocino County.

Siskiyou STAGE (Phase II)

The Siskiyou Feeder will provide a transit connection to the Siskiyou Transit and General Express (STAGE). STAGE serves several communities throughout Siskiyou County including Yreka, Weed, Mt Shasta, Dunsmuir, McCloud, Happy Camp, and Montague.

Burney Express

The Burney Express connects Redding, Burney, and the rural communities between. The Burney Express is operated by Redding Area Bus Authority and runs three round trips each weekday. No weekend or holiday service is available. A fare from Redding to Burney is \$5.

Modoc County

Modoc County operates the Sage Stage, connecting Alturas and Redding once each Tuesday. A passenger travelling to Sacramento from Alturas would depart at 7:30 am, arrive at the Redding Downtown Transit Center at 10:30 am, and then board the third North State Intercity I-5 Backbone trip.

A trip from Sacramento to Alturas would require boarding the first North State Intercity I-5 Backbone bus from Sacramento on a Tuesday, arriving in Redding at 11:05 am. The Sage Stage departs Redding at 12:45 pm.

Lassen County

Susanville Indian Rancheria offers transportation services for the general public six days per week Monday through Saturday (excluding Holidays) to Red Bluff. One round trip connecting Susanville and Chester to Red Bluff is completed each day of operation.

The bus stops at the Red Bluff Transit Center downtown, which requires a 1.4 mile walk to the proposed North State Intercity I-5 Backbone project site, or a 0.8-mile bus ride followed by a 0.6-mile walk. A new or extended regional bus line could fill this gap, or Susanville Indian Rancheria could divert its route to drop North State Intercity I-5 Backbone passengers off as needed.

Plumas County

Plumas Transit offers a bus from Quincy and rural Plumas County to Chester, where passengers can connect to Susanville Indian Rancheria's bus to Red Bluff.

Butte County

Glenn Ride operates a bus between Chico and Orland with several daily trips. The North Valley Feeder Line will expand upon or replace some of these trips as part of its four daily circular trips, while the existing Glenn Ride buses fill gaps in service.

Colusa County

Colusa County provides bus service from the city of Colusa to Williams several times each day, allowing residents of Colusa County to easily connect with the North State Intercity I-5 Backbone or North Valley Feeder.

Sacramento Regional Transit

Sacramento Regional Transit (RT) serves 418 square-miles with a network of buses, light rail, and shuttle vans. The North State Intercity Bus I-5 Backbone will connect directly to RT's 7th/8th & Capitol stop, where riders can easily transfer to several bus and light rail lines.

ATTACHMENT F

Ticketing Analysis



MEMORANDUM

To: Jenn Pollom, SRTA

From: Nelson\Nygaard

Date: April 6, 2018

Subject: North State Express Business Plan – Fare Structure Analysis

This memo summarizes the approach for assessing potential fare structures for the North State Express bus service and offers preliminary ridership and revenue estimated projections for the service under each fare structure scenario.

Methodology

The fare analysis categorized the routes into two categories: backbone service from Redding to Sacramento along Interstate 5, and feeder services providing connections with the backbone service.

A fare model was developed to evaluate the ridership and revenue impacts of several fare scenarios. Like other goods and services, consumption of transit reacts to cost; when any of costs of travel – including travel time or level of discomfort or risk – increases, travel demand tends to decrease. As the monetary cost of transit travel, fare price is an important factor that directly affects transportation choices and thus transit demand. Research examining the sensitivity of transit ridership to fare changes has shown that, in general, for every 10% increase in fares, ridership will decrease by 3% (and vice-versa). Using this rule of thumb, several concepts were developed to evaluate the ridership and revenue impacts of various fare structures.

Assumptions

The fare analysis assumed that all routes of the NSE service would be implemented, and does not incorporate any phased or segmented implementation.

The model for this analysis is based on forecasted ridership by route (see Ridership Estimation Methodology Memo, January 2018). The model assumes a base fare of \$15 for backbone services and \$5 for feeder services, without a transfer discount. Passengers using both feeder and backbone services to complete their trip would pay both fares for a total of \$20. This base fare was chosen in relation to the next best alternative for travel; Amtrak tickets are generally \$27 when purchased in advance. Qualitative factors that influence ridership and revenue levels, such as simplicity for the customer, are not accounted for in this fare model. It is therefore likely that ridership benefits in each scenario are understated.

Because the services are not yet implemented, assumptions about potential user groups, such as the percentage of seniors, were made using a combination of U.S. Census data, potential rider survey data, and national averages.

Scenarios

Seven concepts were developed to evaluate the ridership and revenue impacts of various fare offerings for new North State Express services. Unless otherwise mentioned, all scenarios assume a flat fare of \$15 for backbone services and \$5 for feeder services.

1. Flat Fares with Transfer Discounts

Under this scenario, North State Express feeder and backbone services would charge a flat fare regardless of distance traveled along with a transfer discount to encourage passengers to travel between routes. Backbone services would be charged a higher fare of \$15 while feeder services would be \$5. Two options for transfer discounts were considered:

1A. Flat fares with transfer discount offers a \$3 discount to passengers transferring between feeder and backbone services. This is designed to incentivize through-travel between services.

1B. Flat fares with free transfer allows riders to transfer for free between feeder and backbone services. This option further incentivizes through-travel between services.

Offering a discounted or free transfer poses several potential operational challenges to the agency and makes onboard fare payment more difficult. Operational concepts for providing a free or reduced transfer include: A) provide standard paper transfer slips to customers upon boarding; (B) offer ticket vending machines and/or mobile ticketing app that allows riders to enter their origin and destination to pay the correct fare prior to boarding; (C) only offer transfer discounts to people with pre-purchased fare, not cash.

2. Flat Fares with Reduced Feeder Fare

Under this scenario, feeder service fares are reduced from \$5 to \$2. Backbone fares remain at \$15. This scenario does not include a discount for transfers. The reduced feeder fare is likely to encourage short trips and, similar to a transfer discount, incentivize through-travel. The rate of \$2 is comparable to average local fares.

3. Zone-Based Fares

Under this scenario, backbone fares are based on travel within or between zones. Zone 1 is from Sacramento to Orland (roughly 60 miles), and Zone 2 is between Orland and Redding (roughly 100 miles). Under a zone-based fares system, passengers are charged a base rate for travel within one zone and a higher rate for travel across two zones. Feeder routes remain at a flat \$5 regardless of distance traveled. This scenario does not include a discount for transfers.

Two options for zone-based fare pricing were considered:

3A. Zone-based Fares Market Rate. This scenario charges riders based on an average price of \$0.17 per mile. This rate was used by Bustang to develop fares for their intercity bus services and is based on peer research conducted by that agency. Using the market rate, riders would pay \$17 for travel within one zone and \$27 for travel across two zones.

3B. Zone-based Fares Adjusted. Consistent with the goals of the agency to increase ridership, this scenario adjusts the pricing based on knowledge of rider demographics and transit need. Under this scenario, riders pay \$10 for travel within one zone or \$18 for travel across two zones.

In both cases, zone-based fares can pose a disincentive for riders living close to the zone border. However, feeder service between Orland and Redding may alleviate the cost burden on riders making shorter trips.

4. Flat Fare with Student Discount

This scenario offer 50% off fares to college students. Under this scenario, North State Express feeder and backbone services would charge a flat fare regardless of distance traveled. Backbone services would be charged \$15 while feeder services would be \$5. For students, these prices would be \$7.50 and \$2.50, respectively.

A survey of potential riders found that an average of 7% of respondents were students. This scenario therefore assumes that 7% of forecasted riders will be eligible for the student discount. New student riders attracted to the service are not included in the model. Providing a 50% discount is consistent with typical user-based rider discounts and the student fare provided by comparable services.

5. Honored Citizen Discount

This scenario looks at the revenue and ridership impacts of offering a discount to honored citizens. This group includes seniors, persons with disabilities, and veterans. Offering a discount is elective as FTA requirements do not apply to intercity bus services.¹

Two levels of discount for honored citizens were modeled:

5A. Honored citizen 25% discount. Based on the precedent set by Bustang intercity bus services, this scenario offers a 25% discount to honored citizens.

5B. Honored citizen 50% discount. Providing a 50% discount is consistent with typical user-based rider discounts.

Drivers would need to validate ADA eligibility, senior status, and veteran status onboard, which may require the agency to issue ID cards.

6. Special Airport Fare

A special airport fare of \$22 was modeled to show the revenue and ridership impacts of charging a slightly higher fare for trips starting or ending at the airport. The rate is based on comparable prices on Amtrak and for airport parking. Offering this as a flat fare creates an incentive for people traveling between the airport and feeder routes.

¹ "Public transportation means regular, continuing shared-ride surface transportation services that are open to the general public or open to a segment of the general public defined by age, disability, or low income; and does not include Amtrak, intercity bus service, charter bus service, school bus service, sightseeing service, courtesy shuttle service for patrons of one or more specific establishments, or intra-terminal or intrafacility shuttle services." FTA C 4702.1B, Chap. I-5, Section 5z. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Title_VI_FINAL.pdf

7. Offer 10-Trip Ticket Book

Providing fare passes is a strategy to speed up boardings and enhance customer experience. Based on the expected market being served, a 10-trip ticket book is the most logical pass offering. Day passes and monthly passes, two common transit pass products, were considered but determined not to be attractive to this market. To estimate the market for the 10-trip book, this scenario assumes a 4% usage rate among riders based on observed GRTA and GCT 10-trip pass usage on comparable express bus services in the Atlanta region.

Pricing for the 10-trip ticket book in this scenario is based on current assumed base fare of \$15 on backbone services and \$5 on feeder services. A 10% discount results in \$135 for backbone and \$45 for feeder services. A discount of 10-13% on 10-Trip ticket books is recommended based on best practices and observed discounts among other agencies including Bustang, GRTA, and Ventura. Final pricing should be rounded to a whole number.

Two scenarios for offering a 10-trip ticket book were considered:

7A. Offer 10-Trip Ticket Book with No Transfer Discount. Under this scenario, NSE would offer two 10-trip fare products: a feeder 10-trip book for \$45 and a backbone 10-trip book for \$135. There is no transfer discount in this scenario, so a passenger transferring would need to purchase both fares.

7B. Offer 10-Trip Ticket Book for Backbone Only. Under this scenario, NSE would offer one 10-trip fare product only: a backbone 10-trip book for \$135. A free transfer would be offered for 10-trip ticket book passengers riding on both backbone and feeder services.

Not modeled: Distance-based Fares

A distance-based fare scenario was not modeled due to complexity of estimating ridership by segment. In a distance-based fare structure, riders only pay for distance traveled, which may incentivize short trips. Bustang services in Colorado use a distance-based fare structure, priced at roughly \$0.17 per mile. Applying this market rate to the travel distances provided by NSE services results in fares ranging from \$2 (e.g., Weed to Mt. Shasta) to \$25 (Redding to Sacramento Valley Station). With this structure, no transfer is offered. A distance-based fare structure also results in a complicated fare table that may be confusing for passengers.

Performance Assessment

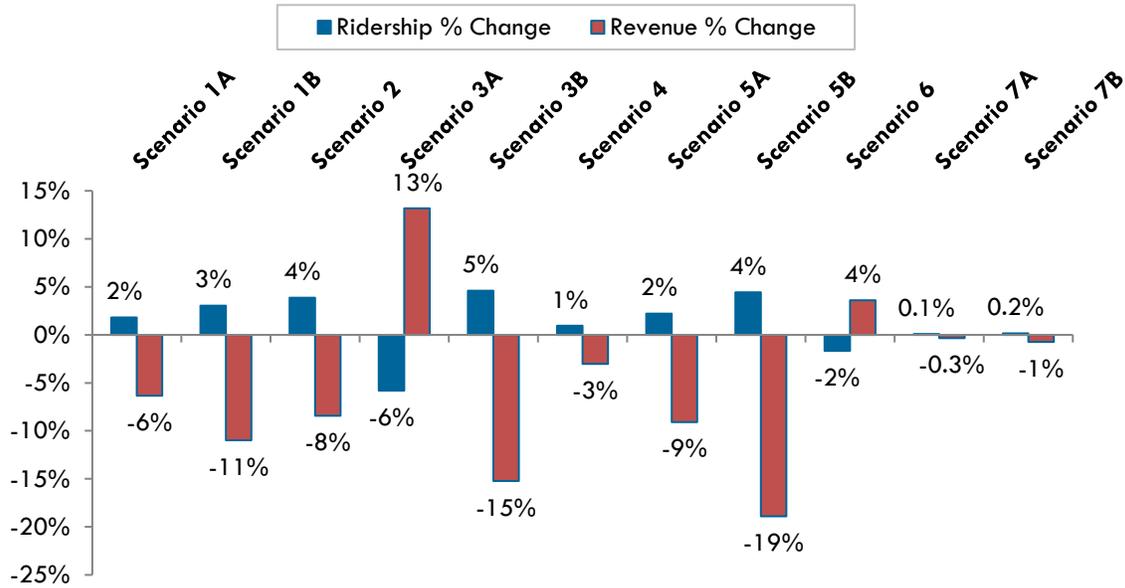
When assessing fare scenarios, the service provider needs to strike a balance between ridership and revenue. The NSE service aims to provide critical rural transit connectivity to regional multimodal connections and encourage mode shift away from single-occupancy vehicles into zero-emission vehicles. With this goal in mind, the fare structure should be easy to use and understand and not unduly penalize transit-dependent users with unnecessarily high fares. Often services that are less financially productive provide the greatest community benefit.

Ridership and Revenue Impacts

A summary of estimated ridership and revenue impacts for each scenario is shown in Figure 1. Scenarios that result in an increase in ridership are those that offer a discount for transfers, feeder services, students, or honored citizens, as well as the zone-based fares scenario with prices adjusted. Scenarios that result in an increase in revenue often see a decrease in ridership. Under

this baseline assumption, the NSE would serve approximately 60,020 riders annually and receive approximately \$958,135 in fare revenue. All percentage changes are in relation to these numbers.

Figure 1 Fare Scenario Summary



Productivity Metrics

The following figures summarize the productivity metrics for each scenario.

Figure 2 Average Fare per Passenger

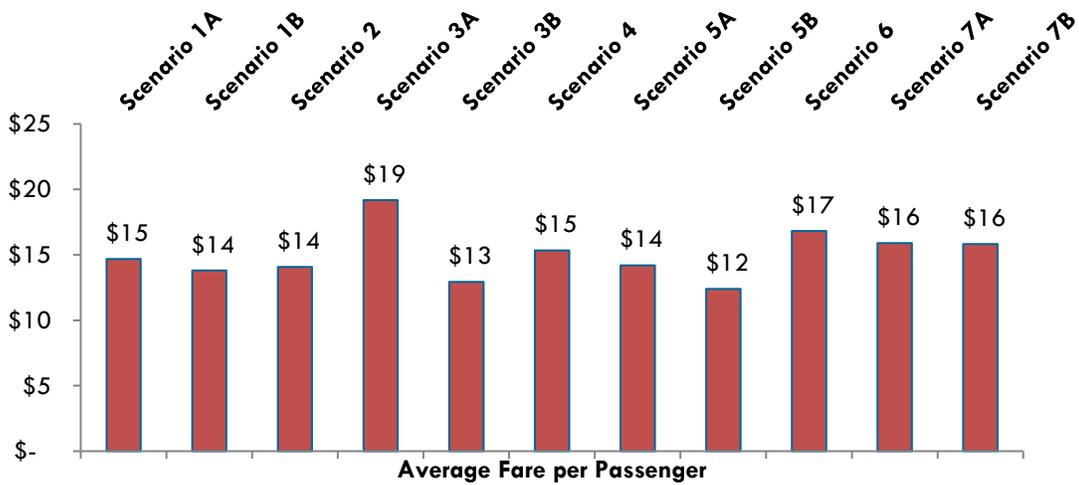
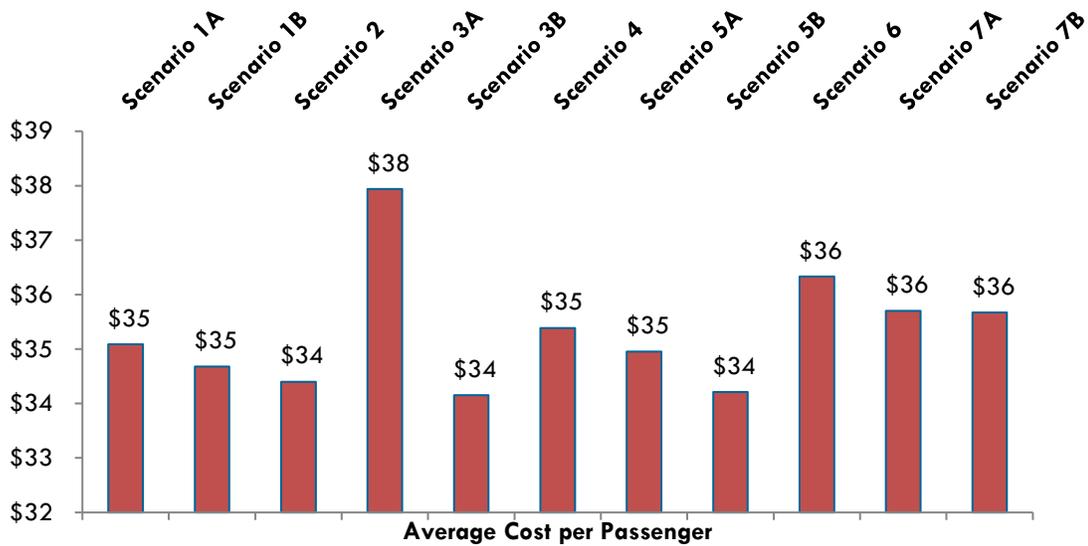


Figure 3 Average Cost per Passenger²



The average fares for scenarios generally fall at the higher end of the range of comparable intercity service productivity; Bustang (Colorado DOT) found that their average fare ranged between approximately \$8 and \$16.³ However, the average cost per rider is estimated to be far higher than average; Colorado DOT’s assessment of intercity service peers when developing their Bustang service found a range of approximately \$7 to \$20 per trip.⁴

Next Steps

Based on the assessment of these scenarios and SRTA priorities, we will develop up to two scenarios that integrate fare structure elements. Our initial preferred scenario would likely include the following:

- Flat fares for backbone and feeder services without a transfer discount
- Provide 50% discount for honored citizens: people with disabilities, seniors, and veterans
- Sell a 10-trip pass for backbone trips with a 10-13% discount

² This calculation uses the annual operating budget stated in the TIRCP Grant Application: \$2,144,496.

³ Bustang Quarterly Update, FY 2017 Q3. <https://www.codot.gov/about/committees/trac/Agendas-and-Minutes/2017/april-14-2017/q3-quarterly-report-bustang-april-2017>

⁴ Colorado Statewide Intercity and Regional Bus Network Study – Appendix B: Interregional Express Bus. <https://www.codot.gov/projects/intercityregionalbusnetworkstudy/intercity-and-regional-bus-network-plan>

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ATTACHMENT G

North State Intercity Bus Program Budget

Capital Budget Summary

Item	Total Costs	Revenue (HVIP) CCI	Difference in Cost vs Revenue	Total 2018 TIRCP Award
I-5 Backbone	\$ 7,034,202	\$ 625,000	\$ 6,409,202	\$ 6,409,202
North Valley Feeder	\$ 2,475,286	\$ 250,000	\$ 2,225,286	\$ 2,225,286
	\$ 9,509,488	\$ 875,000	\$ 8,634,488	\$ 8,634,488

Operating Budget Summary

Item	Total Costs	Revenue	Difference in Cost vs Revenue
I-5 Backbone Operating Costs (Year 1)	\$ 687,577	\$ 1,098,116	\$ 410,539
I-5 Backbone Operating Costs (Year 2+)	\$ 687,577	\$ 1,466,065	\$ 778,488
North Valley Feeder Operating Costs (Year 1)	\$ 488,296	\$ 510,999	\$ 22,703
North Valley Feeder Operating Costs (Year 2+)	\$ 488,296	\$ 498,999	\$ 10,703

Local TDA and LCTOP funds can guarantee operations if other revenues such as fares fall short. However, SRTA is showing several other funding sources in the table as "Preferred Operating Under Development" that are more appropriate for intercity bus services but not yet guaranteed. To the extent these funds under development become committed, local TDA funds and LCTOP funds will shift to complimentary transit needs and capital needs not in the TIRCP project scope

Revenue based on \$20 for Backbone and \$10 for feeders.

Funding	I-5 Backbone	Feeder Fare Integration #1 (North Valley)	System Wide Total	Notes
OPERATING REVENUE-COMMITTED (Year 1)				
TDA --> Loan Fund			\$ -	TDA loan fund will only be used if necessary and will need to be paid back in Year 2.
TDA --> Local			\$ -	TDA will only be used if shortfalls are recognized.
Fare Revenue (based on \$20 for Backbone and \$10 for other routes)	\$ 624,360	\$ 272,880	\$ 897,240	See Fare Analysis workbook. Lake set at \$20/trip.
LCTOP-Shasta			\$ -	will only be used if other funds cannot cover needs.
LCTOP-NV Feeder (provided from Glenn)		\$ 10,000	\$ 10,000	based on estimate discussion with GCTC.
LCTOP-Glenn		\$ 12,000	\$ 12,000	will only be used if other funds cannot cover needs.
Low Carbon Fuel Standard Electricity Program	\$ 36,256	\$ 16,119	\$ 52,375	From Low Carbon Fuel Standard Calcs. See LCFS workbook.
Total Operating Revenue - Committed (Year 1)	\$ 660,616	\$ 310,999	\$ 971,615	
PREFERRED OPERATING REVENUE-UNDER DEVELOPMENT - NOT YET COMMITTED (Year 1)				
Rail Provider Reimbursements	\$ 182,500		\$ 182,500	Commission from JPAs or Amtrak for train ticketed passengers. 10 trips/day @ \$50
Block Ticket Sales (govt., social services, and business)	\$ 85,000		\$ 85,000	Ticket sales to government, social service and business.
Advertising	\$ 170,000		\$ 170,000	Based on estimate from Blue Line Media projected revenue, \$1500/bus & shelter large ad, \$125 interior ad, \$150 bench ads. -15% fee.
5311 (f)		\$ 100,000	\$ 100,000	including coordination and consolidation of existing programs. State is re-examining policy for improved service.
CMAQ Contribution to North Valley Feeder Line		\$ 100,000	\$ 100,000	Tehama CMAQ contribution to NV Feeder
Total Operating Revenue - Uncommitted (Year 1)	\$ 437,500	\$ 200,000	\$ 637,500	
Projected Operating Revenue-Committed	\$ 660,616	\$ 310,999	\$ 971,615	
Annual Operating Cost	\$ 687,577	\$ 488,296	\$ 1,175,873	
OPERATING REVENUE-COMMITTED (Year 2)				
TDA --> Local			\$ -	TDA will only be used if shortfalls are recognized.
Fare Revenue (based on \$20 for Backbone and \$10 for other routes)	\$ 674,309	\$ 272,880	\$ 947,189	See Fare Analysis workbook.
State Intercity Rail Funding	\$ 200,000		\$ 200,000	SJIPA savings agreement or direct from State in-lieu of Amtrak Thruway Bus funding.
LCTOP-Shasta	\$ 100,000		\$ 100,000	will only be used if other funds cannot cover needs.
LCTOP-Modoc	\$ 8,000		\$ 8,000	based on estimate discussion with MCTC.
LCTOP-Glenn		\$ 10,000	\$ 10,000	based on estimate discussion with GCTC.
Low Carbon Fuel Standard Electricity Program	\$ 36,256	\$ 16,119	\$ 52,375	From Low Carbon Fuel Standard Calcs. See LCFS workbook.
Total Operating Revenue - Committed (Year 2)	\$ 1,018,565	\$ 298,999	\$ 1,317,563	
PREFERRED OPERATING REVENUE-UNDER DEVELOPMENT - NOT YET COMMITTED (Year 2)				
Block Ticket Sales (govt., social services, and business)	\$ 85,000		\$ 85,000	Ticket sales to government, social service and business.
Advertising	\$ 170,000		\$ 170,000	Based on estimate from Blue Line Media projected revenue, \$1500/bus & shelter large ad, \$125 interior ad, \$150 bench ads. -15% fee.
5311 (f)		\$ 100,000	\$ 100,000	including coordination and consolidation of existing programs. State is re-examining policy for improved service.
LCTOP-Other NCSR	\$ 10,000		\$ 10,000	Based on preliminary discussions with NCSR agencies.
CMAQ Contribution to North Valley Feeder Line		\$ 100,000	\$ 100,000	Tehama CMAQ contribution to NV Feeder
Rail Provider Reimbursements	\$ 182,500		\$ 182,500	"commission" from JPAs or Amtrak for train ticketed passengers. 10 trips/day @ \$50
Total Operating Revenue - Uncommitted (Year 2)	\$ 447,500	\$ 200,000	\$ 647,500	
Projected Operating Revenue-Committed	\$ 1,018,565	\$ 298,999	\$ 1,317,563	
Projected Operating Revenue-Not Yet Committed	\$ 447,500	\$ 200,000	\$ 647,500	
Projected Operating Revenue-Committed and Uncommitted	\$ 1,466,065	\$ 498,999	\$ 1,965,063	
Annual Operating Cost	\$ 687,577	\$ 488,296	\$ 1,175,873	

Table 8.1 CAPITAL COSTS

Budget Item	I-5 Backbone	North Valley Feeder	Total
Battery Electric Buses	\$ 3,750,000	\$ 1,200,000	\$ 4,950,000
Depot Charging	\$ 160,000	\$ 40,000	\$ 200,000
Opportunity Charging Station (en-route)	\$ 50,000	\$ 25,000	\$ 75,000
Transformer Install	\$ 325,000	\$ 200,000	\$ 525,000
Bringing Power to Site	\$ 20,000	\$ -	\$ 20,000
Solar Installation	\$ 978,000	\$ -	\$ 978,000
Vehicle Amenities (2.5)	\$ 550,000	\$ 220,000	\$ 770,000
Energy Costs		\$ 59,696	\$ 59,696
Bus Maintenance Warranty	\$ 290,832	\$ 87,360	\$ 378,192
Ticketing Equipment Costs	\$ 84,500	\$ 89,300	\$ 173,800
Land Lease	\$ 26,400	\$ -	\$ 26,400
Site Maintenance Cost	\$ 48,000	\$ -	\$ 48,000
Performance Monitoring (5)	\$ 50,000	\$ -	\$ 50,000
Launch Marketing	\$ 218,400	\$ 30,000	\$ 248,400
Signage/Wayfinding	\$ 50,000	\$ 25,000	\$ 75,000
Discounted Rider Passes	\$ 58,400	\$ 41,600	\$ 100,000
Passenger Parking	\$ -	\$ 2,500	\$ 2,500
Land Lease	\$ -	\$ 5,000	\$ 5,000
Transit Shelters	\$ -	\$ 10,000	\$ 10,000
Project Planning	\$ 31,050	\$ 36,450	\$ 67,500
Environmental Review	\$ 8,280	\$ 9,720	\$ 18,000
Consultant Selection	\$ 4,600	\$ 5,400	\$ 10,000
Partnership Agreements	\$ 44,160	\$ 51,840	\$ 96,000
Program Administration	\$ 286,580	\$ 336,420	\$ 623,000
Total Capital Costs	\$ 7,034,202	\$ 2,475,286	\$ 9,509,488

Table 8.3 ANNUAL OPERATING COSTS

Budget Item	I-5 Backbone	North Valley Feeder	Total
Operating Costs	\$ 675,077	\$ 416,100	\$ 1,091,177
Energy Cost (vehicle charging)	\$ -	\$ 59,696	\$ 59,696
Ticketing Admin (annual license fee)	\$ 2,500	\$ 2,500	\$ 5,000
Ongoing Marketing	\$ 10,000	\$ 10,000	\$ 20,000
	\$ 687,577	\$ 488,296	\$ 1,175,873

ATTACHMENT H

Phase II Service Schedule

North State Intercity Bus Schedule

All New Routes

Updated 4/6/2018

All times given are departures unless otherwise noted

Southbound Bus Stop Locations

To Sacramento		Trip 1	Trip 2	Trip 3	Trip 4
Siskiyou Feeder Line					
Yreka		-	6:45 AM	12:00 PM	3:40 PM
Weed		-	7:18 AM	12:33 PM	4:13 PM
Mt Shasta		-	7:37 AM	12:52 PM	4:32 PM
Dunsmuir		-	7:56 AM	1:11 PM	4:51 PM
Redding		-	8:50 AM	2:05 PM	5:45 PM
Shasta Urban Feeder Line					
Redding	Downtown Transit Center	5:22 AM	8:57 AM	2:12 PM	5:52 PM
Lake Feeder Line					
Red Bluff	Hampton Inn & Suites/Holiday Inn Ex	5:47 AM	9:22 AM	2:37 PM	6:17 PM
North Valley Feeder Line					
Williams	SR 20 or E Street Site	6:57 AM	10:32 AM	3:47 PM	7:27 PM
Sacramento					
	Sacramento International Airport	7:46 AM	11:21 AM	4:36 PM	8:16 PM
	7 th & Capitol Stop	8:08 AM	11:43 AM	4:58 PM	8:38 PM
	Sacramento Valley Station	8:20 AM	11:55 AM	5:10 PM	8:50 PM

Connection to Southbound Amtrak

Connection to Northbound Amtrak

San Joaquins	Southbound	-	12:41 PM	5:30 PM
	Northbound	7:41 AM	11:15 AM	-

Source: Approved SJPA Morning Express Schedule effective May 7, 2018

Capitol Corridor	Direction	4:30 AM	10:10 AM	4:45 PM	6:55 PM
		Southbound	5:30 AM	12:10 PM	5:55 PM
		6:20 AM	2:10 PM		10:30 PM
		7:05 AM	3:35 PM		
		7:33 AM			
		8:45 AM			
	Northbound	7:20 AM	9:49 AM	3:29 PM	7:29 PM
		8:25 AM	12:32 PM	4:50 PM	8:10 PM
			2:15 PM	5:17 PM	8:59 PM
				6:24 PM	10:29 PM
				6:50 PM	12:09 AM

Source: Capitol Corridor Schedules effective November 13, 2017

Northbound Bus Stop Locations

From Sacramento		Trip 1	Trip 2	Trip 3	Trip 4
Sacramento					
	Sacramento Valley Station	8:00 AM	11:30 AM	3:45 PM	7:45 PM
	7 th & Capitol Stop	8:12 AM	11:42 AM	3:57 PM	7:57 PM
	Sacramento International Airport	8:34 AM	12:04 PM	4:19 PM	8:19 PM
Williams					
	SR 20 or E Street Site	9:23 AM	12:53 PM	5:08 PM	9:08 PM
North Valley Feeder Line					
Lake Feeder Line					
Red Bluff	Hampton Inn & Suites/Holiday Inn Ex	10:33 AM	2:03 PM	6:18 PM	10:18 PM
Redding					
	Downtown Transit Center	11:05 AM	2:35 PM	6:50 PM	10:50 PM
Shasta Urban Feeder Line					
Siskiyou Feeder Line					
Redding		11:05 AM	2:35 PM	6:50 PM	-
Dunsmuir		12:06 PM	3:36 PM	7:51 PM	-
Mt Shasta		12:25 PM	3:55 PM	8:10 PM	-
Weed		12:44 PM	4:14 PM	8:29 PM	-
Yreka		1:10 PM	4:40 PM	8:55 PM	-

	Trip 1	Trip 2	Trip 3	Trip 4
Downtown TC	7:01 AM	12:16 PM	3:56 PM	-
Masonic TC	7:16 AM	12:31 PM	4:11 PM	-
Shasta College	7:32 AM	12:47 PM	4:27 PM	-
Redding Airport	7:54 AM	1:09 PM	4:49 PM	-
Hilltop Dr Hotels	8:12 AM	1:27 PM	5:07 PM	-
Canby TC	8:23 AM	1:38 PM	5:18 PM	-
Turtle Bay	8:37 AM	1:52 PM	5:32 PM	-
Downtown TC	8:50 AM	2:05 PM	5:45 PM	-

Clearlake	5:56 AM	9:31 AM	2:46 PM	6:26 PM
Williams (arrives)	6:50 AM	10:25 AM	3:40 PM	7:20 PM

	Trip 1	Trip 2	Trip 3	Trip 4
Red Bluff	7:17 AM	12:40 PM	4:07 PM	8:30 PM
Corning	7:42 AM	1:05 PM	4:32 PM	8:55 PM
Orland	8:01 AM	1:24 PM	4:51 PM	9:14 PM
Chico	8:38 AM	-	5:28 PM	-
Orland	9:15 AM	-	6:05 PM	-
Willows	9:38 AM	-	6:28 PM	-
Williams	10:09 AM	-	6:59 PM	-
Willows (arrives at ya)	10:33 AM	1:47 PM	7:23 PM	9:37 PM

Southbound Nb Sb Nb

Assumptions	hours	minutes	miles charged/5
Loading/Unloading		7	minutes
Driver Lunch Break		30	
Backbone Charging	3.5		
Feeder Charging			6
Opportunity Charging		15	15
Deadhead time to and from opportunity charge		30	

See Travel Distance & Times sheet for travel time inputs.

Delays between Sacramento International Airport and downtown may add up to 15 minutes.

	Trip 1	Trip 2	Trip 3	Trip 4
Willows	6:10 AM	9:10 AM	3:00 PM	5:00 PM
Williams	-	9:41 AM	-	5:31 PM
Willows	-	10:05 AM	-	5:55 PM
Orland	6:33 AM	10:42 AM	3:23 PM	6:32 PM
Chico	-	11:19 AM	-	7:09 PM
Orland	-	11:56 AM	-	7:46 PM
Corning	6:52 AM	12:15 PM	3:42 PM	8:05 PM
Red Bluff (arrives)	7:10 AM	12:33 PM	4:00 PM	8:23 PM

Williams	9:23 AM	12:53 PM	5:08 PM	9:08 PM
Clearlake (arrives)	10:17 AM	1:47 PM	6:02 PM	10:02 PM

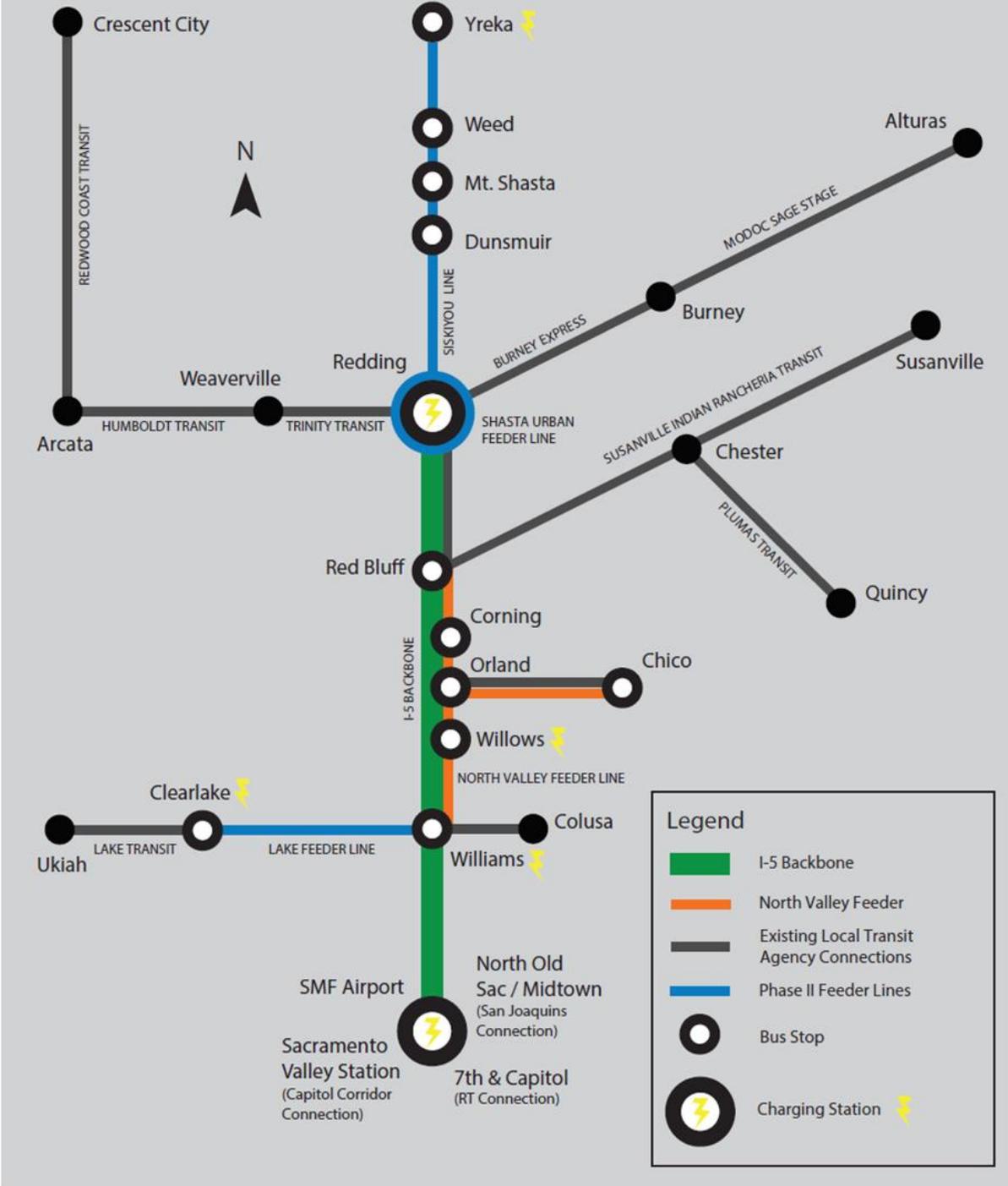
Downtown TC	11:12 AM	2:35 PM	6:50 PM	-
Turtle Bay	11:25 AM	2:48 PM	7:03 PM	-
Canby TC	11:39 AM	3:02 PM	7:17 PM	-
Hilltop Dr Hotels	11:50 AM	3:13 PM	7:28 PM	-
Redding Airport	12:08 PM	3:31 PM	7:46 PM	-
Shasta College	12:30 PM	3:53 PM	8:08 PM	-
Masonic TC	12:46 PM	4:09 PM	8:24 PM	-
Downtown TC (arrive)	12:54 PM	4:17 PM	8:32 PM	-

ATTACHMENT I

Phase II Locations

North State Intercity Bus

Phase II Schematic Transit Service Map



I-5 Backbone – Phase I

North Valley Feeder – Phase I

Siskiyou Feeder – Phase II

Lake Feeder – Phase II

Shasta Urban Feeder – Phase II

Charging Sites

I-5 Backbone

- Redding - Downtown Transit Center
- Red Bluff - Hampton Inn and Suites
- Williams - Woodland Community College, Colusa County Campus
- Sacramento International Airport
- Sacramento Downtown - 7/8th & Capitol Mall
- Sacramento Valley Station

Redding - Downtown Transit Center

Summary:

Also known as the *RABA Passenger Terminal*, the Redding Downtown Transit Center will serve as the northern terminus of the I-5 Backbone Line and a primary bus stop offering transit connections, customer amenities, and complete bus maintenance services. The Transit Center is the regional bus stop for Far Northern California with transit service connections available to Modoc, Lassen, Plumas, Trinity, and Humboldt Counties. The Transit Center is located across the tracks from the Amtrak Station, however, there is no connection between the trains and the buses since the Coast Starlight trains are scheduled to stop during the overnight hours. Amtrak Thruway buses serves the Transit Center.

Location: 1620 Yuba Street, Redding, CA 96001

Existing Land Use: Public Facility: Transportation Passenger Terminal

Site Features:

- Twelve customer gates
- Customer service windows
- Canopied waiting areas with benches
- Passenger restrooms
- Passenger parking
- Vending machines and close walking distance to numerous restaurants
- Bike racks
- In central Downtown Redding

Transit Connections:

Redding Area Bus Authority (RABA), with service to:

- Anderson Commuter Anderson – Redding
- Burney Express Burney – Redding
- Crosstown Express Downtown -Mt. Shasta Mall
- School Express Downtown -Shasta College
- RABA 2 Downtown
- RABA 5 Downtown - Goodwater Ave via Hartnell
- RABA 7 Downtown - North Point Plaza - Shasta College
- RABA 11 Downtown - Mt. Shasta Mall via Cypress, Hilltop
- RABA 14 Downtown - Mt. Shasta Mall via North Point Plaza
- Trinity Transit Redding Line Weaverville - Redding
- Sage Stage Alturas - Redding Route Tue: Alturas - Redding
- Greyhound Bus Service
- Amtrak Thruway 3 Redding - Chico - Davis - Sacramento - Stockton
- SIRPTP Redding Route Susanville - Chester - Red Bluff - Redding

Road Accessibility to:

- Oregon Street/Tehama Street/State Route CA 44: (3-4 signals)
- Exit 678/ CA-44/ Shasta Street/ Oregon ST: 3 miles (2-3 signals)

Charging Station:

Currently, the Transit Center does not have a charging station. However, the North State Intercity Bus system will include an overhead fast-charger at the Transit Center, as well as an overhead fast-charger and plug-in depot charger 2.4 miles away at the Shasta County Maintenance Yard. The Maintenance Yard will also offer bus storage and maintenance facilities.

Utility Provider:

The City of Redding Department of Public Works provides storm drain, wastewater, water utilities and solid waste services including garbage, green waste and recycling services.

Existing Electricity Provider: REU - Redding Electric Utility

Infrastructure needs: City of Redding



Red Bluff – Hampton Inn and Suites

Summary: The proposed bus stop at the Hampton Inn and Suites hotel in Red Bluff offers customers a range of amenities and convenient access to Interstate 5 from its location on Adobe Road. The hotel offers safe parking, restrooms, and transit connections to Tehama Rural Area Express (TRAX). Comfortable waiting accommodations are available in the lobby, and the hotel is within short walking distances to coffee shops and restaurants. This bus stop will not require a charging station.

Location: 520 Adobe Road, Red Bluff, CA 96080

Existing Land Use: Hotel (Freeway Oriented Commercial)

Site Features:

- Partnership opportunity with Hampton Inn & Suites, which offers secure site with ample parking, restrooms and an AC lobby.
- Close walking distance to restaurants and coffee shops
- Potential to offer park n' ride packages
- Minimal to no infrastructure improvements cost

Transit Connections:

- Tehama Rural Area Express (TRAX)

Road Accessibility to:

- Highway 36/Fortuna On/Off Ramps: 0.7 miles (no signals)
- Adobe Rd On/Off Ramps: 0.8 miles (2 to 3 signals)

Charging Station:

A charging station is not required at this bus stop.

Utility Provider:

The City of Red Bluff Department of Public Works provides storm drain, wastewater, and water supply services. Solid waste and recycling services are contracted with Waste Management.

Existing Electricity Provider: PG & E

Infrastructure needs: City of Red Bluff Department of Public Works



Williams – Woodland Community College, Colusa County Campus

Summary: A bus stop in Williams will strategically serve the Backbone Line by providing a connection to the Lake and North Valley Feeder Lines, and a required opportunity charging station. The optimum location currently being explored is at the Colusa County Campus of Woodland Community College. This site offers customer amenities that include safe parking, solar power, and restroom facilities, as well as convenient access to Interstate 5 and State Route 20. Dining opportunities are not within close walking distance.

Location: 99 Ella Street, Williams, CA 96080

Existing Land Use: Institutional - education

Site Features:

- Improved bus pullout along Ella Street
- Improved parking lot with canopy-mounted solar panels

Transit Connections:

- Colusa County Transit (bus stops on Ella Street pull-out)

Road Accessibility to:

- Interstate 5 and State Route 20
- Direct frontage access to Ella and Marguerite Street

Charging Station:

An overhead fast-charger may be installed at this stop.

Utility Provider: City of Williams

Existing Electricity Provider: PG&E

Infrastructure needs: City of Williams Department of Public Works



■ Sacramento International Airport

Summary: A bus stop at the Sacramento International Airport will strategically serve the Backbone Line by providing transit access to a key transportation hub for travelers from throughout Northern California. Additionally, the bus stop will serve visitors to Sacramento by providing transit access to destinations in the north state for multiple purposes including tourism and commerce. Other than arriving via air travel, I-5 provides direct automobile access to the airport. Amenities include ample parking, restrooms, and dining services within the secure environment of two airport terminals. The bus stop at the Sacramento International Airport is one of four stops in the Sacramento area that serve the North State Intercity Bus System. Access to the Sacramento International Airport is available to all travelers on the North State Intercity Bus System via its location on the Backbone Line. An opportunity charger station is not proposed at this stop.

Location: 6900 Airport Blvd, Sacramento, CA 95837

Existing Land Use: Transportation Facility

Site Features:

- Direct access and interchange with Interstate 5
- Two airport terminals with wide range of amenities
- Ample parking and drop-off zones for transit buses at terminals
- Connections to air travel.
- Category 5 - Nonprofit - Publicly Owned Transit
- Exempt from the "Per Trip Fee"
- Insurance Requirements for vehicles with a seating capacity of 16 passengers or more: \$5,000,000
- Registration of all vehicles and drivers with Airport

Transit Connections:

- Backbone Line
- Yolobus
- Off-Airport Taxis and Shuttles

Road Accessibility to:

- Interstate 5, separate interchange with Airport Blvd.

Charging Station:

A charging station is not required at this bus stop.

Utility Provider:

Sacramento County Airport System.

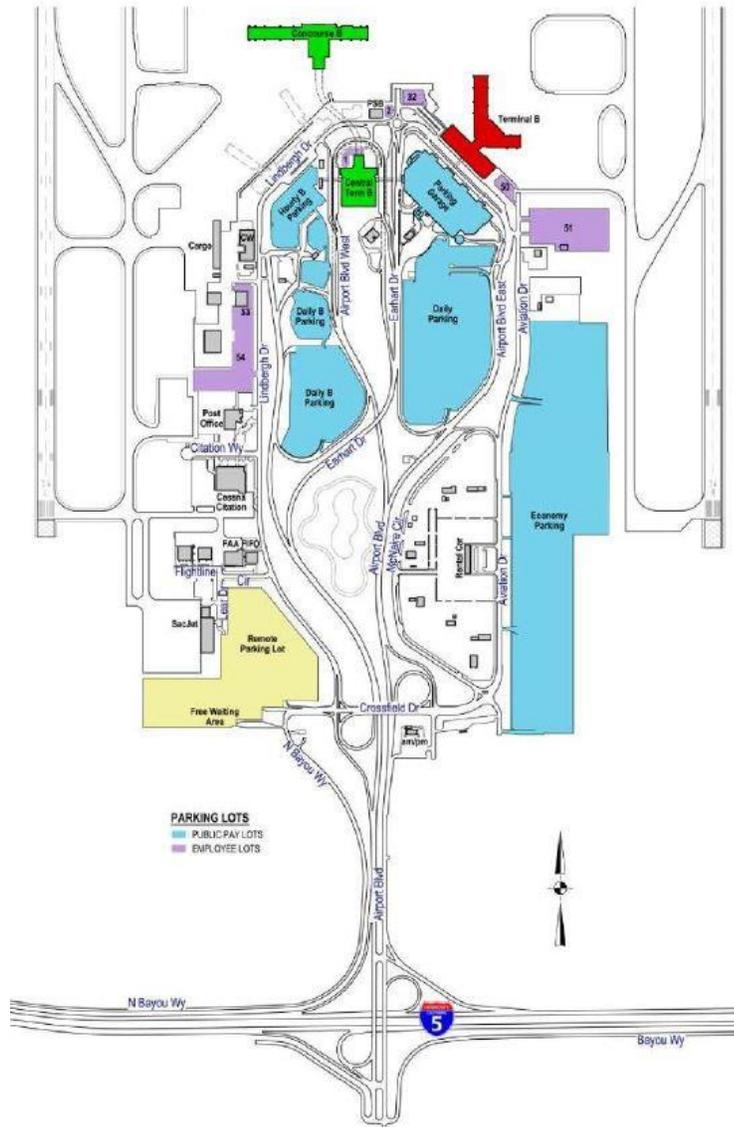
Airport maintenance functions under the direction of the Sacramento County Airport System are divided into three groups: Airfield Maintenance, responsible for the upkeep of the airfield and landside grounds; Equipment Maintenance, responsible for maintaining the Airport's fleet of vehicles including shuttle buses; and General Services, responsible for such functions as electrical, plumbing, painting, and sanitary engineers.

Existing Electricity Provider: Power is supplied to the traction power substations by the local utility,

Sacramento Municipal Utilities District (SMUD) at either 12 kV or 21 kV, 60 Hz.

Infrastructure needs: The Sacramento County Airport System Planning and Design division is responsible for planning, design and construction activities, and is comprised of 3 sections:

- Planning and Environment
- Design and Development
- Construction Management



AIRPORT ROADS AND PARKING LOTS



SACRAMENTO INTERNATIONAL AIRPORT

Sacramento Downtown - 7/8th & Capitol Mall

Summary: Several bus stops are located along 7th St, 8th St, and Capitol Mall at this site. Through a partnership with Sacramento Regional Transit, the North State Intercity Bus Backbone Line will stop at one or more of these bus stops.

Location: 7th St at Capitol Mall and 8th St & Capitol Mall, Sacramento, CA 95814

Existing Land Use: Transportation facility located in the City of Sacramento TC-SPD (Transportation Corridor/Special Planning zoning district

Site Features:

- Improved bus pullouts
- Covered benches

Transit Connections:

- Sacramento Regional Transit Light Rail
- Sacramento Regional Transit Buses

Road Accessibility to:

- Interstate 5, State Route 99, Interstate 80, US 50

Charging Station: A charging station is not required at this bus stop, but will be located at the nearby Sacramento Regional Transit service yard.

Utility Provider:

City of Sacramento

Existing Electricity Provider: PG&E

Infrastructure needs: City of Sacramento Department of Public Works



Sacramento Valley Station

Summary: The historic Depot Building at Sacramento Valley Station will serve as the southern terminus of the Backbone Line. In addition to providing connections to Sacramento Regional Transit (RT) Light Rail and the Amtrak Thruway Motorcoach, the station building has undergone a full restoration, which includes +/-25,000 square feet of mixed-use leasable space for offices, restaurants, and retail. The project is in a prime location, close in proximity to the Golden 1 Center, DOCO, and the planned Sacramento Railyards development. The station connections with the Sacramento will have an opportunity charger. The potential partnership is with Sacramento Regional Transit, located at N St and 29th St.

Location: 401 I Street, Sacramento, CA 95814

Existing Land Use: Transportation facility located in the City of Sacramento TC-SPD (Transportation Corridor/Special Planning zoning district

Site Features:

- Improved Bus Parking
- Improved vehicle parking lot
- Air-conditioned lobby
- Restrooms

Transit Connections:

- Sacramento Regional Transit Light Rail
- Amtrak Thruway Motorcoach: Bakersfield, Merced, Oakland, Reno/Sparks, San Jose, Stockton, San Francisco and more
- Capital Corridor
- San Joaquins
- Coast Starlight
- California Zephyr
- Future California High Speed Rail lines

Road Accessibility to:

- Interstate 5, State Route 99, Interstate 80, US 50

Charging Station: A charging station is not required at this bus stop, but will be located at the nearby Sacramento Regional Transit service yard.

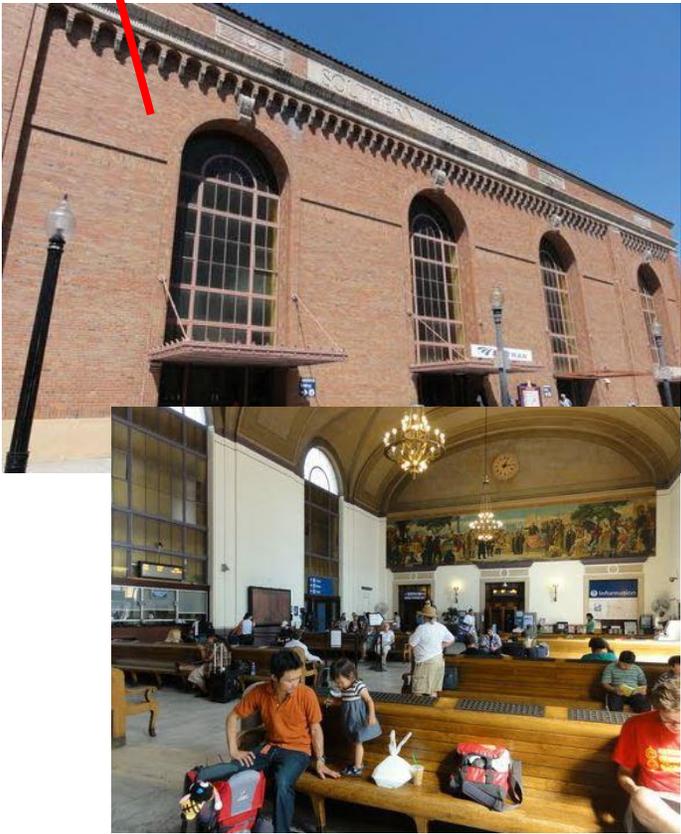
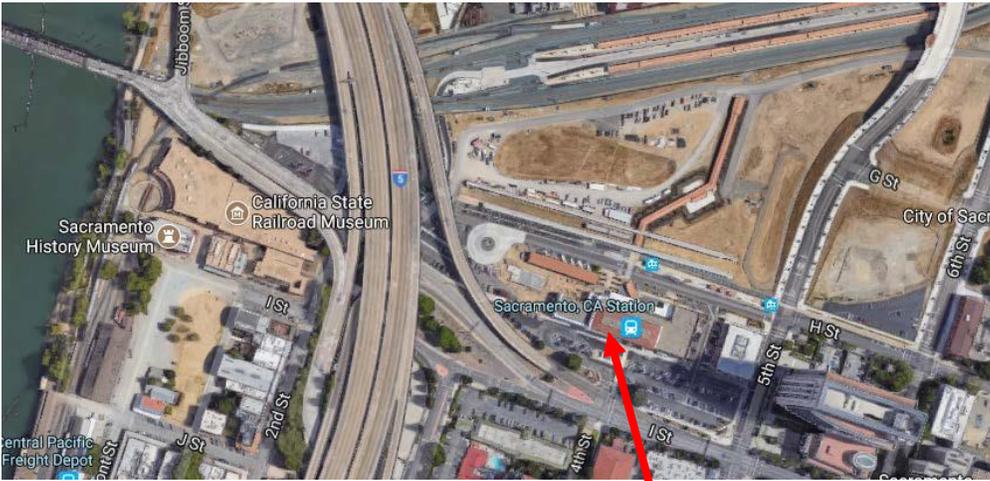
Utility Provider:

City of Sacramento

Existing Electricity Provider:

PG&E

Infrastructure needs: City of Sacramento Department of Public Works



North Valley Feeder Stops

■ Corning

■ Orland

■ Chico

■ Willows

Corning:



Location:
1081 Solano St # A, Corning, CA 96021

Land use:

- Industrial

Property Characteristics:

- Partnership opportunity with Hometown Café, which offers secure site with ample parking, restrooms and an AC lobby.
- Potential to offer park n' ride packages.

Transit Connections:

- Tehama Rural Area eXpress

Accessibility:

- Exit 631 for Corning Rd / Turn left onto Corning Rd / Continue onto Solano St.
- Exit 631 for Corning Rd / Turn right into Corning Rd / Continue onto Solano St.

Charging Station: No

Utility Provider: N/A

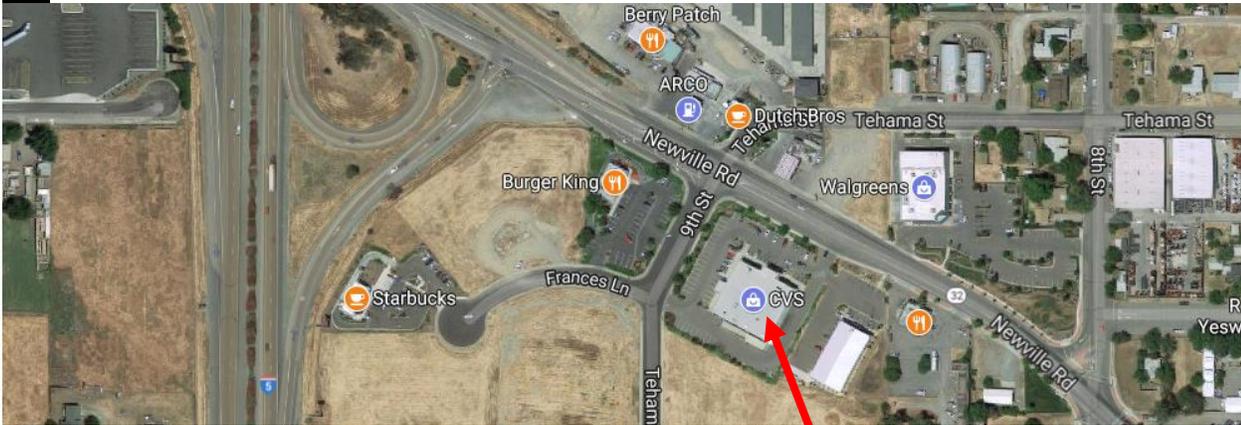
Existing Electricity Provider: N/A

Infrastructure needs:

- Transit Shelter



Orland:



Location:

- 869 Newville Rd

Land use:

- Commercial

Property Characteristics:

- Partnership opportunity with CVS Pharmacy which offers secure site with ample parking, restrooms and an AC lobby.
- Potential to offer park n' ride packages.



Transit Connections:

- Glenn Ride

Accessibility:

- Exit 619 for CA- 32 / Turn right onto CA – 32/ Newville Rd (1 stop sign)
- Exit 619 for CA – 32/ Turn left onto Newville Rd (2 stop signs)

Charging Station: No

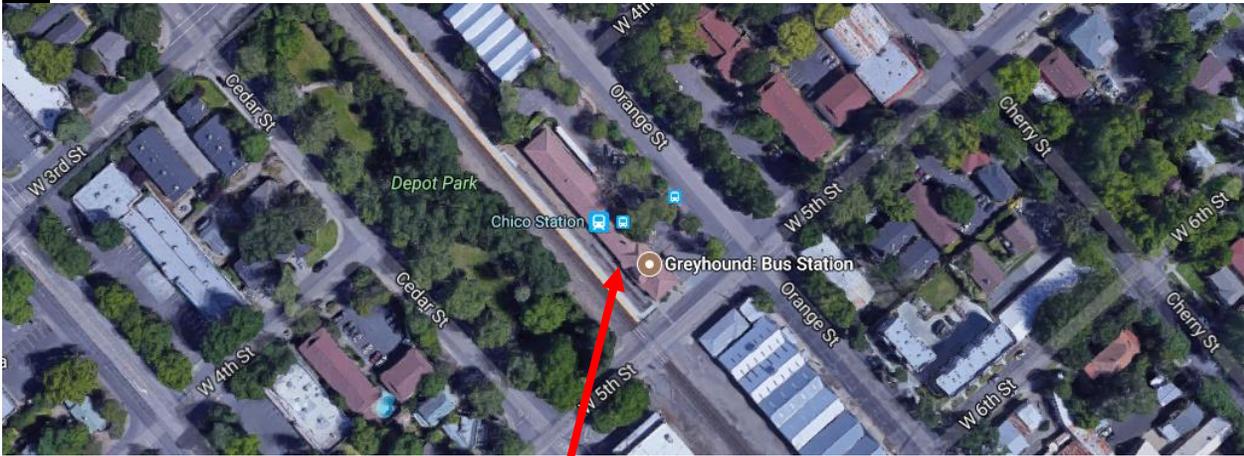
Utility Provider: N/A

Existing Electricity Provider: N/A

Infrastructure needs:

- Transit Shelter

Chico:



Location:

- 450 Orange St, Chico, CA 95928

Land use:

- PFS Public Facilities & Services

Property Characteristics:

- Partnership opportunity with the Chico Station which offers secure site with ample parking, restrooms and an AC lobby.
- Potential to offer park n' ride packages.



Transit Connections:

- Greyhound
- B-Line

Accessibility: Access to State Route 32

Charging Station: No

Utility Provider: N/A

Existing Electricity Provider: N/A

Infrastructure needs:

- Little to no improvement

Willows:



Location:

- Walmart Supercenter: 470 Airport Avenue, Willows, CA 95988

Land use:

- Commercial / Industrial Combining

Property Characteristics:

- Partnership opportunity with Glenn Ride and Walmart, which offers secure site with ample parking, restrooms and an AC lobby.
- Already offers a park n' ride service.



Transit Connections:

- Glenn Ride

Accessibility:

- Exit 603 / Turn right onto CA-162 / Turn right onto Airport Avenue

Charging Station: No

Utility Provider: N/A

Existing Electricity Provider: N/A

Infrastructure needs:

- Transit Shelter

Siskiyou Feeder

■ Yreka

■ Weed

■ Mt Shasta

■ Dunsmuir

Yreka:



Location:

- Siskiyou County Transit Center - 190 Greenhorn Road, Yreka, CA 96097

Land use:

- Commercial Highway

Property Characteristics:

- Partnership opportunity with Siskiyou Station which offers secure site with ample parking, restrooms and an AC lobby.
- Potential to offer park n' ride packages

Transit Connections:

- STAGE

Accessibility:

- I-5 S/ U.S 99/ Volcanic Legacy Scenic Byway

Charging Station: Nearby, at Siskiyou County Yard

Utility Provider: N/A

Existing Electricity Provider: Pacific Power & Light Co

Infrastructure needs:

- N/A



Weed:



Location:

- Ray's Market
175 N Weed Blvd, Weed, CA 96094

Land use:

- Residential Low

Property Characteristics:

- Partnership opportunity with Ray's Food Place, which offers secure site with ample parking, restrooms and an AC lobby.
- Potential to offer park n' ride packages.



Transit Connections:

- Sage Stage

Accessibility:

- Exit 748 toward N Weed Blvd/ turn right onto Chaparral Dr. / turn right onto U.S. 99/ N Weed Blvd. 2,261.99 ft – 2 four-way stops
- Exit 748 toward Weed/ Klamath Falls / turn left onto Chaparral Dr / turn right onto .S. 99 / N Weed Blvd. 2,823.7 ft – 3 four-way stops

Charging Station: No

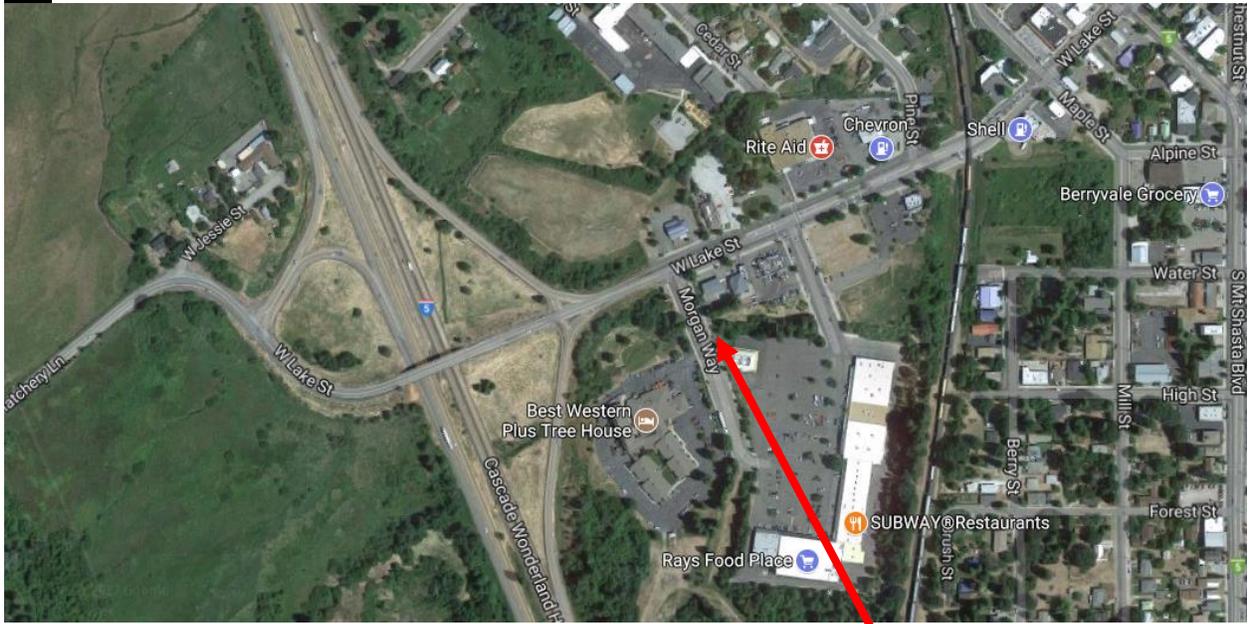
Utility Provider: City of Weed

Existing Electricity Provider: Pacific Power & Light Co

Infrastructure needs: N/A

- Transit Shelter

Mount Shasta:



Location:

- Mt Shasta Shopping Center (near Best Western) 134 Morgan Way, Mt Shasta, CA 96067



Land use:

- Downtown Commercial

Property Characteristics:

- Partnership opportunity with local businesses in the Shopping Center which offers secure site with ample parking, restrooms and an AC lobby.
- Potential to offer park n' ride packages.

Transit Connections:

- Sage Stage

Accessibility:

- Exit 738 toward Central Mt Shasta / Turn right onto W Lake St (signs for Central MT Shasta) / Turn right onto Morgan Way: 2017.32 ft 1 stop sign
- Exit 738 toward Central Mount Shasta/ Turn left onto W Lake St/ Turn right on Morgan Way (2,849.45 ft) 1 stop sign

Charging Station: No

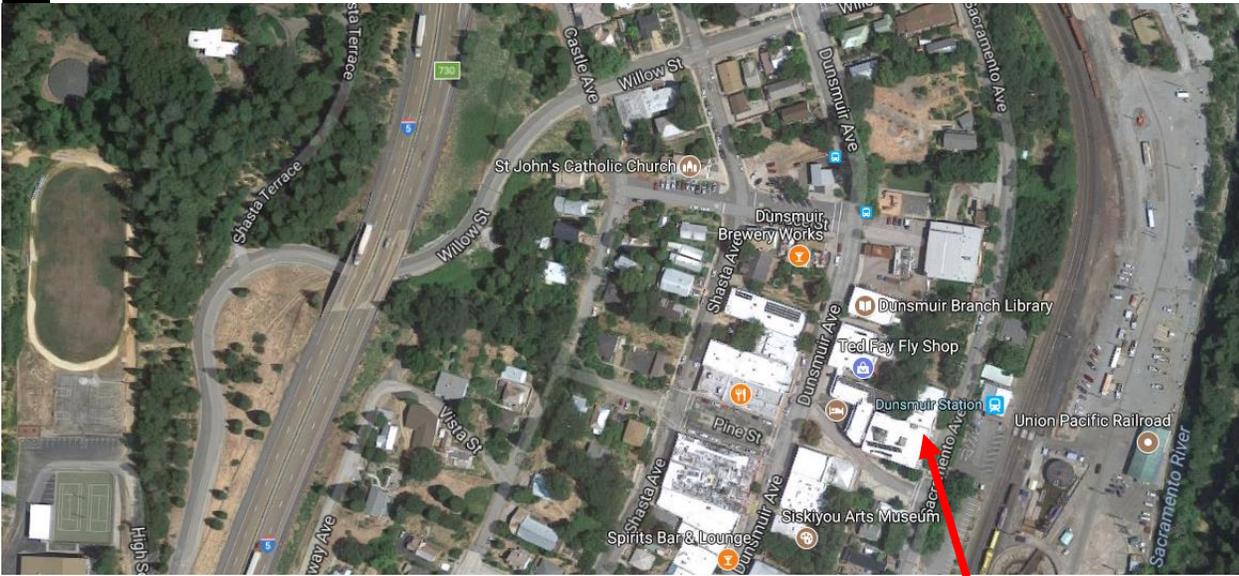
Utility Provider: City of Mount Shasta

Existing Electricity Provider: Pacific Power & Light Co

Infrastructure needs:

- Transit Shelter

Dunsmuir:



Location: Dunsmuir Station: 5750 Sacramento Ave, Dunsmuir, CA 96025

Land use: Train and Transit Station

Property Characteristics:

- Partnership opportunity with Dunsmuir Inn & Suites, which offers secure site with ample parking, restrooms and an AC lobby.
- Potential to offer park n' ride packages.

Transit Connections:

- STAGE
- Amtrak Coast Starlight

Accessibility:

- Exit 730 / Turn right Dunsmuir Ave 2453.45ft 1 stop sign
- Exit 730 / Turn left onto Dunsmuir Ave 3722.91ft 1 stop sign

Charging Station: No

Utility Provider: City of Dunsmuir

Existing Electricity Provider: Pacific Power & Light Co

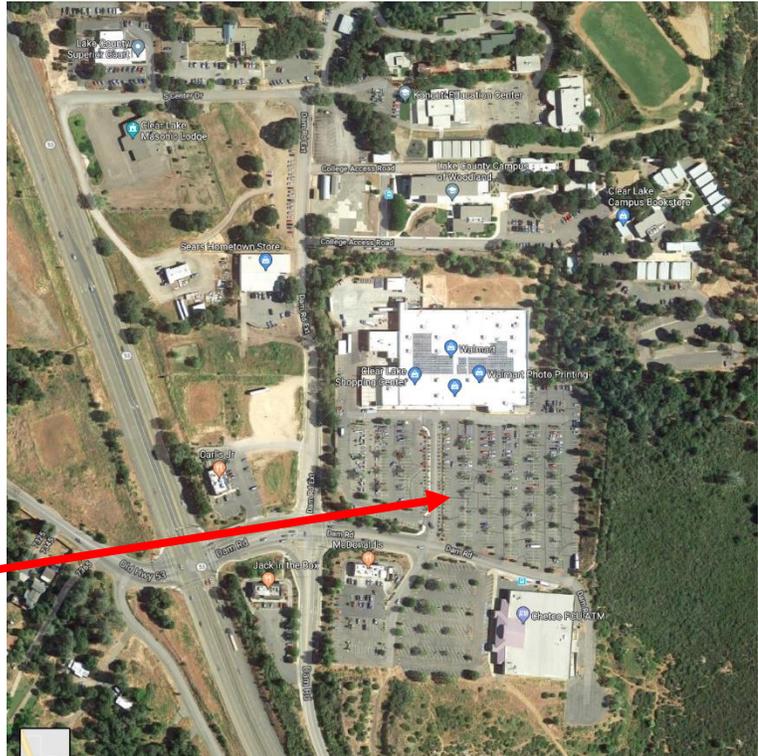
Infrastructure needs:

- Little to no improvement



Lake Feeder

Clearlake



Location: Walmart: 15960 Dam Rd, Clearlake, CA 95422

Land Use: Commercial

Property Characteristics:

- Partnership opportunity with Walmart, which offers secure site with ample parking, restrooms and an AC lobby.
- Potential to offer park n' ride packages.

Transit Connections:

- Lake Transit Routes 1, 3, 4, 10, 11, 12

Accessibility: State Route 53

Charging Station: No; A charging station will be located at Lake Transit 1.4 miles South.

Utility Provider: City of Clearlake

Existing Electricity Provider: PG&E

Infrastructure needs:

- Designated bus pullout

Shasta Urban Feeder

The following stops are all currently served by Redding Area Bus Authority (RABA), and therefore have existing facilities and use agreements. No additional charging infrastructure will be necessary, as the Shasta Urban Feeder will charge at the Downtown Transit Center and the RABA Service Yard.

■ Downtown Transit Center

■ Masonic Transfer Center

■ Shasta College

■ Canby Transfer Center

■ Hilltop Drive Hotels

■ Turtle Bay

■ Redding Municipal Airport

Charging Locations

■ Redding

■ Williams

■ Sacramento

■ Willows

■ Siskiyou

■ Clearlake

Williams

Summary: An Overhead Fast-Charger will be installed at the bus stop location in Williams to provide buses on the Backbone, North Valley Feeder, and Lake Feeder routes with an opportunity charge as needed.

Location: Colusa County Campus of Woodland Community College: 99 Ella Street, Williams, CA 96080.

Land Use: Community College

Routes Served:

- I-5 Backbone
- North Valley Feeder
- Lake Feeder

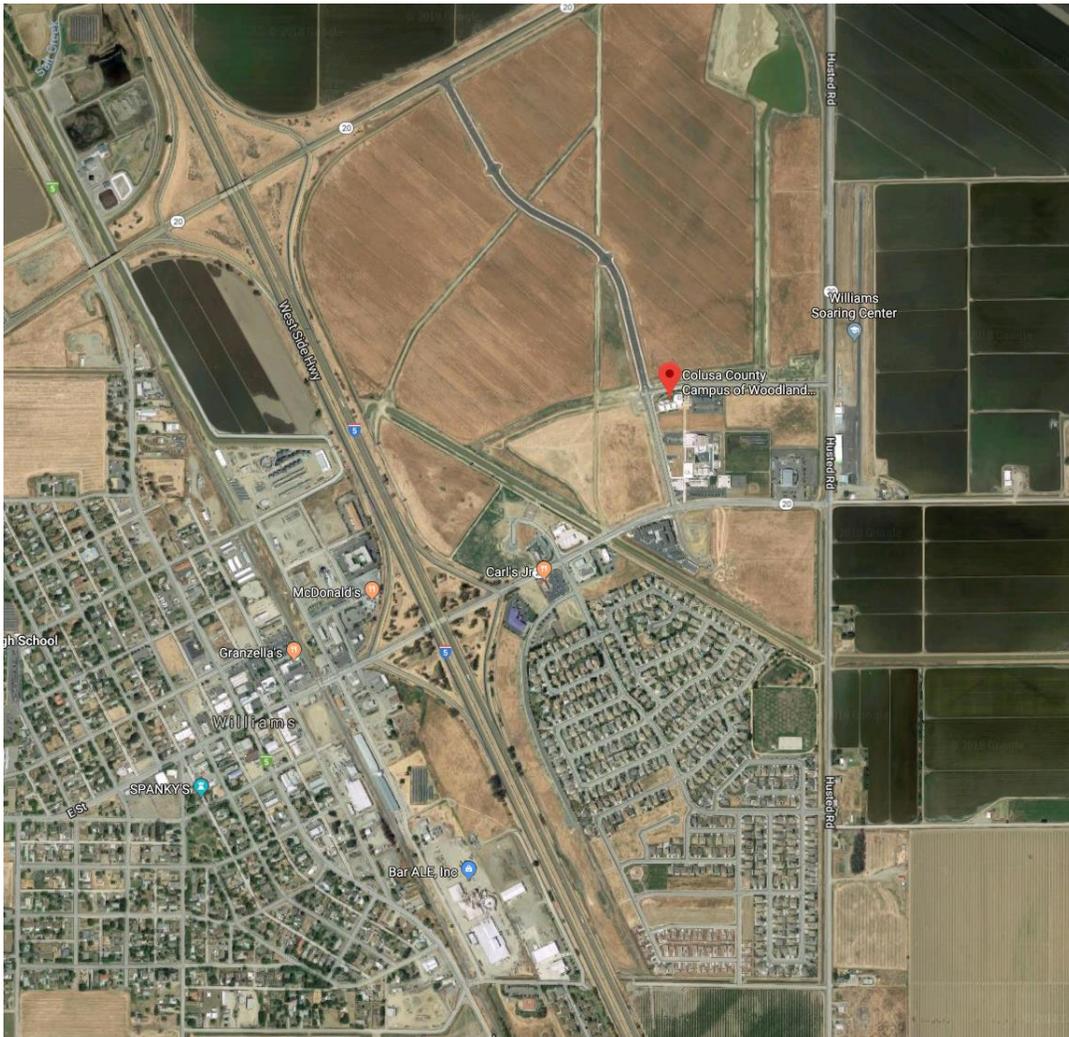
Accessibility: Interstate 5

Solar Canopy: No

Utility Provider: City of Williams

Existing Electricity Provider: PG&E

Infrastructure needs: Overhead Fast-Charger



Sacramento

Summary: Plug-In Depot chargers will be installed in Sacramento Regional Transit's maintenance yard. I-5 Backbone buses will charge at this location before returning to Redding.

Location: Underneath Capital City Freeway (I-80), bound by Capitol Ave, N St, 29th St, 30th St.

Land Use: Transit Maintenance Yard

Routes Served:

- I-5 Backbone

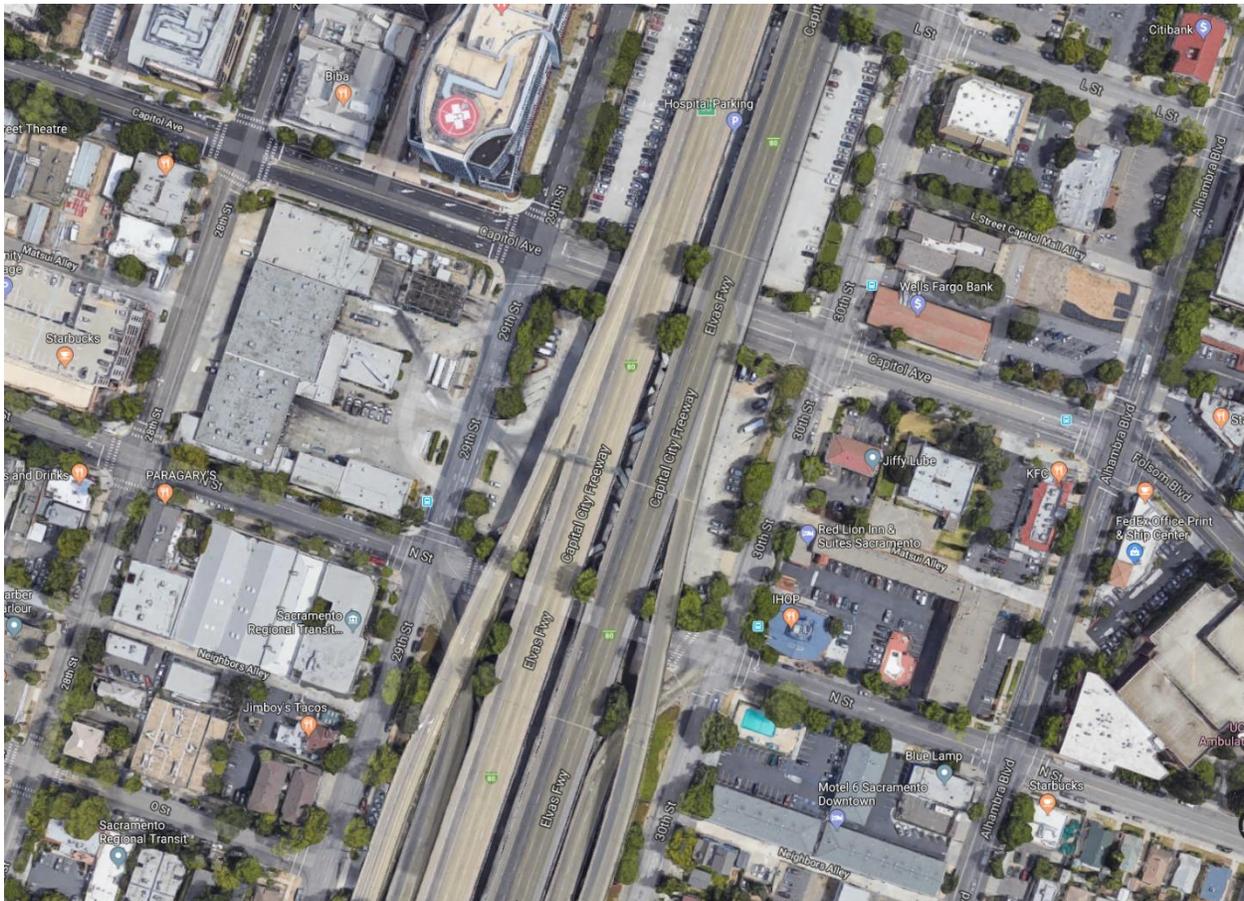
Accessibility: Interstate 5, State Route 99, Interstate 80, US 50

Solar Canopy: No

Utility Provider: City of Sacramento

Existing Electricity Provider: PG&E

Infrastructure needs: **Two** Plug-In Depot Chargers



Willows

Summary: Two Plug-In Depot chargers will be installed at the Glenn County Maintenance Yard in Willows. The charger will serve the North Valley Feeder line.

Location: Glenn County Yard: 777 N Colusa St, Willows, CA, 95988

Land Use: County Maintenance Yard

Routes Served:

- North Valley Feeder

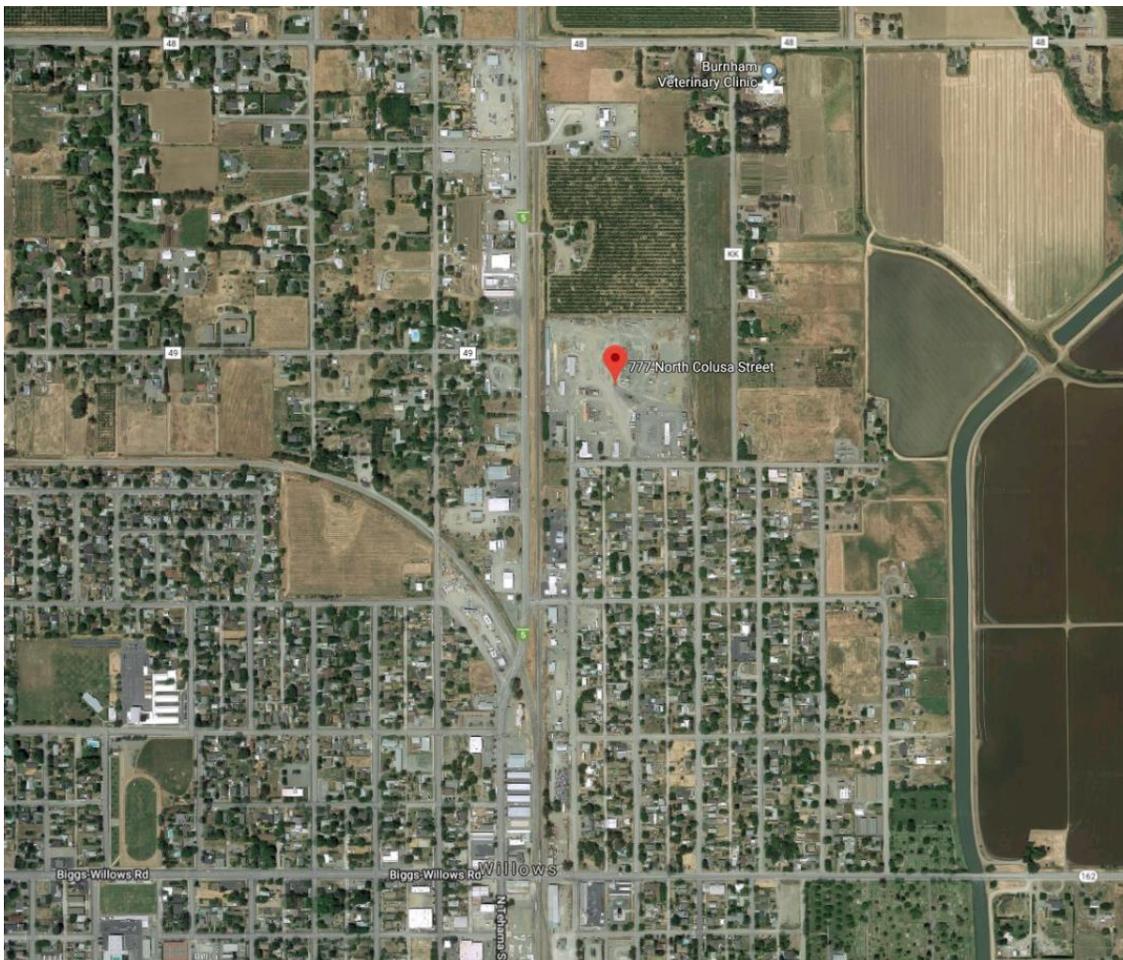
Accessibility: Interstate 5

Solar Canopy: No

Utility Provider: City of Willows

Existing Electricity Provider: PG&E

Infrastructure needs: Two Plug-In Depot Chargers



Yreka

Summary: Plug-In Depot Chargers will be installed at Siskiyou County's service yard.

Location: Siskiyou County Service Yard, 279 Sharps Rd, Yreka, CA 96097

Land Use: County Maintenance Yard

Routes Served:

- Siskiyou Feeder

Accessibility: Interstate 5, US 99

Solar Canopy: No

Utility Provider: City of Yreka

Existing Electricity Provider: Pacific Power & Light Co

Infrastructure needs: Plug-In Depot Chargers



Lower Lake

Summary: A Plug-In Depot charger will be installed at Lake Transit Authority's maintenance yard in Lower Lake, CA, approximately 1.4 miles south of the bus stop at Walmart in Clearlake. A solar canopy will be installed to provide the buses with renewable energy.

Location: 9240 CA-53, Lower Lake, CA 95457

707-994-3334

Land Use: Lake Transit Maintenance Yard

Routes Served:

- Lake Feeder

Accessibility: State Route 53

Solar Canopy: Yes

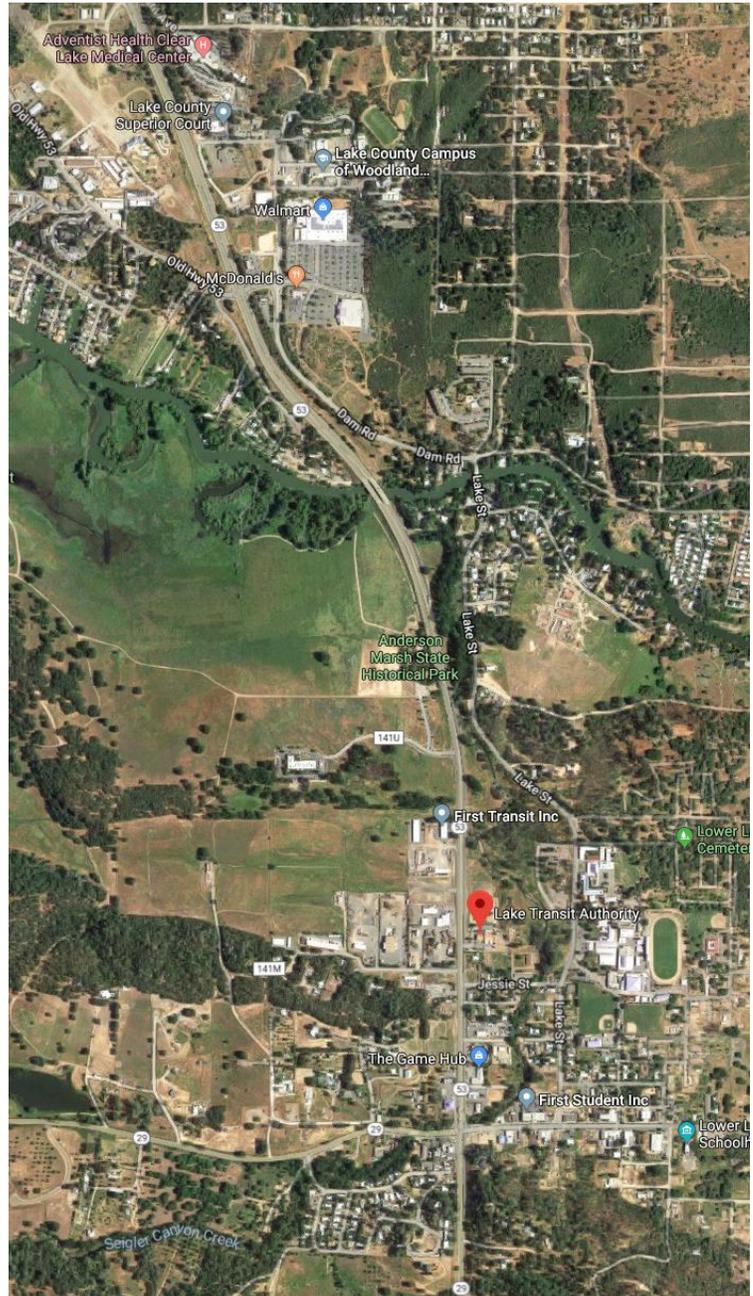
Utility Provider: City of Lower Lake

Existing Electricity Provider: PG&E

14730 Olympic Dr, Clearlake, CA 95422

800-743-5000

Infrastructure needs: Plug-In Depot Chargers

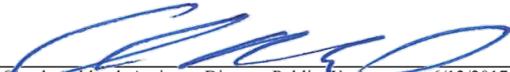


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ATTACHMENT J

RABA Solar Canopy Project

CITY OF REDDING
REPORT TO REDDING AREA BUS AUTHORITY

MEETING DATE: June 19, 2017 ITEM NO. 4.5 [R-010-075]	FROM: Brian Crane, Public Works Director
SUBJECT: 4.5--Award Bid Schedule No. 0060 (Job Order No. 2426), RABA Facility Solar Canopy Project	
APPROVED BY	
 <hr style="width: 100%;"/> Chuck Aukland, Assistant Director Public Works 6/12/2017	 <hr style="width: 100%;"/> Brian Crane, Public Works Director 6/13/2017

Recommendation

Authorize the following action relative to Bid Schedule No. 0060 (Job No. 2426), RABA Facility Solar Canopy Project:

1. Award to J.R. Conkey & Associates in the amount of \$683,838;
2. Approve an additional \$100,000 to cover the cost of administration and inspection fees;
3. Approve \$70,000 to provide construction contingency funding; and
4. Authorize the Executive Officer to approve additional increases in either the construction management or construction contingency amounts up to a total of \$10,000, for a total of \$863,838.

Background

On May 11, 2017, the City of Redding for the Redding Area Bus Authority opened bids on the RABA Solar Canopy Project (Project). This project consists of providing and constructing two solar canopies at the existing RABA Maintenance Facility. This includes removal of AC paving at the footing and electrical trench locations, removal of existing parking lot striping, installing ADA modifications, metal canopy structures, metal roofing, solar panels, electrical improvements, and a seal coat. These improvements will substantially reduce on-going electrical costs for RABA.

A tabulation of the bids received and opened is attached.

The apparent low bid in the amount of \$683,828 was received from J.R. Conkey & Associates (Conkey) of Roseville, California, and the apparent second low bidder was MDS Engineering & Construction, Inc. (MDS). Upon evaluation of the bids, staff discovered a discrepancy in Conkeys bid proposal regarding bid Item 3. The total price was not calculated correctly, therefore the City revised the total price in accordance with the project Instruction to Bidders, Section C. The correction did not change the fact that Conkey was the apparent low bidder. Staff notified MDS of the discrepancy and the related correction made to the low bidder's proposal. MDS submitted a bid protest on May 22, 2017 alleging that the discrepancy in the unit price and total price provided Conkey an unfair bid advantage. On May 24, 2017 Conkey submitted its response to the bid protest. The matter was referred to the City of Redding (City)

Attorney’s office (RABA counsel) for review and they have thoroughly reviewed the MDS bid protest, Conkeys response, the applicable bid documents, and the law regarding these issues. On June 7, 2017 the City Attorney’s office sent a letter of determination to both parties finding that Conkey’s bid was responsive. The letters referenced above are attached.

Issue

Should the Board award Bid Schedule No. 0060 for the RABA Solar Canopy Project to J.R. Conkey & Associates?

Alternatives; Implication of Alternatives

The Board has the option of selecting one of the following alternatives:

1. Award Bid Schedule No. 0060 for the RABA Solar Canopy Project to J.R. Conkey & Associates. This action will allow for the preservation of the buses by providing protection from the elements, in addition to reducing the annual operating costs of the RABA Facility.
2. Do not award the bid. Without this project, there will be continued maintenance on the RABA buses and no offset for the annual operating funds of the Facility.

Fiscal Impact

Funding in the amount of \$1,175,000 was approved by the Board for Fiscal Year 2016-17. Funding will be provided by multiple grants from the Proposition 1B (Prop 1B) funding programs. All funds are Prop 1B grants and do not require a local match.

Cost Summary	
Item	Estimated
Project Development Costs	\$115,000
Construction Contract + Contingency	\$753,838
Contract Administration, Inspection, Testing	\$100,000
Additional City Manager Authority	\$10,000
Total Project Costs	\$978,838

Project cost components are estimates and some shifting of the project development, construction management and construction contingency funds may be necessary to balance the project within the approved budget.

Conclusion

It is the recommendation of staff that the RABA Board award Bid Schedule No. 0060, for the RABA Solar Canopy Project to J.R Conkey & Associates.

- c: Corri Vandiver, Project Engineer
- Don Chilton, Project Coordinator – Construction
- Kyle Jones, Assistant Engineer

Attachments:

Notice of Exemption

Location Map

Bid Tab

Response to Bid Protest Letter 060717

MDS bid protest 052217

05-26-2017-SPINT-Response

NOTICE OF EXEMPTION

APPENDIX I

To: Project File

FROM: City of Redding
Public Works Department
777 Cypress Avenue
Redding, CA 96001

Project Title: RABA Facility Bus Parking Solar Canopy Project, J.O. 2426-20 (ED-29-14)

Project Location Specific: RABA Maintenance Facility at 3333 S Market Street

Project Location City: Redding Project Location County: Shasta

Description of Project: The project proposes to construct two solar parking canopies within the existing paved park lot. One structure will be 140 x 90 ft and the other will be 215 x 60 ft. All work will be completed on existing RABA property. The parking lot may be slurry sealed and striped if the budget allows.

Name of Public Agency Approving Project: City of Redding

Name of Person or Agency Carrying Out Project: Corri Vandiver, Project Engineer

Exempt Status: (check one)

- Ministerial [Section 21080(b)(1); 15268]
- Declared Emergency [Section 21080(b)(3); 15269(a)]
- Emergency Project [Section 21080(b)(4); 15269(b)(c)]
- X Categorical Exemption. State type and section number: Section 15303: New Construction, Class 3
- Statutory Exemptions. State code number:

Reasons why project is exempt: Class 3 exemptions include the construction and location of limited numbers of new small facilities or structures. All work will be conducted within the existing developed footprint of the facility. There are no sensitive environmental resources within the project boundaries that could be affected by this project. Although previously a known contaminated site, subsequent studies have indicated contaminant levels are below thresholds and the parking area was uncontaminated. If contaminated soils are found at the site during construction, then standard evaluation procedures will be implemented. There is no reasonable possibility that this project will have a significant effect on the environment.

Lead Agency Contact Person: Jonathan Oldham Telephone: 530.225.4046

If Filed by Applicant:

1. Attach certified document of exemption finding.
2. Has a notice of exemption been filed by the public agency approving the project? Yes No

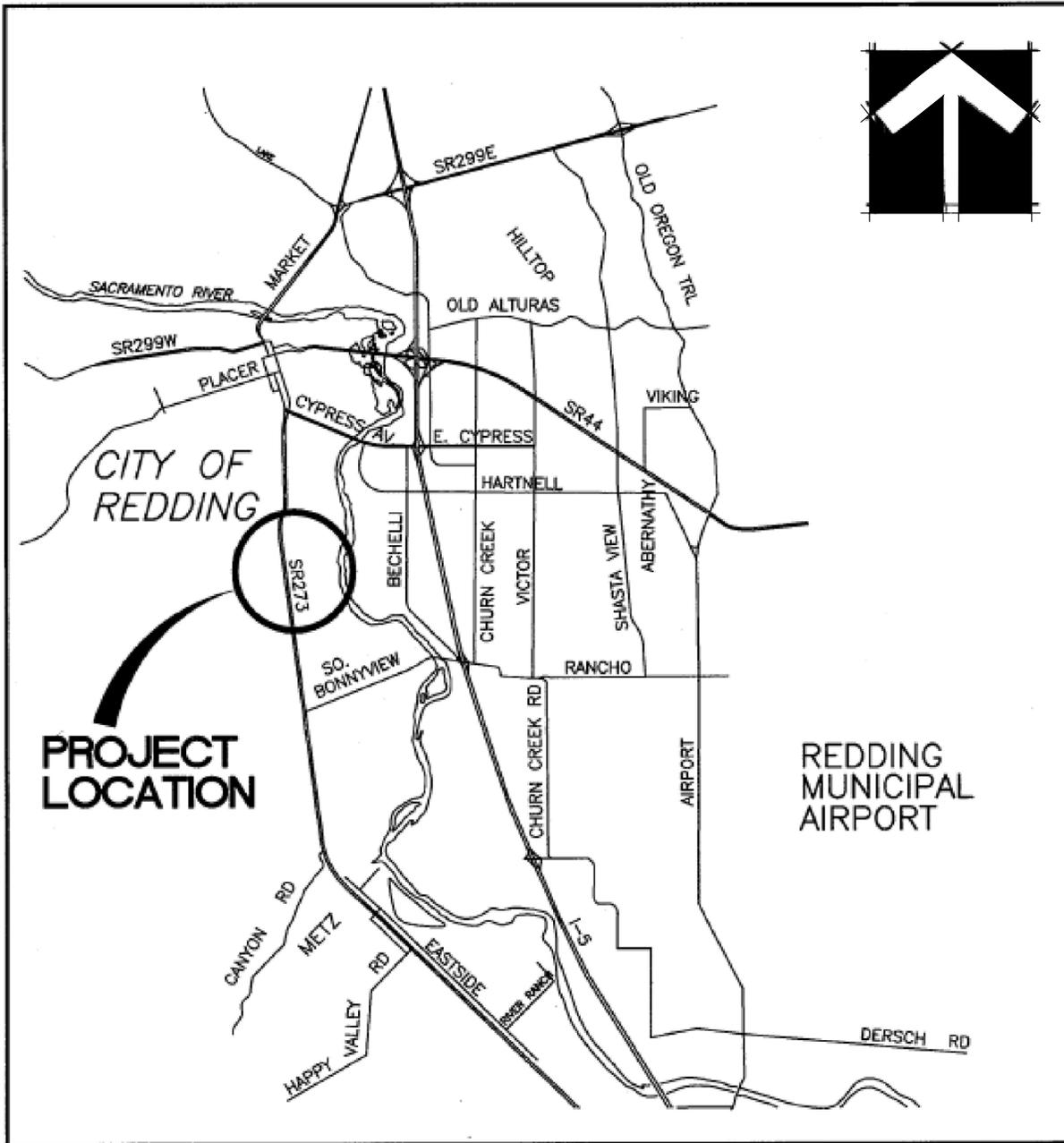
Signature: [Handwritten Signature]

Date: December 3, 2014

Title: Environmental Compliance Manager

- Signed by Lead Agency
- Signed by Applicant

Date received for filing at OPR: _____



**PROJECT
LOCATION**



**CITY OF REDDING
PUBLIC WORKS
DEPARTMENT**

**EXHIBIT A
RABA FACILITY SOLAR CANOPY
LOCATION MAP**

BID TABULATION FOR:
RABA FACILITY SOLAR CANOPY PROJECT
 Bid Schedule No.: 0060
 Job No.: 2426
 5/11/2017

ITEM	DESCRIPTION	UNIT	QTY	ENGINEER'S EST		J.R. Conkey & Associates		MDS Engineering	
				UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
1	Water Pollution Control	LS	1	\$5,000.00	\$5,000.00	\$6,500.00	\$6,500.00	\$750.00	\$750.00
2	Construct Solar Parking Canopies	LS	1	\$850,000.00	\$850,000.00	\$671,686.00	\$671,686.00	\$690,598.00	\$690,598.00
3	Seal Coat	SY	1570	\$25.00	\$39,250.00	\$3.60	\$5,652.00	\$2.57	\$4,034.90
TOTAL - CONTRACT ITEMS					\$894,250.00		\$683,838.00		\$695,382.90

ITEM	DESCRIPTION	UNIT	QTY	RTA Construction		SnL Group, Inc.		Trent Construction	
				UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
1	Water Pollution Control	LS	1	\$2,500.00	\$2,500.00	\$1,250.00	\$1,250.00	\$8,507.72	\$8,507.72
2	Construct Solar Parking Canopies	LS	1	\$791,000.00	\$791,000.00	\$820,000.00	\$820,000.00	\$813,916.09	\$813,916.09
3	Seal Coat	SY	1570	\$5.25	\$8,242.50	\$3.00	\$4,710.00	\$3.46	\$5,432.20
TOTAL - CONTRACT ITEMS					\$801,742.50		\$825,960.00		\$827,856.01

ITEM	DESCRIPTION	UNIT	QTY	Cal Electro, Inc.		McCuen Construction, Inc.	
				UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
1	Water Pollution Control	LS	1	\$1,000.00	\$1,000.00	\$2,500.00	\$2,500.00
2	Construct Solar Parking Canopies	LS	1	\$824,000.00	\$824,000.00	\$904,417.00	\$904,417.00
3	Seal Coat	SY	1570	\$9.55	\$14,993.50	\$5.15	\$8,085.50
TOTAL - CONTRACT ITEMS					\$839,993.50		\$915,002.50



CITY OF REDDING
777 CYPRESS AVENUE, REDDING, CA 96001
P.O. Box 496071, REDDING, CA 96049-6071

OFFICE OF THE CITY ATTORNEY
BARRY DEWALT, CITY ATTORNEY
LYNETTE M. FREDIANI, ASSISTANT CITY ATTORNEY
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June 7, 2017
B-050-020

Michael "Shawn" Stierli
MDS Engineering & Construction, Inc.
14771 Wonderland Blvd.
Redding, CA 96003

Scott Ransdell, Sr. Vice President
J.R. Conkey & Associates
Solar Power Integrators
735 Sunrise Avenue, Suite 200
Roseville, CA 95661

RE: Redding Area Bus Authority Solar Canopy Project - Bid Schedule 0060
Response to Bid Protest

Messrs. Stierli and Ransdell:

On May 11, 2017, the City of Redding for the Redding Area Bus Authority opened bids on the above-referenced project. Multiple bids were received, including bids from J.R. Conkey & Associates (hereinafter referred to as "Conkey") and MDS Engineering & Construction, Inc. (hereinafter referred to as "MDS"). Conkey's proposal totaled \$683,828.00 and was preliminarily declared the lowest monetary bid.

The preliminary declaration caused a string of communications between the City of Redding, Conkey and MDS. Those communications ultimately resulted in a preliminary determination of potential award to Conkey, despite a somewhat irregular pricing methodology included in its proposal. The methodology utilized a price per square foot model on the portion of the project requesting bids on 1,570 square yards of Seal Coat. Subsequent discussions took place to determine whether there was a discrepancy between the unit price and the line item total for the Seal Coat portion of the project. There was further discussion of potentially applying the quoted price, per square yard, rather than per square foot. A bid protest ensued, whereby MDS alleged that the bid must be rejected since the methodology could have been used as an unfair advantage for Conkey over his competitors and any such award would violate public policy.

On May 26, 2017, Conkey issued a written response to the protest, which presented argument that the pricing methodology was not detrimental to the process or the awarding authority,

Attachment: Response to Bid Protest Letter 060717 (3731 : 4.5--Award Bid Schedule No. 0060, RABA Facility Solar Canopy Project)

because the 1,570 square yards of Seal Coat were bid on and the unit price was reflective of the measurements utilized in the specifications. In essence, the unit price was stated at \$.40 per square foot rather than \$3.60 per square yard, which are one in the same. In short, and for the reasons set forth more particularly below, this Office finds this argument persuasive, but does find there was a discrepancy between the unit price and the total price for the Seal Coat line item.¹ Since there is a discrepancy, the unit price will apply and the calculation of \$.40 per square yard will be multiplied by the 1,570 square yards called for in the controlling documents. Since the resulting amount is still the lowest monetary bid, awarding the project to Conkey is appropriate.

This Office has thoroughly reviewed the above-referenced communications, the applicable bid documents, and the law regarding these issues. For the reasons set forth below, this Office determines Conkey's bid was responsive and the unit price methodology should not be treated as a disqualifying discrepancy pursuant to the controlling documents. As a result, City staff will recommend the Redding Area Bus Authority accept Conkey's bid and award the contract accordingly.

Pursuant to Public Contract Code §20162, the contracts for competitively bid public projects must be awarded to the lowest responsible bidder. The general process for selecting the lowest responsible bidder includes a determination of (1) which bidder is the lowest monetary bidder; (2) whether or not the lowest monetary bidder submitted a responsive bid; and (3) whether or not the lowest monetary bidder is responsible.²

A bid is responsive if it promises to do what the bidding instructions require. (*Bay Cities Paving & Grading, Inc. v. City of San Leandro* (2014) 223 Cal.App.4th 1181, 1187) Responsiveness is generally determined from the face of the bid, without outside investigation or information. (*Great West Contractors, Inc. v. Irvine Unif. Sch. Dist.* (2010) 187 Cal.App.4th 1425, 1453-54) A determination of responsiveness boils down to a simple binary analysis: whether or not the bidder complied with the bidding instructions. (*Great West* at 1457).

If a city determines that a bid deviates from the bidding instructions, a secondary binary analysis applies: whether or not the deviation is material or immaterial. If it is material, the city must reject the bid. If the deviation is not material, the city has the option – though not the requirement – to waive the deviation and accept the bid. (*MCM Construction, Inc. v. City and County of San Francisco* (1998) 66 Cal.App.4th 359, 374. “The point of discretion is that the agency may properly act in either direction. It may waive or refuse to waive such deviation.” A “responsive” bid is one that is in strict and full accordance with all *material* terms of the bid package. (*Menefee v. County of Fresno* (1985) 163 Cal. App. 3d 1175) For example, the bidder has used the correct bid forms, has fully completed all questionnaires, has submitted all requisite enclosures, and has provided a proper bid bond when security is required. Any material

¹ \$.40 per square foot multiplied by 1,570 square yards is \$5,652.00. The Seal Coat line item total is \$5,642.00. Thus, there is a discrepancy of \$10.00.

² Bidder irresponsibility has not been alleged and, as such, was not analyzed in this letter.

variations will place the bidder at risk of being rejected by the public entity as non-responsive. Material terms include terms that are clearly identified by the public entity and that must be complied with at the risk of bid rejection.

In this case, Conkey's bid included a price for each item in the bid proposal, Conkey used all the correct bid forms, fully completed all questionnaires, submitted all requisite enclosures, and provided all necessary bid bonds. While Conkey's bid included an unconventional pricing methodology, the methodology was clearly identified and clearly qualified in relationship to the total amount of material called for in the controlling documents. As such, that particular unit price should not be treated as a disqualifying discrepancy between the unit amount and the total amount for the Seal Coat portion of the bid. Furthermore, the Instructions to Bidders included with the noticing documents do not require rejection in this case, but rather an accounting based on the unit price of the bid. The Instructions to Bidders, Section C, reads, in part:

“Bidders must quote on all items appearing on the Proposal form, unless specific directions allow for partial bids. *Failure to quote an item means that the item will be provided at no cost.* The Bidder shall legibly enter unit or lump sum price in figures for all items required on the Proposal. When bids on all items are not required, Bidders shall insert the words “NO BID” where appropriate. *In case of discrepancy between unit prices and totals, unit prices will prevail.* Failure to legibly quote on items may disqualify the bid. Alternate bids will not be considered unless specifically called for in the proposal form.”

In this case, the unit price shall prevail pursuant to the controlling bid documents. Since the units were designated in square yards, the unit price of \$.40 per square foot will control. As the price was clearly qualified as “\$.40 / SF” which, by simple math, is also \$3.60 per square yard, the only discrepancy between the unit price and the total price quoted is the aforementioned \$10.00. Had there been an alteration to the total units quoted, or had the price per unit not specifically identified the price to be per square foot, the analysis would be different. That hypothetical is not the case here. Since such qualifications were made, and since the 1,570 square yards were provided for in the proposal, the end result is the minor discrepancy noted above.

Of further note and particular importance, courts have generally held that when bidders are required to include calculations on the bid form, a clause in the invitation for bids *will be enforced* if it clearly indicates that the unit price amounts will take precedence over the calculated line item amounts. (See *Pozar v Dep't of Transp.*, (1983) 145 Cal.App3d 269). Since the awarding authority specifically required the bidders to include calculations on the bid form and the invitation included an order of authority for the unit price over the line item price, the Redding Area Bus Authority has the authority to make the reconciliation. Since Conkey is still the lowest bidder after the reconciliation, awarding the proposal would be appropriate.

Contrary to MDS's allegations, the unconventional pricing used by Conkey, even if deemed a discrepancy, is inconsequential and, if awarded, would not result in a violation of public policy.

MDS alleges the discrepancy could have resulted in Conkey withdrawing its bid and, as such, was a tactical advantage. In certain instances, staff agrees that allowing a contractor to withdraw its bid over certain mistakes or deviations from the controlling documents could be violative of various authorities and could be advantageous to a potential bidder.

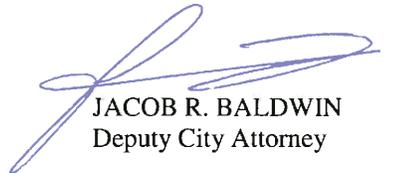
Public Contract Code Section 5101 generally controls such withdrawals and generally requires that a bidder shall not be relieved of the bid, absent consent of the awarding authority. A review of Public Contract Code Section 5100, et seq., does not warrant any such withdrawal in this case and no such withdrawal was proposed or contemplated by either Conkey or the awarding authority. Furthermore, had Conkey attempted to withdraw its bid, the awarding authority would have had strong grounds to pursue collection efforts through the accompanying bid bond. As such, the withdrawal concerns raised by MDS do not require rejection in this case as any such withdrawal would have been improper.

Staff further does not believe Conkey received an unfair advantage as a result of the pricing methodology utilized by Conkey. If the unit price would have been unqualified, the potential for an unfair advantage would have been greater, however, given the clear qualification mentioned above, both the awarding body and any potential bidder were well informed of Conkey's quoted price for the Seal Coat portion of the project and, as such, an argument of unfairness is not compelling.

Furthermore, this Office has determined this bid protest concerns the issue of bid responsiveness and does not involve any consideration of whether Conkey is a responsible bidder. A bidder whose bid is challenged on grounds of responsiveness is not entitled to a hearing; review is limited to the face of the bid.

City staff anticipates having this matter before the Redding Area Bus Authority at its meeting on June 19, 2017. Meetings typically convene at 6:00 p.m. in the City Hall Chambers located at 777 Cypress Avenue in Redding. Should any party wish to appear and speak on the matter, you may contact me in the next couple of weeks for an update on when this matter may be heard by the Redding Area Bus Authority. You may call me directly at (530) 225-4050, or email me at jrbaldwin@cityofredding.org. Agenda information is also available on the City's website at www.cityofredding.org.

Sincerely,



JACOB R. BALDWIN
Deputy City Attorney

JB/sel

c: Chuck Aukland, Assistant Public Works Director
James Triantafyllou, Project Coordinator

Triantafyllou, James

From: Michael Stierli <mds@mdsengco.com>
Sent: Monday, May 22, 2017 9:36 AM
To: Triantafyllou, James; Baldwin, Jacob
Cc: Kraft, Becky; Aukland, Chuck; Vandiver, Corri
Subject: RE: RABA Facility Solar Canopy Project - BS 0060 Bid Protest

Thanks James,

I would like to supplement our concern mentioned below. The City should weigh the fact that Conkey could use the mistake with his unit price for an unfair advantage. There is a general prohibition against contractors using a unit price mistake argument to relieve them of their bid. In this case, Conkey could have used his unit price mistake to request his bid be withdrawn. A public agency asking Conkey if he is okay with honoring his price after the fact gives him an unfair advantage over the other bidders in that he has already seen the other competitors bids.

Furthermore, with unit price mistakes the City will be in a bad position should they need or want extra seal coating. They could not demand that Conkey honor his price should they need or want to do a substantial amount of seal coat.

Thank you,
Michael "Shawn" Stierli
MDS Engineering & Construction, Inc.
14771 Wonderland Blvd.
Redding, CA 96003
(530) 275-2779
(530) 275-9483 (fax)

-----Original Message-----

From: Triantafyllou, James [mailto:jtriantafyllou@ci.redding.ca.us]
Sent: Monday, May 22, 2017 9:16 AM
To: 'Michael Stierli'; Baldwin, Jacob
Cc: Kraft, Becky; Aukland, Chuck; Vandiver, Corri
Subject: RE: RABA Facility Solar Canopy Project - BS 0060 Bid Protest

Good Morning Shawn-

By way of this email your bid protest has been forwarded to the City Attorney's office for review and consideration. We will notify you once a determination of the bid protest is made.

Sincerely,

James Triantafyllou, PE
Project Coordinator
City of Redding

777 Cypress Ave
Redding, CA 96001
530-245-7232

-----Original Message-----

From: Michael Stierli [mailto:mds@mdsengco.com]
Sent: Monday, May 22, 2017 8:52 AM
To: Triantafyllou, James
Cc: Kraft, Becky; Aukland, Chuck; Vandiver, Corri; Baldwin, Jacob
Subject: RE: RABA Facility Solar Canopy Project - BS 0060 Bid Protest

James,

MDS would like to file a bid protest for the following reason. A unit price mistake is routinely rejected (please see page 35, 2-1.1 Acceptance or Rejection of Proposals of the City specifications). The unit price in this case is obviously unbalanced. There is sound reason for this policy. It is public policy in this state to prohibiting public agencies from knowingly taking products or services below a contractor's cost (see California Public Contract Code Section 10344, paragraph (e)(1)).

Thank you,
Michael "Shawn" Stierli
MDS Engineering & Construction, Inc.
14771 Wonderland Blvd.
Redding, CA 96003
(530) 275-2779
(530) 275-9483 (fax)

-----Original Message-----

From: Triantafyllou, James [mailto:jtriantafyllou@ci.redding.ca.us]
Sent: Friday, May 19, 2017 2:51 PM
To: 'Michael Stierli'
Cc: Kraft, Becky; Aukland, Chuck; Vandiver, Corri; Baldwin, Jacob
Subject: RE: RABA Facility Solar Canopy Project - BS 0060 Bid Protest

Hi Shawn-

This is what I was typing up before you called.

I understand your confusion. When the bid was submitted the name on the envelope may have been Solar Power Integrators, which is part of JR Conkey. The Contractors name was the same on proposal documents. I have attached a copy of their proposal for your use.

I also wanted to point out that we will be making a correction to their bid with regard to Item 3. They submitted a bid for \$0.40 and the total for



May 24, 2017

City of Redding
Attn: Mr. James Triantafyllou, PE
777 Cypress Avenue
Redding, CA 96001

Re: RABA Facility Solar Canopy Project – BS 0060 – Bid Protest Response

Mr. Triantafyllou,

J.R. Conkey & Associates, Inc. dba Solar Power Integrators provides the following response to the Bid Protest received from MDS Engineering & Construction, Inc. with regard to our bid proposal for the subject project.

We have reviewed California Public Contract Code Section 10344 (e)(1) and California Business and Professions Code Section 17030. We firmly believe that our specified lump sum price for Bid Item 3 – Seal Coat is not detrimental to the City of Redding. Our price was based upon City provided drawing sheet A-25994 which states there is 14,105 square foot area to be slurry seal coated. The lump sum price on our proposal for this work was \$5,642 which was calculated by \$0.40 per square foot. If calculated out by the square yard, the bid amount would remain the same and the cost per square yard would be \$3.60. Based upon Proposal Sheet P1, a lump sum or sums price is acceptable and our lump sum price reflects either square footage or square yard.

J.R. Conkey & Associates, Inc. dba Solar Power Integrators believes our original bid price remains fair and reasonable.

Respectfully,

Scott Ransdell
Sr. Vice President

735 Sunrise Blvd. Suite 200, Roseville California 95661 Phone 916-783-3585 Fax 916-783-8820
SIN 206-3, SIN 412-50, SIN 412-51 and SIN 412-52 DUNS #128514874 CCR and VetBiz Current/ Registered California General
Building Contractor #686184
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