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# Truckee Long-Range Transit Plan Final

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*Prepared for the*

**Town of Truckee**

*Prepared by*



**LSC Transportation Consultants, Inc.**

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*Prepared for the*

Town of Truckee

*Prepared by*

LSC Transportation Consultants, Inc.  
2690 Lake Forest Road  
PO Box 5875  
Tahoe City, CA 96145  
(530) 583-4053

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This document presents a conceptual plan for the long-range expansion of transit services in the Truckee area, including both the incorporated Town of Truckee as well as the Donner Summit area. It builds on recent regional efforts to expand public transit options, as well as a growing awareness of the importance of public transportation in serving Truckee residents, employees and visitors and in solving parking/traffic problems.

## **Background**

The Town of Truckee has, since its inception, provided public transit services and supported public transit in Town policy. The *2025 General Plan* includes the following policy elements regarding transit:

*Guiding Principal – Promote a safe and efficient transit system, including both bus and rail, to reduce congestion, improve the environment, and provide viable alternatives to the automobile.*

*Policy – Require new development to incorporate features that encourage transit use, including shelters and safe routes to transit stops, and ensure that right-of-way for future transit access is reserved in plans for new growth areas.*

*Policy – Pursue all available sources of funding for capital and operating costs of transit services, including consideration of funding through major developers.*

*Policy – As funding permits, participate in the provision of inter-regional transit services to Lake Tahoe and the ski areas.*

*Policy – Consider the transit needs of senior, disabled, low-income and transit-dependent persons in making decisions regarding transit services and compliance with the Americans with Disabilities Act.*

*Policy – Encourage the development of facilities for convenient transfers between different modes of transport, especially to provide connections to rail and intercity bus service.*

*Policy – When needed, work with neighboring jurisdictions to develop funding mechanisms to address future shortfalls in available sales tax-based funding for transit and to support adequate transit service for the Town’s population as it grows.*

*Action – Continue to fund existing Town-sponsored transit services such as the Truckee Trolley and Dial-A-Ride Service.*

*Action – Actively work with local and regional organizations and agencies to continue existing transit operations, and implement expanded transit services within and to the Town that are timely, cost-effective, and responsive to growth patterns and existing and future transit demand, especially where affordable housing units are located.*

Over the last few years, the North Lake Tahoe Resort Association has been leading the development of the *North Tahoe Truckee Transportation Vision Plan*. This plan, completed in the spring of 2016, identifies increased service frequency, longer hours of service, elimination of fares, and capital improvements for the broader North Tahoe / Truckee / Donner Summit region. As detailed below, these improvements would include half-hourly service, longer hours and elimination of fares on the SR 89 and SR 267 routes operated by Placer County serving Truckee. With regards to the specific Truckee/Donner Summit transit program, this regional vision plan includes only a modest increase in transit operating hours. Through this Vision Plan, the two individual Placer County TART and Town of Truckee transit programs have been “rebranded” as a single region-wide transit program (Tahoe Truckee Area Regional Transit), though services continue to be provided separately by the Town of Truckee (discussed herein as “Truckee TART”) and Placer County (“Placer TART”).

More recently, Placer County has prepared the *Systems Plan Update for Tahoe Truckee Area Regional Transit in Eastern Placer County*. This plan builds on the Vision Plan, focusing on elements serving the Tahoe Basin portion of Placer County as well as the major ski resorts outside the Tahoe Basin. It includes both a “financially constrained” plan as well as a “financially unconstrained” plan. The financially constrained plan includes service improvements in the Lake Tahoe Basin and as far north as Squaw Valley (on SR 89) and Northstar (on SR 267), but does not include elimination of transit fares or service expansions directly impacting Truckee. This financially constrained plan element expanded policy and funding commitments by Placer County, but does not identify any new funding commitments by the Town of Truckee. The financially unconstrained element would expand these improvements along the two routes into Truckee.

As an aside, the Nevada County Transportation Commission (NCTC) prepares a Short-Range Transit Plan (SRTP) for eastern Nevada County (including Truckee) roughly every five years. These SRTPs (most recently completed in 2013) focus on near-term transit improvements within a five-year planning horizon. In contrast, this document considers transit strategies for a long-range (20-years or beyond) period.

This Truckee TART Systems Plan provides a single summary document that (1) identifies improvements in the Placer TART program serving the Town of Truckee and associated costs, and (2) further defines long-range improvements in the Truckee TART. The following chapter presents a concise summary of existing public transit services in Truckee. This is followed by a review of the Placer County TART Systems Plan’s elements that impact Truckee. Finally, a systems plan for the Truckee TART program is presented.

## Existing Transit Services

Transit services in the overall Truckee area are currently provided by a combination of Town of Truckee, Placer County, and intercity services. The Town and Placer County services are jointly branded as “Tahoe Truckee Area Regional Transit” (TART). Table 1 presents a summary of the overall TART services in Truckee (and Donner Summit).

	Annual Ridership	Annual Vehicle- Hours	Annual Vehicle- Miles	Annual Marginal Operating Cost	Annual Fare Revenue	Annual Operating Subsidy (2)
<b>Truckee TART</b>						
Fixed Route -- Winter	7,013	1,826	30,916	\$171,966	\$4,869	\$167,097
Fixed Route -- Non-Winter	7,600	1,854	33,764	\$177,167	\$7,733	\$169,434
Dial-A-Ride	7,588	3,820	41,862	\$335,670	\$22,422	\$313,248
NTTT (1)	120	172	3,756	\$17,072	\$749	\$16,323
Fixed	--	--	--	\$179,110	--	\$179,110
<b>Total Truckee TART</b>	<b>22,321</b>	<b>7,672</b>	<b>110,298</b>	<b>\$880,984</b>	<b>\$35,773</b>	<b>\$845,211</b>
<b>Placer County TART in Truckee</b>						
SR 89 Route	18,600	--	--	--	--	--
SR 267 Route	9,980	--	--	--	--	--
Total Placer TART in Truckee	28,580	--	--	--	--	\$166,138
<b>Total Transit in Truckee</b>	<b>50,901</b>					<b>\$1,011,349</b>
Note 1: Annual estimates based upon February -- July 2016 data.						
Note 2: Costs minus fare revenues. Figures for Placer County TART in Truckee represent the Town's annual subsidy.						

### TAHOE TRUCKEE AREA REGIONAL TRANSIT – TOWN OF TRUCKEE

Transit services are overseen by Town of Truckee staff. A service contractor (currently Paratransit Services, Inc.) is employed to dispatch and operate the service, using vehicles owned by the Town. Fueling and vehicle maintenance is provided by the Town.

#### Fixed-Route

During the non-winter months (mid-March through mid-December), the Town of Truckee operates a fixed route along Donner Pass Road between Hennes Flats and West End Beach at Donner Lake. Major stops include the Tahoe Forest Cancer Center, Truckee Train Depot, Gateway Center, Crossroads Center and West End Beach. The route operates on hourly headways Monday through Saturday between 9:05 AM and 5:13 PM.

In winter, Truckee TART service is expanded to serve the Donner Summit area (with funding support from participating resorts, and Placer and Nevada Counties). Hourly service continues

to be operated along the same corridor within Truckee, with the hours of service expanded to 6:05 AM – 6:13 PM. In addition, six runs a day (three in the morning, one mid-day and two in the afternoon) are provided to the Donner Summit resorts. Winter transit service operates mid-December through mid-March, and is provided seven days a week.

Detailed ridership data is presented in Appendix A. For the 2015/16 Fiscal Year the fixed-route ridership totaled 14,613 boardings. Ridership is highest in the winter months, averaging 80 passengers per day, and is also higher in the summer months than in the spring/fall. Average daily boardings in the winter are highest at Donner Summit (58.6 percent of boardings), Donner Pass Rd at South Shore Drive (9.1 percent of boardings), and Gateway Center (5.7 percent of boardings). In the non-winter, stops with the highest percentage of average daily boardings are Truckee Train Depot (21.2 percent), Tahoe Forest Hospital (18.3 percent), and Donner Pass Rd at South Shore Drive (13.1 percent).

### **Truckee Dial-A-Ride**

Demand response curb-to-curb DAR service is provided within the Town limits in order to provide paratransit service, as well as to serve outlying neighborhoods not served by the fixed routes. The service area includes all Truckee residential neighborhoods and commercial districts such as Tahoe Donner, Prosser, Glenshire, Sierra Meadows, and downtown Truckee. DAR service is available for both the general public and ADA-eligible individuals. Service is available during the same hours and days as fixed route service. Total annual ridership is 7,588, with the highest monthly ridership occurring in October.

### **North Tahoe Truckee Transport**

The North Tahoe Truckee Transport (NTTT) program is a shared-ride, origin to destination, ADA accessible, public transit service offering out of area, and inter-regional transportation primarily for non-emergency specialty medical trips. Five monthly trips are provided on a specified schedule to Grass Valley/Nevada City, Reno, Auburn/Roseville/Sacramento, Quincy, and South Lake Tahoe. Priority is given to those age 60 and over residing in eastern Placer and Nevada Counties. Other residents may ride on a space available basis. The service is funded through a grant from the Area 4 Agency on Aging in partnership with Placer County and the Tahoe Transportation District. Continuation of the service beyond fiscal year 2016/17 is dependent on securing additional grant funding through Area 4 Agency on Aging or other grant funding sources.

### **Truckee Thursdays Shuttle**

In the summer of 2016, a free shuttle service was initiated to serve the popular Truckee Thursday's downtown street fair. Up to eight runs were operated over a total of five routes (serving Prosser, Donner Lake, Glenshire, Sierra Meadows, Tahoe Donner, and Northstar/Squaw Valley) under a contract between the Town and Northstar California. Over 11 Thursdays (as well as on the 4<sup>th</sup> of July), the Town-funded service carried 8,909 one-way passenger trips (not

including the ridership on the Tahoe Donner route). In addition, the Tahoe Donner Association operated a separate shuttle service serving the Tahoe Donner neighborhood which carried 8,254 passengers over the same period, for a total of 17,163.

## **TAHOE TRUCKEE AREA REGIONAL TRANSIT – PLACER COUNTY**

Truckee is also served by the TART services operated by the Placer County Department of Public Works. Two routes are operated:

- The **89 Route** operates hourly service between Tahoe City, Squaw Valley and Truckee along State Route (SR) 89. Service is offered generally between 6:00 AM and 6:30 PM between Tahoe City and Truckee. This route currently serves approximately 77,600 passengers per year in total, of which 27,200 travel to/from or within Truckee.
- The **267 Route** service is provided on SR 267 between Crystal Bay and Truckee (via Northstar Village) 365 days a year. Service is offered generally between 7:00 AM and 5:50 PM. Service in the spring and fall was recently added on a three-year experimental basis, through a funding agreement that includes the Town of Truckee and Truckee Tahoe Airport District. Including the estimated additional ridership from this increase in service, this route currently serves approximately 40,500 passenger-trips per year, of which 12,600 are to/from or within Truckee.

### **Fares**

The one-way fare on Truckee TART fixed-route service is \$2.50 for adults, \$1.50 for children ages 3 to 12, and \$1.00 for seniors and disabled persons; children under the age of 3 can board for free. In addition, employees of Donner Summit ski resorts that are funding partners ride fare free with valid employee identification. An all-day pass is \$5.00 for adults and \$2.00 for children under 12, seniors, and disabled persons. In addition, 10-ride punch passes are available at \$25.00 for adults, \$15.00 for children under 12, and \$10.00 for seniors and disabled persons.

On Dial-A-Ride, the general public one-way fare is \$6.00. The one-way fare for seniors or disabled passengers is \$2.00. In addition, 10-ride punch passes are available at \$60.00 for adults and \$20.00 for seniors, children under the age of 12, and disabled persons.

The Placer TART fare is currently \$1.75 per one-way trip for the general public. The general public can also purchase day passes for \$3.50, 10-ride passes for \$14, 14-day passes for \$30, and 30-day passes for \$53. Various multi-ride passes are also available on the Placer TART service. Seniors (age 60 and above), persons with disabilities, children aged 12 years and under and Medicare card holders can purchase any of the fare options at half-price.

## Costs

Fiscal Year 2015/16 costs for the Town's transit program, as shown in Table 2, total \$867,886 for Truckee TART services plus \$116,138 in subsidies for Placer County TART services, for a total of \$1,034,024. For purposes of estimating the costs of service modifications, the Truckee TART costs can be allocated into three categories: those cost items that vary by the number of hours operated (such as driver salaries), those that vary by the number of miles operated (such as fuel) and those that are fixed (such as management costs).

The costs associated with each category can be summed and divided by the hours and miles operated over the same period in order to identify a cost formula, as shown in the bottom portion of Table 2. The resulting cost formula is as follows:

$$\text{Annual Operating Cost} = \$76.28 \times \# \text{ of Vehicle-Hours} + \$1.06 \times \# \text{ of Vehicle-Miles} + \$179,110$$

## EXISTING REGIONAL TRANSIT LIMITATIONS

The overall TART transit program has substantial limitations with regards to serving Truckee's transit potential:

- Perhaps most importantly, the current fixed route serves relatively few residential areas. By largely serving trip destinations rather than trip origins, the transit route serves a relatively small proportion of all travel demand in Truckee.
- Hours of service are very limited, particularly in the non-winter season. The span of service from 9:05 AM to 5:13 PM means that residents cannot use public transit to access a full-time job, attend classes, go out to dinner or attend other evening activities.
- The lack of Sunday service in the non-winter season is not in parallel with the 7-days-a-week nature of a resort economy, both for employees as well as for visitors.
- The relatively high fare of \$2.50 per one-way trip is a disincentive for transit ridership on the Truckee fixed-route service.
- The Town and Placer County have co-branded the overall TART transit program but have not fully integrated the service. For example, the fare structure between the Town and Placer County differ. Additionally, Placer County has electronic fareboxes while the Town has manual fareboxes. At this time, each agency does not recognize the other's fare collateral, thus requiring transferring passengers to pay fares on both individual services.

**TABLE 2: Operating Expenses and Cost Allocation for Tahoe Truckee Area Regional Transit - Town of Truckee**

2016/17 Proposed Budget

Line Item	Allocation			Total Expense
	Fixed	Per Hour	Per Mile	
<b>Town Personnel Expenses</b>				
Salaries and Benefits	\$125,305	\$0	\$0	\$125,305
<b>Fixed Route Expenses</b>				
Professional Services - Fixed Route	\$0	\$176,097	\$0	\$176,097
CalTIP Insurance	\$0	\$27,147	\$0	\$27,147
Prof Services - Donner Summit Shuttle	\$0	\$70,868	\$0	\$70,868
Vehicles - Fuel	\$0	\$0	\$17,600	\$17,600
Fleet Maintenance Allocation	\$0	\$0	\$41,298	\$41,298
<i>Subtotal</i>	\$0	\$274,112	\$58,898	\$333,010
<b>Dial-A-Ride Expenses</b>				
Professional Services	\$0	\$297,968	\$0	\$297,968
Vehicles - Fuel	\$0	\$0	\$16,500	\$16,500
Fleet Maintenance Allocation	\$0	\$0	\$41,298	\$41,298
<i>Subtotal</i>	\$0	\$297,968	\$57,798	\$355,766
<b>General Transit</b>				
Education & Training	\$1,800	\$0	\$0	\$1,800
Advertising	\$500	\$0	\$0	\$500
Membership & Dues	\$630	\$0	\$0	\$630
General Supplies	\$525	\$0	\$0	\$525
Postage, Freight & Delivery	\$150	\$0	\$0	\$150
Printing	\$50	\$0	\$0	\$50
Professional Services	\$32,500	\$0	\$0	\$32,500
Professional Services - Audit	\$850	\$0	\$0	\$850
Telephone	\$2,900	\$0	\$0	\$2,900
Repair & Maint - Buildings	\$12,500	\$0	\$0	\$12,500
Repairs & Maint. - Office Equip.	\$50	\$0	\$0	\$50
Supplies - Shelters, Buses & Signs	\$1,000	\$0	\$0	\$1,000
Vehicles - Mileage	\$350	\$0	\$0	\$350
<i>Subtotal</i>	\$53,805	\$0	\$0	\$53,805
<b>Total Truckee TART Operating Costs</b>	<b>\$179,110</b>	<b>\$572,080</b>	<b>\$116,696</b>	<b>\$867,886</b>
<b>Placer County TART</b>				
Hwy 267 3-Year Non-Winter Pilot				\$62,547
Hwy 89 Year-round / Hwy 267 Winter				\$103,591
Subtotal Placer County Tart Bus				\$166,138
<b>TOTAL TRUCKEE TRANSIT PROGRAM OPERATING COSTS</b>				<b>\$1,034,024</b>
<b>Truckee TART Operating Cost Model</b>				
Service Factors for FY 2016-17		Vehicle Service Hours	Vehicle Service Miles	
		7,500	110,298	
<b>Vehicle Service Hour Cost Factor</b>	<b>\$76.28</b>			
<b>Vehicle Service Mile Cost Factor</b>	<b>\$1.06</b>			
<b>Annual Fixed Cost</b>	<b>\$179,110</b>			
<i>Source: Town of Truckee 2016/17 Annual Budget Details, Town staff. Excludes capital costs</i>				

## **INTERREGIONAL TRANSPORTATION SERVICES**

### **Greyhound Lines, Incorporated**

Greyhound operates service along the I-80 corridor between Reno and Sacramento (and beyond). There are a total of five runs per day along I-80 in each direction, of which three serve the Truckee Train Depot in the eastbound direction and two in the westbound direction. Eastbound departures from Sacramento are at 9:25 AM, 1:15 PM, and 6:35 PM, serving Truckee at 12:05 PM, 3:50 PM, and 8:45 PM, respectively and then arriving in Reno 50 minutes later. Westbound buses traveling to Sacramento depart Reno at 6:25 AM and 2:50 PM, stop in Truckee at 7:15 AM and 3:40 PM, arriving in Sacramento at 9:50 AM and 6:15 PM. Fares between Truckee and Reno are \$9 to \$19, while fares between Truckee and Sacramento are \$25 to \$44. It is possible to make a day return trip from Truckee to both Reno and Sacramento.

### **Amtrak**

Truckee is served by Amtrak's *California Zephyr* route which travels from the San Francisco Bay Area to Chicago. The train departs Emeryville (Bay Area) daily at 9:10 AM and arrives in Truckee at 2:38 PM; the return train leaves at 9:37 AM and arrives in Emeryville at 4:10 PM. Traveling to Chicago, the train departs Truckee at 2:38 PM and arrives in Chicago at 2:50 PM two days later. Traveling to Truckee, the train departs Chicago at 2:00 PM and arrives at the Truckee Train Depot at 9:37 AM two days later. Fares for a one-way trip between Truckee and Sacramento start at \$44.

In addition to train service, Amtrak Thruway Bus Service is also offered from Sacramento. Passengers arriving into Sacramento through the Coast Starlight (originating in Los Angeles and Seattle), Capital Corridor (originating in San Jose) or the San Joaquin (originating in Bakersfield) routes can connect with a bus to the Truckee Train Depot. Buses depart Sacramento at 10:15 AM, 12:30 PM and 4:20 PM daily, while buses depart Truckee at 8:40 AM, 12:05 PM and 3:25 PM. Passengers using the bus service must be booked on a trip that also includes a rail leg.

### **North Lake Tahoe Express**

The North Lake Tahoe Express is an airport shuttle service, first initiated in 2006, operating between the Reno Tahoe International Airport and the North Lake Tahoe, Truckee, and Incline Village regions. The Green Route provides service between Truckee (including a stop at the Train Station), Northstar, and the Reno-Tahoe International Airport. Truckee pickup locations include the Truckee Airport and Truckee Train Depot. The Green Route departs the Reno-Tahoe International Airport for Truckee at 3:15 PM and 12:00 AM, and departs the Truckee/Northstar area for the airport at 6:00 AM and 9:15 AM. Reservations are required 24 hours in advance, and the service is operated year round. One-way fares range from \$32 to \$49.

## **Private Ridesharing**

SnowPals - Beginning in 1999, SnowPals.org provides a free online tool for visitors to coordinate carpool trips to and within ski resort towns. The SnowPals Tahoe Rideshare program specifically provides connections for San Francisco/Bay Area residents. It is up to carpoolers to determine the cost of the ride and facilitate the transfer of money.

Zimride - A relatively new private startup company, Zimride coordinates carpoolers, particularly from San Francisco Bay Area to and from the Tahoe region. It is free of charge to use the service, however drivers do charge a “fare” for each empty seat; fares are set by the driver. All bookings are made through the website, in addition to payment processing. Passengers may purchase one-way or roundtrip rides, so long as there are empty seats available for their trip.

Uber/Lyft – In 2015, Uber announced that it would begin serving North Lake Tahoe and Truckee. Lyft followed suit in 2016, and the two companies are now present in the North and South Lake Tahoe regions.

## **Private Taxicab Companies**

There are a variety of taxicab companies available in the Tahoe-Truckee area. Until recently, Tahoe Blue Taxi operated complementary paratransit service for Placer TART.

## **Private Regional Shuttle Companies**

Several private shuttle companies (including Bay Area Ski Bus, Rally Travel Bus, and North American Charter) offer individual and group transportation between the Bay Area and Tahoe. Trips are available in the winter and are generally provided on Saturdays and Sundays.

## Placer County TART Improvements Serving Truckee

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The Truckee TART program functions as an element of a Truckee / North Tahoe regional transit network. In addition, Truckee currently funds a portion of the Placer County routes serving Truckee (totaling just over \$166,000 annually or 16% of Truckee’s transit expenditure budget). As such, it is useful to review regional transit plans before evaluating the details of the long-range Truckee plans.

### 2016 Tahoe Truckee Area Regional Transit Systems Plan Update

On April 19, 2016, the Placer County Board of Supervisors approved the *2016 Tahoe Truckee Area Regional Transit Systems Plan Update*. This plan is the result of a five-year-long planning effort to form a regional “transit vision.” It also reflects Placer County’s commitment to expanding Placer County TART services to address growth in eastern Placer County. The document focuses on the Placer County TART program, and does not address services provided by the Town. This document identifies both “financially constrained” plan elements (those fundable through currently foreseeable funding strategies) as well as “financially unconstrained” plan elements. A summary of the “financially constrained,” “financially unconstrained,” and capital plan elements is provided below.

#### Financially Constrained Service Plan

- **Increase Peak Season Service Frequency** – During the summer and winter seasons, consistent half-hourly service frequency will be provided during the daytime on all TART Mainline service (including the North and West Shores), along SR 89 between Tahoe City and Truckee, and along SR 267 between Crystal Bay and Truckee. It is the goal of Placer County to begin half-hourly peak season daytime service on both routes into Truckee anticipated to start in the winter of 2018/19.
- **Increase North Shore Service Frequency in Off Seasons** – Half-hourly service between Tahoe City and Crystal Bay in the spring and fall will be initiated in the fall of 2017.
- **Expand the Days of Summer Service Levels** – The peak summer season will be expanded from the current 68 days (June 27 to Labor Day) to 93 days (June 15 through September 15), starting with the summer of 2017. This reflects growing activity earlier in the summer and later into the fall. (The current winter schedule of approximately 119 days per year from December 10th to April 7th is unchanged.)
- **Improve Evening Service Including Off-Season Evening Service for TART Service Areas South of Squaw Valley and Northstar** – Evening service will be provided in the spring and fall seasons until roughly 9:00 PM (depending upon the specific run), for TART services south of Squaw Valley Road and Northstar Drive, starting in the fall of 2017.

Current gaps in service between the daytime and evening service will be filled, and one additional late night hour of service is to be provided on the SR 267 service. This will ensure consistency with the span of service on the other routes.

- **Additional Morning 267 Route Northbound Run** – A 6:00 AM northbound run from Crystal Bay to Northstar in the winter will be added, starting in 2016/17.
- **Provide Wheelchair-Accessible Paratransit Service through Town of Truckee Contractor** – Placer County will negotiate with the contracted provider of Truckee’s Dial-A-Ride service (Paratransit Services, Inc.) to provide trips that require a wheelchair-accessible vehicle in eastern Placer County.

#### Financially Unconstrained Service Plan

- **Free Transit Boardings throughout the TART System** – Transit fares paid by the passenger will be eliminated, including for boardings in Truckee and in Washoe County. Instead, other funding (such as transient occupancy tax funding) will be used to “pre-pay” all existing transit fare revenues. This will bring TART in line with the transit programs of other major mountain resort communities, including Mammoth Lakes, Park City, Vail, Summit County (Colorado) and Aspen. Transit services that have shifted from fare systems to free-fare have generally seen ridership increases on the order of 50 percent.
- **Evening Service Improvement to Truckee** – Once additional funding has been defined, evening service improvements should be extended beyond Squaw Valley Road and Northstar Drive to include 89 and 267 services to Truckee, including summer and winter service until 2:00 AM and off-season service until 9:00 PM.

#### Capital Plan

- **Fleet Improvement Plan** – Expansion of the Placer County TART fleet to 15 buses (financially constrained) and 17 buses (financially unconstrained).
- **Bus Stop Improvement Plan** – The document identifies bus stop improvements within Placer County, and does not identify improvements (or funds for improvements) in Truckee. However, the NLTRA’s “Transit Vision Plan” identifies the following stop improvements in Truckee and associated costs:
  - Expanded bus stop capacity at the Truckee Depot (\$200,000)
  - A bus shelter at the Truckee Senior Apartments (\$55,000)
  - Replacement of the existing shelters on Donner Pass Road across from the Gateway Center and at the West End of Donner Lake (\$110,000)

- Bus pullouts along Brockway Road at Cedar House and at the Regional Park (\$50,000)

### **Truckee Prioritization of Placer TART Enhancements**

For many years, the Town of Truckee and Placer County have had a written intergovernmental agreement regarding funding for existing Placer County TART routes that serve the Town. Put simply, this is built on the assumption that Placer County would – absent the existence of the Town of Truckee – provide service in eastern Placer County along Lake Tahoe, between Tahoe City and Squaw Valley, and between Kings Beach and Northstar. The subsidy needs for current services north of Squaw Valley and Northstar are split evenly between Placer County and the Town of Truckee (or the Town’s funding partners). At present, the costs assigned to the Town total approximately \$166,100 (including the additional costs of the three-year pilot expansion of SR 267 service).

While the Town is under no current responsibility to expand funding for additional Placer County TART services, as part of this Truckee-led planning effort the Placer TART service expansions have been prioritized and potential Town funding contributions identified. Table 3 presents a summary of service enhancements (by priority) identified in this current planning process.

- **High priority** improvements focus on winter service improvements, including evening service half-hourly peak-period service, and earlier southbound departures. This reflects the relative existing transit demand, as well as the desire to help address regional traffic congestion. These improvements will increase ridership by just under 15,000 boardings per year. Total potential Town (or Town funding partner) contributions (at current unit costs) are estimated to be \$96,200.
- **Medium priority** improvements consist of expanding the evening service to 11:00 PM in the summer season and 9:30 PM in the spring and fall. Approximately 5,000 additional passenger-trips will be served, with a potential Town contribution of \$51,800.
- **Low Priority** improvements consist of half-hourly service in the winter mid-day as well as in summer, and extension of evening service in winter and summer to 2:00 AM.

In sum, these improvements will increase ridership by over 30,000 per year, with a potential subsidy from the Town or the Town’s partners of up to \$354,150. Note that implementing these improvements will require agreements with other partners, including additional funding from other entities south of the Nevada County / Placer County line.

**Table 3: Prioritization of Truckee Participation in Placer TART Service Improvements**

Implementation Order	Service Alternatives (1)	Annual Ridership	Potential Town Contribution	Cost per Passenger Trip
<b>High Priority: Short-Term within 5 Years</b>				
1	Winter Evening Service Extension to Truckee 5:30 PM to 11:00 PM	8,925	\$44,900	\$5.03
2	Earlier Winter Southbound Departures on 89 and 267 (2)	1,195	\$2,450	\$2.05
3	Winter Half-Hourly Service Frequency Extension to Truckee: 2 Hours in AM, 3 Hours in PM	4,558	\$48,850	\$10.72
<i>Total High Priority Placer TART</i>		14,678	\$96,200	
<b>Medium Priority: Mid-Term within 10 Years</b>				
4	Summer Evening Service Extension to Truckee 5:30 PM to 11:00 PM	3,698	\$36,000	\$9.74
5	Off-Season Evening Service Extension to Truckee 5:30 PM to 9:30 PM	1,300	\$15,800	\$12.15
<i>Total Medium Priority Placer TART</i>		4,998	\$51,800	
<b>Low Priority: Long-Term within 20 Years</b>				
6	Winter Half-Hourly Service Frequency Extension to Truckee - Mid-day Period (9:30 AM-2:30PM)	3,974	\$51,650	\$13.00
7	Summer Half-Hourly Service Frequency Extension to Truckee	2,700	\$83,850	\$31.06
8	Winter Evening Service Extension to Truckee 11:00 PM to 2:00 AM	2,975	\$39,200	\$13.18
9	Summer Evening Service Extension to Truckee 11:00 PM to 2:00 AM	1,102	\$31,450	\$28.53
<i>Total Low Priority Placer TART</i>		10,751	\$206,150	
<b>Total</b>		30,427	\$354,150	

Note 1: All Placer TART alternatives assume 116 days per winter season (mid-December through first weekend in April), 68 days per summer season (last weekend in June through Labor Day), and 181 days of spring/fall seasons

Note 2: Requires full additional run on 89 Route. 267 Route costs are incremental over cost of current deadhead runs to Crystal Bay.

## Truckee TART Systems Plan

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This chapter presents a long-range vision for the Truckee TART system. It is intended to be consistent with the *Placer County TART Systems Plan*, with regards to the days of service, hours of service, and fares. The individual plan elements are first presented, followed by a prioritization of improvements.

### Service Plan

#### Establish New Neighborhood Routes

New routes would be established to serve Truckee residential neighborhoods. Each of these routes would consist of a fixed route, as well as “On Demand” stops off of the fixed route. The fixed route is intended to stay on the more major roads, serving signed stops every 1/8 to 1/4 mile. “On Demand” stops would be identified in other areas with lower potential demand, further than a 1/4 mile walk from the route<sup>1</sup>. To request a pickup at these stops, passengers would call or text the transit dispatcher prior to the departure of the run. For a drop-off, passengers would simply inform the driver on entering the bus. In addition, if a pattern emerges of frequent requests on a specific run (such as for school trips), a standing request can be established whereby the stop is always served on the specific run. The advantages of this strategy are that (1) a greater area can be served within a specific overall run schedule time (2) transit vehicle movements on lower volume streets only occur when a passenger is actually being served, and (3) overall transit mileage, and associated costs, are reduced.

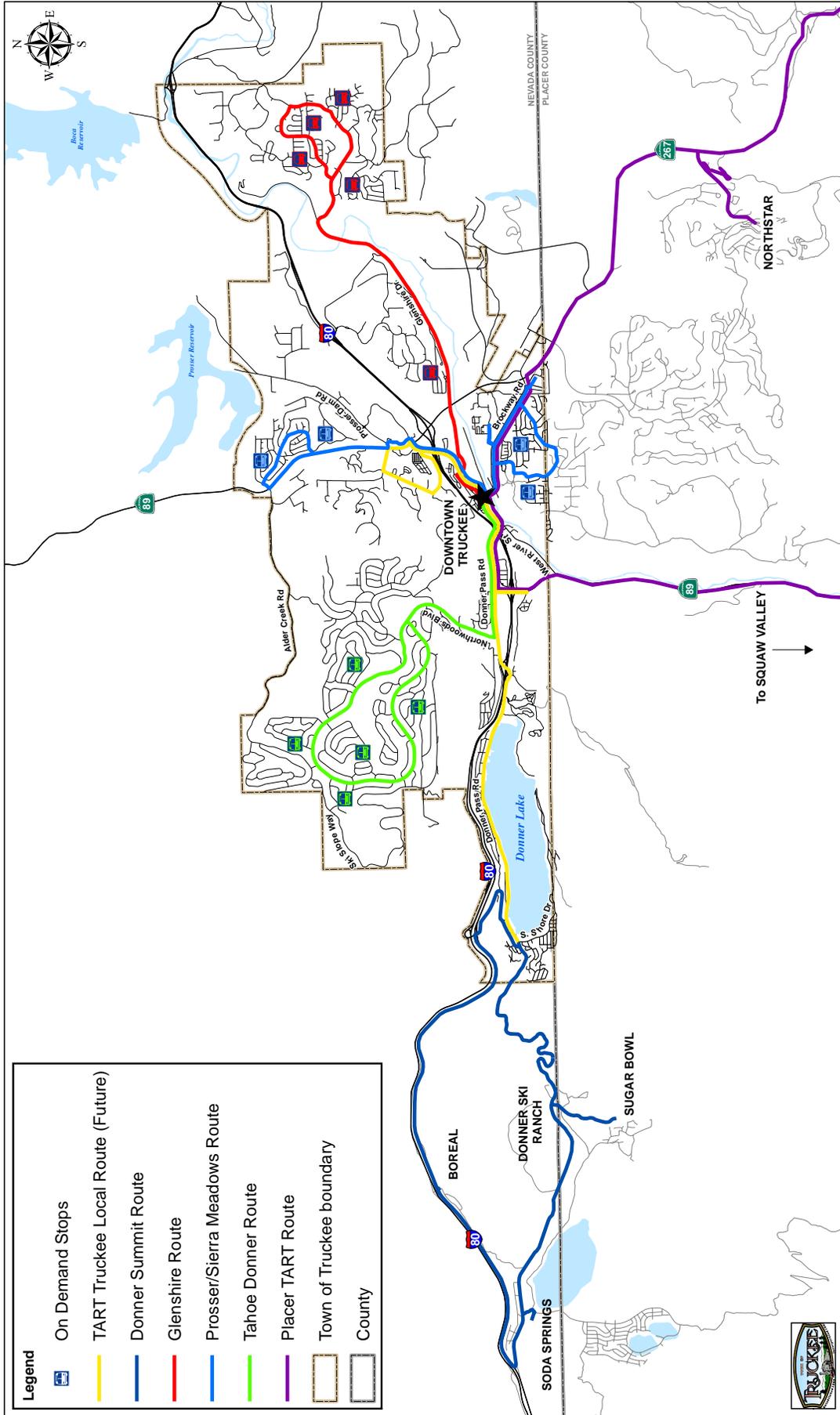
As shown in Figure 1, the following new routes would serve Truckee’s various residential neighborhoods:

- A **Glenshire Route** would connect downtown with Glenshire via Olympic Heights. It would travel along Donner Pass Road, Glenshire Road and Dorchester Drive. On Demand stops would be located in outlying areas, such as Devonshire. In addition, On Demand stops in Olympic Heights would allow residents to avoid the need to cross Glenshire Drive on foot. When Church Street is extended eastward to connect directly with Glenshire Road, this route could directly serve stops through the Railyard core. One bus could provide hourly service.
- A **Prosser Lakeview Route** would travel north on SR 89 and serve a loop along Rainbow Drive and Alder Creek Road. On Demand stops could offer service to the northeastern portion of this neighborhood, as well as to Gray’s Crossing.

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<sup>1</sup> Truckee TART currently uses this strategy for the Truckee Tahoe Airport, as well as Hampton Inn. It has also long been used by the Gold Country Stage in the Grass Valley/Nevada City area.

**Figure 1: Long-Range Truckee TART System**



- A **Sierra Meadows Route** would travel out of downtown via Brockway Road, and serve a loop along Martis Valley Road, Ponderosa Drive and Palisades Drive. On Demand stops west of this route and within the loop would expand the overall service area. In addition, this route would directly serve the Senior Apartments. This route and the Prosser Lakeview Route could be operated on an hourly basis using a single bus. On Demand stops could also be served at the Truckee Tahoe Airport and the Hampton Inn, if Placer TART service is not considered to be sufficient.
- A **Tahoe Donner Route** would travel west out of downtown on Donner Pass Road, and follow Northwoods Boulevard through Tahoe Donner. A relatively high number of On Demand stops would serve residences in the more remote areas of the neighborhood, as well as the ski base areas. Hourly service would be provided using one bus.

With these routes, and with consistent TART year-round service along Brockway Road, the existing fixed route could be modified to no longer travel over the 267 Bypass. This could in turn provide running time (within an hourly cycle for each vehicle) to serve new stops near Donner Pass Road, such as the Railyard project.

Optimally, these routes would be operated in a “pulse” configuration, whereby they are scheduled so that buses are at the common Truckee Train Depot hub at the same time (such as 30 minutes past the top of the hour) in order to allow passengers to make direct transfers between the various routes without waiting outside a vehicle. The various vehicles then “pulse” out onto the various routes, before returning to the train station to start the next schedule cycle. This will depend on specific scheduling constraints, as well as potential constraints on the number of peak transit vehicles that can be accommodated at the train station at one time.

#### Increase Service Frequency along the Donner Pass Road Corridor

The existing Truckee local route would be renamed (to something such as the “Main Line Route”). Service frequency should be increased from the current hourly schedule to half-hourly service during the daytime. This substantially increases the convenience of public transit service, and improves the ability to coordinate this key route with the neighborhood routes.

#### Provide Evening Service

Consistent with the *Placer TART Systems Plan*, service should be provided until approximately 9:30 PM during the spring and fall, and until approximately 2:00 AM in the winter and summer. The extended hours in the busy visitor seasons would provide access between lodging properties and residential areas to commercial centers (such as Commercial Row) for evening dining and entertainment, as well as for employment. While shorter evening hours would be more efficient in the off-seasons, evening service is still important for employment and educational purposes in particular, and to allow Truckee residents to form year-round transit ridership patterns.

### Start Daily Service Earlier in the Non-Winter Months

At present, Truckee TART starts service at 9:00 AM. Under this plan, service will start at 7:00 AM, thereby providing access to morning employment start times and connecting service to Placer County TART.

### Provide Service 7 Days a Week, Year-Round

In spring, summer and fall, Truckee TART currently operates Monday through Saturday only. Under this plan, both fixed route and Dial-A-Ride service would be operated seven days a week, throughout the year. Experience in other resort transit programs indicates that Sunday ridership is only modestly lower than ridership on the remainder of the days of the week, particularly in summer and winter.

### Improve Donner Summit Service

Contingent upon funding from Placer County, Nevada County and the Donner Summit Resorts, service in winter should be expanded from the current six runs per day to a consistent hourly service over a 12-hour daytime service period. Service should also be provided during summer days as well.

### Extend the Winter Operating Season

The Truckee TART calendar should be modified so that winter services (currently operated from mid-December through mid-March) are extended to operate through the first week of April. The length of the summer season should be consistent with the *Placer TART Systems Plan* element providing summer service levels from mid-June through mid-September.

### Eliminate Fares on Fixed Route Services and for ADA-Eligible Passengers on Dial-A-Ride

Consistent with other similar mountain resorts, fares would be eliminated on all fixed-route services. To be consistent with the Americans with Disabilities Act, passengers certified as unable to use the fixed route service due to disability would be provided with free boarding of the Dial-A-Ride service. To control costs, fares would continue to be charged on DAR service for persons not eligible under ADA.

### Expand Dial-A-Ride Service

This plan will expand Dial-A-Ride service parallel with growth in Truckee. In addition, the Dial-A-Ride service will be needed to provide complementary paratransit service within  $\frac{3}{4}$  miles of all fixed routes, consistent with the requirements of the Americans with Disabilities Act. Overall, Dial-A-Ride service (as measured by vehicle-hours) would expand by 88 percent over current levels.

## Service Plan Prioritization

Through a robust public input and review process, the various plan elements were discussed and evaluated. This included a review of incremental implementation (such as expanding specific services only during peak visitor periods as an initial implementation step). The resulting prioritization is shown in Table 4, reflecting the following priority levels:

<b>TABLE 4: Prioritization of Truckee TART Service Improvements</b>					
Implemen- tation Order	Truckee TART Service Alternatives	Annual Ridership	Annual Marginal Operating Subsidy	Subsidy per Passenger Trip	
<b>High Priority: Short-Term within 5 Years</b>					
1	Elimination of Fares on Truckee TART	7,700	\$35,000	\$4.55	
2	Mainline - Additional Hours, Non-Winter, 6 Days/Week, 7:00 AM to 9:00 AM & 5:00 PM to 6:00	28,133	\$111,700	\$3.97	
3	Neighborhood Summer/Winter Service, 5:30 PM to 11:00 PM	Tahoe Donner	5,879	\$90,500	\$15.39
		Glenshire	5,793	\$91,200	\$15.74
		Prosser/Sierra	7,121	\$89,200	\$12.53
		<i>Subtotal</i>	18,794	\$270,900	\$14.41
4	Mainline - Summer/Winter, 6:00 PM to 11:00 PM	5,150	\$87,500	\$16.99	
5	Peak Winter Daytime Neighborhood Service (2)	Tahoe Donner	7,352	\$36,300	\$4.94
		Glenshire	7,629	\$36,600	\$4.80
		Prosser/Sierra	8,933	\$35,700	\$4.00
		<i>Subtotal</i>	23,915	\$108,600	\$4.54
<i>Total High Priority Truckee TART</i>		83,692	\$613,700		
<b>Medium Priority: Mid-Term within 10 Years</b>					
6	Non-Winter Sunday Main Line and DAR Service	1,635	\$80,100	\$49.00	
7	Expand Winter Season From 88 to 116 Days	1,278	\$45,500	\$35.60	
8	Spring/Fall, 5:30 PM to 11:00 PM	Tahoe Donner	2,906	\$78,000	\$26.85
		Glenshire	2,457	\$78,600	\$32.00
		Prosser/Sierra	3,574	\$76,900	\$21.52
		<i>Subtotal</i>	8,936	\$233,500	\$26.13
9	Mainline - Spring/Fall, 6:00 PM to 11:00 PM	4,288	\$75,500	\$17.61	
<i>Total Medium Priority Truckee TART</i>		16,137	\$434,600		
<b>Low Priority: Long-Term within 20 Years</b>					
10	Year-Round Neighborhood Service, 6:30 AM to 5:30 PM (3)	Tahoe Donner	29,948	\$329,000	\$10.99
		Glenshire	27,771	\$331,200	\$11.93
		Prosser/Sierra	36,667	\$324,100	\$8.84
		<i>Subtotal</i>	94,385	\$984,300	\$10.43
<i>Total Low Priority Truckee TART</i>		94,385	\$984,300		
<b>Total Prioritized Truckee TART</b>		194,214	\$2,032,600		
<b>Non-Prioritized Services</b>					
Donner Summit Service: Add Summer Service		4,200	\$106,100	\$25.26	
All Truckee TART Services on 30 Minute Headways		92,197	\$3,026,700	\$32.83	
Note 1: Includes Dial-A-Ride expansion costs and ridership					
Note 2: Operates 7:00 AM to 5:30 PM, all Saturdays and Sundays from mid-December through mid-March, weekdays in last week of December and first week of January, MLK Birthday, and Presidents Day (total of 38 days)					
Note 3: Beyond Winter Peak Season Daytime Service					

- **High priority** improvements consist of the elimination of transit fares (other than for non-ADA Dial-A-Ride and NTTT passengers), initiation of neighborhood route service during the evenings in summer and winter and during the daytime on peak winter days, and expansion of the Mainline Route service hours. A schedule of the peak winter days of neighborhood service is shown in Table 5.

**TABLE 5: Peak Winter Neighborhood Service Calendar**

Week Beginning	Su	Mo	Tu	We	Th	Fr	Sa
12/11/2017							
12/18/2017							
12/25/2017							
1/1/2018							
1/8/2018							
1/15/2018							
1/22/2018							
1/29/2018							
2/5/2018							
2/12/2018							
2/19/2018							
2/26/2018							
3/5/2018							
3/12/2018							

- **Medium priority** improvements will provide Sunday service year-round, expand the length of the winter season, and provide evening service in the spring and fall.
- **Low priority** improvements will provide year-round daytime service on the neighborhood routes.

In addition, Donner Summit summer service is included in the plan but not prioritized (as it depends on funding partners on the summit), as is improvement in service frequency to 30-minute service.

### Service Cost Projections

The annual vehicle-hours and vehicle-miles of service associated with the various service expansions were calculated for full buildout, as provided in Appendix B. The existing service cost equation shown in Table 2 was then applied to these figures, resulting in the operating cost

estimates (in FY 2015/16 dollars)<sup>2</sup>. The proportion of costs associated with the various specific elements identified in Table 4 were then calculated.

## Ridership Forecasts

Future ridership on the expanded Truckee TART system was estimated as follows, and as provided in Appendix B:

- First, the ridership generated by the current service plan given future development of Truckee was estimated. The Truckee TransCAD transportation model land use datasets were reviewed to identify the existing number of single-family homes and multifamily homes (including mobile homes) in Truckee<sup>3</sup>, as well as the number of units at buildout of the Truckee General Plan. Transit trip generation rates were identified for current Truckee conditions based on observed transit ridership (such as is shown in Appendix A) divided by the number of residential units in each boarding area. Applying these rates to the forecast development, by General Plan buildout the annual Dial-A-Ride boardings are forecast to increase by 5,380, or 71 percent above current levels. Similarly, the ridership in the existing fixed route service corridor is forecast to increase by 17,680 boardings per year, or 121 percent.
- Similarly, fixed-route ridership can be estimated for the expanded service areas, again assuming no change in the current quality of service (span of service, fare, frequency, etc.). Buildout residential development levels were drawn from the TransCAD files, while transit trip generation rates were adjusted by individual neighborhood based upon the proportion of permanent/seasonal housing. Annual fixed-route ridership under current quality of service is estimated to be highest for the Glenshire/Olympic Heights route, followed closely by the Tahoe Donner and Sierra Meadows routes, while ridership potential for the Prosser route is relatively low due to the smaller number of residential units (particularly multifamily units) and a relatively high proportion of seasonal homes.
- Next, the ridership benefits of the various service enhancements were evaluated. For each factor (headway, days of service, hours of service, and free fare), a factor was identified reflecting the proportionate change in ridership associated with the factor. Individual factors were defined as follows:
  - The impact of schedule headway (e.g. service frequency) change was evaluated using elasticity analysis. This is based on the field of microeconomics, and considers the change in ridership in relationship with the change in service headway observed at many other transit systems in similar settings. An

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<sup>2</sup> Note that this cost equation assumes no change from the current contracted service strategy.

<sup>3</sup> These two categories of residential land uses were evaluated, reflecting that multifamily residential units generate transit ridership at a higher rate than do single family units.

additional increase was included for the Donner Summit service, reflecting the proven ridership increase associated with operating a convenient and easy-to-remember hourly service without breaks.

- The ridership growth associated with the addition of Sunday service in the non-Winter months was assessed by considering the ratio of Sunday ridership to that on other days of the week in the Placer County TART program.
- Growth in fixed-route ridership associated with the expansion in the hours of service was based on an evaluation of ridership by hour (by season) for the Placer County TART service as well as the Eastern Sierra Transit Authority routes serving the Mammoth Lakes area. A similar evaluation of Dial-A-Ride ridership by hour was conducted based on data from the Yuba-Sutter Transit Authority.
- Transit services that have shifted from fare systems to free-fare have generally seen ridership increases on the order of 50 percent. The most recent examples are Corvallis, Oregon (which saw a 43 percent increase in ridership in the first two months after elimination of fares in 2011) and the Mountainline system in Missoula, Montana (which only eliminated fares in January 2015, but which saw a 50 percent increase in ridership after six months). Given the additional convenience of free-fare service to visitors to Truckee, a 50 percent ridership increase is reasonable. As free fares on DAR would be provided only to persons eligible under the Americans with Disabilities Act, the impact on DAR ridership would be relatively small.
- As there is no available data regarding summer vs. winter activity in the Donner Summit area, daily ridership generated in the Squaw Valley and Northstar areas was reviewed to identify an appropriate ratio of summer to winter ridership (assuming similar seasonal patterns), and applied to the winter ridership forecast to estimate potential summer ridership.
- North Tahoe Truckee Transport program ridership is forecast to grow both due to development, as well as the fact that the first-year ridership on a new transit program typically only represents on the order of 60 percent of the full ridership potential.

The total potential ridership for each service element was then factored to reflect the span of service in each of the specific prioritization/implementation steps, as shown in Table 4.

Total annual Truckee TART ridership at full implementation of this plan (and buildout of the General Plan) is estimated to equal 313,200, as shown in Table 6. Overall, this forecast ridership represents a 14-fold increase over current ridership. Including ridership increases on Placer County TART services in Truckee, total transit ridership on all services would be 383,300 per year.

**TABLE 6: Summary of Long-Range Truckee Transit Program**

*Excluding Truckee Thursdays and Holiday Shuttles*

	Annual Ridership	Annual Cost	Annual Fare Revenue	Annual Subsidy (2)
<b>Truckee TART Services</b>				
Existing	22,200	\$867,900	\$7,500	\$860,400
Total Prioritized Service Expansion	194,200	\$2,032,600	\$0	\$2,032,600
Total Non-Prioritized Service Expansion	96,400	\$3,132,800	\$0	\$3,132,800
<b>Total</b>	<b>312,800</b>	<b>\$6,033,300</b>	<b>\$0</b>	<b>\$6,033,300</b>
North Tahoe Truckee Transport (1)	400	\$17,100	\$2,500	\$14,600
Additional Senior Administrative Position	--	\$140,000	--	\$140,000
<b>Total Truckee TART</b>	<b>313,200</b>	<b>\$6,190,400</b>	<b>\$10,000</b>	<b>\$6,187,900</b>
<b>Placer County TART Serving Truckee</b>				
Existing	39,700		\$0	\$166,100
Total Service Expansion	30,400		\$0	\$354,200
<b>Total</b>	<b>70,100</b>		<b>\$0</b>	<b>\$520,300</b>
<b>Total Transit in Truckee</b>	<b>383,300</b>	<b>\$6,710,700</b>	<b>\$10,000</b>	<b>\$6,708,200</b>
<b>ANNUAL LOCAL CAPITAL COSTS</b>				<b>\$73,000</b>
<b>TOTAL ANNUAL</b>				<b>\$6,781,200</b>
Note 1: FY 2015/16 dollars, unadjusted for future inflation.				
Note 2: Costs minus fare revenues. Figures for Placer County TART in Truckee represent the Town's annual subsidy.				

While this large proportionate increase over current ridership may seem dramatic, the total future ridership figure is well within the ridership observed in other mountain resort areas. As points of comparison, the annual transit ridership for local (as opposed to regional) transit services in other mountain resort communities is as follows:

- Mammoth Lakes, California – 0.7 Million boardings per year
- Park City, Utah – 1.8 Million boardings per year
- Aspen, Colorado – 1.1 Million boardings per year
- Vail, Colorado – 3.2 Million boardings per year

### Capital Improvements

Truckee's transit capital inventory currently consists of a fleet of six vehicles, 35 signed bus stops, of which 8 are provided with shelters. As shown in the top portion of Table 7, applying typical length of useful life for each capital asset, this inventory results in an annualized capital cost of \$106,200 per year. There are a variety of state and federal sources available for capital

funding of public transit improvements in rural areas. The largest funding opportunities require a minimum of 20 percent “local match” (defined as the proportion funded through other funding programs). Applying this proportion, the local responsibilities for existing capital improvements are estimated to equal \$21,000 per year.

<b>TABLE 7: Truckee TART Existing and Long-Range Capital Costs</b>						
			Total Units	Unit Cost	Useful Life (Years)	Annualized Total Cost
<b>Existing Capital Inventory</b>						
Vehicles	Peak in Service Spares					
Medium Buses (25-30 foot)	2	1	3	\$111,000	7	\$48,000
Vans / Small Buses	2	1	3	\$84,100	7	\$36,000
<i>Subtotal</i>	4	2	6			\$84,000
<b>Transit Stop Improvements</b>						
Shelters			8	\$55,000		\$440,000
Signs			35	\$114		\$4,000
<i>Subtotal</i>					20	\$444,000
Total Annual Average Capital Costs						\$106,200
Estimate of Required Annual Average Local Share						20% \$21,000
<b>Long-Range Plan Requirements</b>						
<b>Vehicles</b>						
Large Buses (35-foot and up)	2	1	3	\$533,000	12	\$133,000
Medium Buses (25-30 foot)	4	1	5	\$115,000	7	\$82,000
Vans / Small Buses	3	1	4	\$84,100	7	\$48,000
<i>Subtotal</i>	9	3	12			\$263,000
<b>Passenger Facilities</b>						
New Transit Hub					20	\$1,000,000
<b>Key Transit Stop Improvements</b>						
Shelters			18	\$55,000		\$990,000
Pullouts			2	\$25,000		\$50,000
Benches			10	\$800		\$8,000
Signs			111	\$200		\$22,200
<i>Subtotal</i>					20	\$1,070,200
Total Annual Average Capital Costs						\$366,510
Estimate of Required Annual Average Local Share						20% \$73,000
Net Impact of Plan on Annual Average Local Share						\$52,000

The following capital improvements will be necessary to achieve this plan, as summarized in the bottom portion of Table 7.

**Fleet**

At full implementation of this plan a total of up to nine vehicles will be in operation at peak times – three in Dial-A-Ride service plus six in fixed-route service. The Mainline and Donner Summit routes will ultimately generate ridership that will warrant a full-size (35-foot to 40-foot-long) bus. Peak loads on the neighborhood routes are expected to remain within the capacity

of a smaller (25-foot to 30-foot) vehicle, which is more appropriate for neighborhood streets. Dial-A-Ride vehicles will continue to consist of smaller vans. Including one spare vehicle in each category, a total fleet of 12 vehicles will be required.

Ultimately, some of the Truckee TART fleet could consist of battery electric buses. Improvements in battery technology (led in large part by research conducted for automobiles) have begun to address the range limitations in electric battery buses to the point where some all-electric (non-hybrid) bus models can travel 200 to 350 miles or more on a single charge. This is well in excess of the daily mileage for some of the planned neighborhood routes, making electric vehicles a potentially feasible option so long as adequate heating can be provided. While per-unit costs are presently high (in the range of \$750,000), future advances and the benefits of mass production may bring prices down to the point where they are a viable option for local transit services. The Town should monitor advances in this technology, and consider this alternative prior to future bus procurements.

Assuming a fossil-fuel fleet, the annualized costs of the expanded vehicle fleet is shown in the top portion of Table 7. Applying existing unit costs as well as the typical useful life for each vehicle type, the average annual costs associated with vehicle purchases is estimated to be \$263,000.

### Passenger Facilities

The following bus stop and other passenger facility improvements will be warranted:

- At total of approximately 76 new bus stops will need to be signed along the additional routes (including On Demand stops), based on standard transit stop spacing standards. Of these, an estimated 10 will warrant provision of a shelter (with bench), and an additional 10 will warrant provision of a bench only. Bus pullouts are also currently warranted along Brockway Road at Cedar House and the Regional Park. At current unit costs, these improvements will require \$623,200 to construct. Added to the current stop improvement value, the total value of the improvements will be \$1,070,200.
- The expansion of the transit program will increase the space required for a transit center beyond the reasonable capacity of the Truckee Train Depot (or another nearby location). As discussed above, a pulse schedule would be optimal. This could result in the following peak number of buses at one time:

Mainline	1 bus
Glenshire Route	1 bus
Tahoe Donner Route	1 bus
Prosser/Sierra Meadows Route	1 bus
SR 89 Placer TART Route	1 bus
SR 267 Placer TART Route	<u>1 bus</u>
Total	6 buses

In addition, at least one space would be needed for intercity (Greyhound, Amtrak Thruway, etc.) buses. Accommodating seven buses at the Depot would require reconfiguration of existing driveways and parking areas (such as use of the existing parking area west of the Depot building for transit) that would result in a substantial loss of parking and other impacts that would be an overall detriment to downtown. A review of potential options identified that the preferred location of a new transit center would be within the Railyard project. This is based on the following key factors:

- **Convenient walking distance to transit generators** -- As the Transit Center is the single most accessible point on the local and regional transit network, it is important that it be convenient to as many destinations as possible. While passengers could potentially transfer to another route to reach destinations in downtown from a remote location, the need to transfer reduces the overall convenience of using public transit. A Railyard site would be within a few hundred yard walk of existing Commercial Row, as well as a convenient walk to the Community Arts Center and the future Railyard land uses.
- **Impact on transit operations** – It is important to avoid significant increases in transit operating costs as a result of out-of-direction travel, or increases in running time that impacts the ability to provide convenient schedules. The Railyard site would have only minimal impacts on these factors.
- **Ability to accommodate the transit program** -- The ability to provide adequate space for the desired transit program is key, in a configuration that avoids delays to transit operations. This ability is provided on the Railyard site.
- **Compatibility** -- The location should be compatible with adjacent land uses (particularly residential or other uses sensitive to noise impacts) and does not result in traffic or other environmental impacts. A transit center is consistent with planned land uses in the Railyard project area.
- **Consistency with downtown and Town plans.** A transit center has been identified as a potential use in the Railyard Master Plan.

For purposes of this plan, \$1,000,000 is included to construct a new transit hub.

### Park-and-Ride Lots

Park-and-Ride lots can be a very effective element of a transit program, particularly for longer trips and for trips to locations with constrained or costly parking. They are also useful in areas (such as Truckee) with large areas of lower density residential development, as they provide residents with an opportunity to conveniently access transit stops for longer trips. In Truckee, a particularly strong opportunity exists for park-and-ride lots to serve trips using the

Neighborhood Routes to the ski resorts and to special events in downtown Truckee. In addition to serving trips to the ski resorts in Placer County and on Donner Summit, park-and-ride lots along Donner Pass Road can serve the substantial number of Tahoe Donner skiers that drive from outside the immediate neighborhood.

Rather than incurring the cost and community impacts of new park-and-ride lots, this plan focuses on shared use of existing parking areas. Fortunately, the fact that the peak potential times for park-and-ride activity occurs on weekends, holidays and in the evenings allows many existing parking areas to be potentially used for transit purposes, such as the following:

- School District parking areas. The parking areas serving the District offices and the High School are particularly convenient for park-and-ride use for the Squaw Valley, Donner Summit and Tahoe Donner winter resorts.
- The Rodeo Grounds parking area, convenient for service to Northstar California as well as for downtown special events.
- Golf course parking areas.

Use of these facilities will require agreements between the Town and the parking lot owner, as well as signage and other marketing efforts to ensure their effective use.

### Operations Facility

This plan assumes that adequate vehicle parking, maintenance and fueling capacity exists to accommodate the expanded fleet.

### Total Annual Capital Costs and Local Share

Assuming that passenger facilities are constructed over a 20-year period, and adding the annualized costs of vehicles, the average annual capital costs to support this plan total \$366,510, as shown in Table 7. Applying the same “local match” proportion discussed above, the local responsibilities for capital improvements are estimated to equal \$73,000 per year. This represents a \$52,000 increase in annual average local share over current program requirements.

### **Total Program Summary**

Table 6, above, presents a summary of annual ridership and subsidy requirements (considering both the Truckee TART service as well as Placer County TART services). Total subsidy would equal an estimated \$6,781,200 per year in FY 2015/16 dollars, including operating costs for both Truckee TART and for Truckee’s portion of Placer County TART services, as well as annualized local capital costs. In addition, one Town senior administrative position was assumed to be necessary to increase oversight and grants management for this substantially

expanded program, adding to the annual operating costs. If the non-prioritized Truckee TART service expansion costs are excluded, the total annual cost equals \$3,648,400.

### **Potential Local Funding Sources**

The Truckee TART service already takes advantage of a variety of state and federal public transit funding programs, including the Federal Transit Administration's Section 5310 (Enhanced Mobility of Seniors and Individuals with Disabilities) and Section 5311 (Rural Area Formula Grants) programs and the state's Consolidated Transportation Services and State Transit Assistance programs. While there are other discretionary opportunities for bus purchases and other capital improvements, the state/federal opportunities for the more crucial issue of expanded operating funding are quite limited, due in part to Truckee's status as rural area (for purposes of federal transit funding). This means that the key financial challenge facing the expansion of transit services is how best to expand ongoing local/regional funding for transit operations. Potential new or expanded sources consist of the following:

- **Sales Tax** – Along with the rest of California, there is already an effective ¼ cent sales tax for transit services in Truckee (which funds the statewide Local Transportation Fund program). There is the opportunity for local-option “self help” additional sales taxes. Sales tax is the mainstay of funding for other mountain resort communities, including Aspen, Colorado (which imposes a total of 1.165 percent sales tax for transit). In California, increasing sales tax for a specified purpose requires a two-thirds voter approval.
- **Lodging/Transient Occupancy Tax** – A Transient Occupancy Tax (TOT) can generate funds for a wide variety of uses, including transit operations and capital needs. This is an important element of funding for Placer County's TART program. In Truckee, there is currently a 12 percent TOT tax rate (including 2 percent for the Truckee Tourism Business Improvement District). Transit funding could come from re-allocation of existing revenues, or an increase in the tax rate (which requires a simple majority). The expansion of evening services would be a logical use of TOT funding.
- **Business License Fees** – Annual business license fees are another potential source of ongoing transit funding. As an example, Park City collects a substantial proportion of the funding for their free-to-the-rider transit system through business license fees, such as an annual fee of \$0.33 per square foot on restaurant and retail establishments.
- **Impact Fee Programs** – As major developments have gone through the approval process, the Town of Truckee has been establishing ongoing annual fees on new construction. These are paid through property tax bills. As an example, the Gray's Crossing development (PC-2) is currently generating on the order of \$60,000 per year. As developments are constructed over time, this source can potentially become a significant element in the overall funding strategy, particularly if applied to additional developments, such as PC-1, PC-3 and the Railyard.

- **Private Funding** – Private partners can also be an important part of the funding mix, as evidenced by the Town’s ongoing partnership with the Donner Summit resorts. As a whole, the resorts contribute approximately \$82,000 per year to support the winter service. It is reasonable to assume that future expansion of transit services connecting Truckee with the Donner Summit area would be dependent on additional funding from Summit partners. In addition, the Truckee Tahoe Airport District is a potential funding partner for transit service enhancements.
- **Truckee Special Service Areas** – There are currently two active Truckee Special Service Areas (TSSAs): TSSA 1 covering the Tahoe Donner Area (which currently generates approximately \$590,000 per year) and TSSA 5 in the Glenshire area (currently generating approximately \$175,000 per year). A portion of these revenues could potentially be allocated to funding expansion of transit services into these neighborhoods.
- **General Fund** – Transit services are a valid use of municipal general fund monies. The transit systems serving Telluride and Steamboat Springs both are funded largely through their respective municipal general funds.

The most successful mountain resort transit programs use several local funding sources, in order to equitably spread the financial burden over the various elements of the community.

## Conclusion

This plan will expand the transit network serving Truckee to a level consistent with that provided in other successful mountain resort communities. In particular, it will expand transit access into all of Truckee’s residential neighborhoods, expand service frequency, and expand the hours that service is available. In addition, eliminating transit fares will substantially increase the usefulness and productivity of the transit system. As a whole, these improvements will increase Truckee TART transit ridership by approximately 291,000 passenger-trips per year – a factor of 14 times over existing ridership. It will also achieve many of the transportation goals identified in the *Truckee General Plan* and result in an improved transit hub, bus stop amenities, and transit fleet.

Local subsidy funding requirements will increase by an estimated \$5.7 Million per year (a factor of 5.6 over current levels), for local service enhancements, participation in regional service expansion, and capital improvements. In addition to existing funding sources, this will require new local public funding, fees and exactions on new development, and participation by funding partners such as the Airport District and ski resorts. The end result, however, will be a transit program that expands mobility options for Truckee residents, enhances the community’s role as a hub in the resort region, provides environmental benefits, and helps to grow the local economy.



**APPENDIX A**  
**Detailed Ridership Data**

**TABLE A1: Truckee TART Passengers by Month**  
Fiscal Year 2015-16

Month	Fixed Route	Dial-A-Ride
July	1,265	608
August	1,299	737
September	565	691
October	593	778
November	565	650
December	1,385	544
January	2,935	610
February	2,819	528
March	1,404	654
April	523	605
May	494	629
June	766	554
<b>Total</b>	<b>14,613</b>	<b>7,588</b>
Average Daily Annual	45	21
Average Daily Winter	80	19
Average Daily Non-Winter	32	21

Source: Town of Truckee

**TABLE A2: TART - Town of Truckee Fixed Route Winter and Non-Winter Passenger Activity By Stop**

Stop	Winter		Non-Winter	
	% of Total Passenger Boardings	Average Daily <sup>(1)</sup>	% of Total Passenger Activity	Average Daily <sup>(2)</sup>
Hennes Rd @ Hennes Flat Apt	2.4%	1.9	7.2%	2.3
Truckee Community Recreation Center	0.4%	0.3	0.0%	0.0
Pioneer Trail @ Forest Charter School / Choices	0.2%	0.1	0.0%	0.0
Alder Dr. @ Alder Creek Middle School	0.1%	0.1	0.0%	0.0
Brockway Rd @ Larkspur	0.8%	0.6	0.7%	0.2
Brockway Rd @ Reynold Way	0.6%	0.5	0.7%	0.2
Estates Dr @ Senior Apts	4.0%	3.2	4.1%	1.3
Brockway Rd @ Regional Park	0.8%	0.7	0.9%	0.3
Truckee Train Depot	4.0%	3.2	21.2%	6.7
Tahoe Forest Hospital	1.0%	0.8	18.3%	5.8
Donner Pass Rd @ Bank of America	3.3%	2.7	0.0%	0.0
Gateway Center (Safeway)	5.7%	4.5	1.7%	0.5
Deerfield Dr. @ Crossroads Center	1.5%	1.2	9.6%	3.1
Donner Pass Rd. @ 7-11	2.2%	1.8	7.0%	2.2
Donner Pass Rd. @ Northwoods Blvd.	0.6%	0.5	1.9%	0.6
Donner Pass Rd. @ Highway Rd.	1.3%	1.0	2.2%	0.7
Donner Pass Rd. @ Chevron	0.4%	0.3	0.6%	0.2
Donner Pass Rd. @ Donner Memorial State Park	1.1%	0.9	4.1%	1.3
Sticks Market	1.9%	1.5	6.8%	2.2
Donner Pass Rd @ South Shore Dr	9.1%	7.3	13.1%	4.2
Donner Summit	58.6%	46.7	--	--
<b>Total</b>	<b>100.0%</b>	<b>79.7</b>	<b>100.0%</b>	<b>31.8</b>

Note 1: Boarding data observed December 17, 2015 to March 13, 2016

Note 2: Boarding data observed March 16 to Dec 16, 2015

**TABLE A3 - Placer County TART Boarding & Alighting in Truckee - January through June, 2016**

	6:30 AM		7:30 AM		8:30 AM		9:30 AM		10:30 AM		11:30 AM		12:30 PM		1:30 PM		2:30 PM		3:30 PM		4:30 PM		TOTAL		% of Psgrs - Both Directions				
	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	Total		
	<b>Hwy 89 Northbound</b>	24	6	0	7	2	6	12	6	4	7	4	8	0	15	3	5	1	34	2	21	1	26	53	141	0.9%	2.0%	1.5%	
Hwy. 89 @ West River St.	3	41	4	143	2	50	2	39	3	65	7	46	3	39	3	39	3	132	2	48	5	50	37	695	0.6%	9.8%	5.5%		
Hwy. 89 @ Deerfield (College)	1	70	0	91	2	34	2	44	1	77	4	48	4	49	4	48	6	138	5	94	9	39	35	737	0.6%	10.4%	5.8%		
Hwy. 89 @ CHP Office	1	27	0	21	13	61	18	81	29	97	24	112	27	135	41	114	28	224	45	111	32	116	258	1099	4.2%	15.5%	10.3%		
Donner Pass Rd. B of A	4	0	0	25	7	47	5	58	14	22	9	26	9	39	1	39	18	92	17	27	12	34	96	412	1.6%	5.8%	3.8%		
Donner Pass Rd. @ Pine St. Hosp.	0	163	0	142	0	159	0	115	0	169	0	155	0	192	0	245	0	968	0	386	0	454	0	3148	0.0%	44.3%	23.8%		
Truckee Depot	33	311	4	429	26	357	39	352	51	404	45	424	43	471	52	490	56	1588	71	687	59	719	479	6232	51.4%	0.0%	23.7%		
<b>TOTAL</b>	1,004	0	284	0	220	0	201	0	176	0	235	0	215	0	194	0	231	0	209	0	165	0	3,134	0	51.4%	0.0%	23.7%		
<b>Hwy 89 Southbound</b>	29	7	6	6	15	18	13	15	22	11	12	10	15	9	23	7	28	8	11	7	7	3	181	101	3.0%	1.4%	2.1%		
Truckee Depot	216	31	42	18	49	24	56	24	89	53	103	53	141	55	137	30	153	37	137	19	109	55	1,232	399	20.2%	5.6%	12.3%		
Donner Pass Rd. @Hospital Offices	34	3	22	2	7	10	21	9	27	5	49	15	68	24	41	10	37	16	22	5	16	7	344	106	5.6%	1.5%	3.4%		
Donner Pass Rd. @ Safeway	119	10	52	21	35	11	36	12	47	15	123	26	53	37	49	17	38	16	52	10	51	10	655	185	10.7%	2.6%	6.4%		
Hwy. 89 between DMV & Freeway	25	0	4	1	8	5	1	2	3	1	3	9	13	4	2	17	6	34	1	5	7	12	73	90	1.2%	1.3%	1.2%		
Hwy. 89 @ Deerfield & Crossroad	1,427	51	410	48	334	68	328	62	364	85	525	113	505	129	446	81	493	111	432	46	355	87	5,619	881	10.7%	2.6%	6.4%		
Hwy. 89 West River St. trailer park	84	362	414	477	360	425	367	414	415	489	570	537	548	600	498	571	549	1,699	503	733	414	806	6,098	7,113	1.2%	1.3%	1.2%		
<b>TOTAL</b>	1,460	362	414	477	360	425	367	414	415	489	570	537	548	600	498	571	549	1,699	503	733	414	806	6,098	7,113	1.2%	1.3%	1.2%		
<b>Hwy 89 Total Both Directions</b>	84	362	414	477	360	425	367	414	415	489	570	537	548	600	498	571	549	1,699	503	733	414	806	6,098	7,113	1.2%	1.3%	1.2%		
Psg-r-Trips Wholly Within Truckee	1,654	787	597	579	632	791	804	804	632	791	804	804	804	804	804	804	804	804	804	804	804	804	804	804	804	1,360	1,360	10.4%	11.1%
Psg-r-Trips To/From Truckee	1,738	839	691	680	768	949	976	976	768	949	976	976	976	976	976	976	976	976	976	976	976	976	976	976	976	1,074	11,851	8.1%	14.9%
Total Psg-r-Trips in Truckee	5%	6%	14%	15%	18%	17%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	14%	11%	11%	
% Psg-r-Trips Within Truckee	95%	94%	86%	85%	82%	83%	83%	83%	83%	83%	83%	83%	83%	82%	86%	86%	92%	92%	90%	90%	86%	86%	89%	89%	89%	86%	89%		
% Psg-r-Trips To/From Truckee	3	1	5	11	1	3	6	3	1	4	5	0	4	1	4	3	18	5	12	12	12	3	76	38	1.8%	1.1%	1.5%		
<b>Hwy 267 Northbound</b>	2	2	7	9	0	7	4	2	11	4	3	3	1	12	4	14	1	90	2	21	0	12	35	176	0.8%	5.2%	2.8%		
Truckee Train Depot	3	15	12	2	10	7	6	1	4	0	3	7	5	13	4	17	1	32	6	35	11	65	140	2.7%	1.6%	4.2%			
Brookway Rd & Palisades Dr	5	3	8	2	6	19	5	21	10	13	2	13	1	34	1	34	3	35	6	42	4	20	51	216	1.2%	6.4%	3.6%		
Village Green (2nd Driveway)	4	4	9	1	4	1	6	1	5	4	7	3	3	7	2	6	3	8	11	15	0	12	54	62	1.3%	1.8%	1.5%		
Across from Best Western	20	21	11	24	3	10	11	4	6	21	4	8	4	29	4	23	8	58	17	191	1	54	89	443	2.2%	13.2%	7.1%		
Hampton Inn & Suites	0	150	0	226	0	95	0	168	0	210	0	130	0	198	0	149	0	253	0	274	0	145	0	1,998	0.0%	59.4%	26.6%		
Hampton Inn & Suites	37	196	48	269	34	140	35	203	39	253	24	164	18	294	19	226	34	481	54	590	28	257	370	3,073	0.0%	59.4%	26.6%		
Truckee Train Depot	319	0	163	0	173	0	163	0	161	0	128	0	178	0	180	0	264	0	308	0	275	0	2,312	0	55.9%	0.0%	30.8%		
Brookway Rd & Palisades Dr	211	1	139	2	47	1	29	0	38	2	32	6	13	7	33	7	24	11	33	8	9	5	608	50	14.7%	1.5%	8.8%		
Village Green (2nd Driveway)	3	0	12	0	4	0	3	2	5	0	10	4	3	2	3	6	10	16	1	11	4	9	58	50	1.4%	1.5%	1.4%		
Across from Best Western	70	0	70	0	27	4	55	5	24	5	11	16	3	7	22	9	12	15	20	12	19	8	333	81	8.1%	2.4%	5.5%		
Hampton Inn & Suites	12	0	76	2	38	4	21	1	16	1	3	3	7	12	13	3	7	12	11	2	16	6	220	35	5.3%	1.0%	3.4%		
Across from Village Green	0	0	9	0	7	0	3	0	1	0	2	4	6	0	4	2	8	4	1	5	9	3	50	18	1.2%	0.5%	0.9%		
Hampton Inn & Suites	4	3	15	0	45	2	29	7	29	6	13	6	3	4	3	2	19	17	14	3	11	7	185	57	4.5%	1.7%	3.2%		
Truckee Train Depot	619	4	484	4	341	11	303	15	274	14	199	39	213	21	258	29	344	75	388	41	343	38	3,766	291	0.0%	59.4%	26.6%		
Truckee Train Depot	656	200	532	273	375	151	338	218	313	267	223	203	231	315	277	255	378	556	442	631	371	295	4,136	3,364	55.9%	0.0%	30.8%		
Truckee Train Depot	38	51	34	47	34	47	47	47	50	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	58	
Brookway Rd & Palisades Dr	777	702	447	459	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	
Village Green (2nd Driveway)	815	753	481	481	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	506	
Across from Best Western	5%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%		
Hampton Inn & Suites	95%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%		
Truckee Train Depot	122	431	103	128	148	148	148	148	186	186	216	216	207	177	177	177	258	2,648	2,007	2,007	200	1,945	16,745	18,690	1.2%	10%	10%		
Brookway Rd & Palisades Dr	2,431	1,489	1,044	1,044	1,038	1,038	1,038	1,109	1,109	1,096	1,096	1,276	1,243	1,243	1,243	1,243	2,906	2,906	2,906	2,906	2,906	2,906	2,906	2,906	2,906	2,906	2,906	2,906	
Village Green (2nd Driveway)	2,553	1,592	1,172	1,172	1,186	1,186	1,186	1,295	1,312	1,312	1,483	1,483	1,483	1,483	1,483	1,483	2,906	2,906	2,906	2,906	2,906	2,906	2,906	2,906	2,906	2,906	2,906	2,906	
Across from Best Western	5%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%		
Hampton Inn & Suites	95%	94%	89%	89%	88%	88%	88%	86%	86%	84%	84%	86%	86%	88%	88%	88%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%	91%		
Truckee Train Depot	95%	94%	89%	89%	88																								

**APPENDIX B**  
**Detailed Service, Cost and Ridership Forecast Tables**

**TABLE B1: Long-Range Truckee TART Operating Plan**

All Costs in FY 2015/16 Dollars

Route/Season	Span of Service		Frequency	# Vehicles In Operation	Revenue Hours		Annual Revenue Vehicle-Miles	Marginal Operating Cost
	Days/Yr	From To			Per Day	Annual		
<b>Mainline (Donner Pass Road)</b>								
Year-Round	365	7:00 AM 5:30 PM	30 Min	2	21	7,665	148,500	\$741,800
Summer, Winter	209	5:30 PM 2:00 AM	Hourly	1	8.5	1,777	34,400	\$171,900
Spring, Fall	156	5:30 PM 9:30 PM	Hourly	1	4	624	12,100	\$60,400
Subtotal						10,066	195,000	\$974,100
<b>Donner Summit Service</b>								
Winter	116	7:00 AM 6:30 PM	Hourly	1	11.5	1,334	23,600	\$126,700
Summer	93	6:30 AM 6:30 PM	Hourly	1	11.5	1,070	18,900	\$101,600
Subtotal						2,404	42,500	\$228,300
<b>Glenshire / Olympic Heights</b>								
Summer, Winter	209	7:00 AM 2:00 AM	Hourly	1	19	3,971	57,600	\$363,800
Spring, Fall	156	7:00 AM 9:30 PM	Hourly	1	14.5	2,262	32,800	\$207,200
Subtotal						6,233	90,400	\$571,100
<b>Prosser / Sierra Meadows / Palisades</b>								
Summer, Winter	209	7:00 AM 2:00 AM	Hourly	1	19	3,971	50,000	\$355,800
Spring, Fall	156	7:00 AM 9:30 PM	Hourly	1	14.5	2,262	28,500	\$202,700
Subtotal						6,233	78,500	\$558,500
<b>Tahoe Donner</b>								
Summer, Winter	209	7:00 AM 2:00 AM	Hourly	1	19	3,971	55,200	\$361,300
Spring, Fall	156	7:00 AM 9:30 PM	Hourly	1	14.5	2,262	31,400	\$205,800
Subtotal						6,233	86,600	\$567,100
<b>Total Fixed Route</b>				<b>6</b>		<b>31,168</b>	<b>493,000</b>	<b>\$2,899,000</b>
<b>Dial-A-Ride</b>								
Weekday Peak Periods	255	7:30 AM 4:30 PM	--	3	18	4,590	61,500	
Weekday Off Peak Periods	255	4:30 PM 8:30 PM	--	1	5	1,275	17,100	
Weekends	110	7:30 AM 7:30 PM	--	1	12	1,320	17,700	
Total				<b>3</b>		<b>7,185</b>	<b>96,300</b>	<b>\$649,900</b>
<b>Total Truckee TART</b>				<b>9</b>		<b>38,353</b>	<b>589,300</b>	<b>\$3,548,900</b>
								<b>Fixed Costs</b>
								Existing
								Additional Senior Administrative Position
								Subtotal: Fixed
								<b>TOTAL ANNUAL COST</b>
								<b>\$3,868,000</b>

**TABLE B2: Impact of Growth in Truckee on Transit Demand**

Based on General Plan Buildout  
Assuming Hourly Fare Service Over Current Service Span

	# of Units <sup>(1)</sup>		Growth		Daily Transit Trip Rate		Daily Ridership at Buildout		Total Annual	
	2009	Buildout	#	%	Winter	Non-Winter	Winter	Non-Winter		
<b>Dial-A-Ride -- Townwide</b>										
Single Family Homes	9,064	15,527	6,463	71%	0.002	0.002	10.4	10.4	3,810	
Multifamily/Mobile Homes	2,143	4,804	2,661	124%	0.002	0.002	4.3	4.3	1,570	
<b>Total</b>	<b>11,207</b>	<b>20,331</b>	<b>9,124</b>	<b>81%</b>					<b>5,380</b>	
<b>Fixed Route Ridership: Within Existing Fixed Route Transit Service Area</b>										
Single Family Homes	1,591	2,732	1,141	72%	0.030	0.010	34.4	11.0	5,650	
Multifamily/Mobile Homes	862	2,224	1,362	158%	0.024	0.028	32.6	38.3	12,030	
<b>Total</b>	<b>2,453</b>	<b>4,955</b>	<b>2,503</b>	<b>102%</b>			<b>67.1</b>	<b>49.3</b>	<b>17,680</b>	
<b>Outside of Existing Fixed Route Transit Service Area</b>										
<u>Glenshire./Olympic Heights</u>										
Single Family Homes	1,589	2,275	686	43%	0.056	0.018	126.9	40.4	20,820	
Multifamily/Mobile Homes	22	34	12	57%	0.044	0.052	1.5	1.8	560	
<b>Total</b>	<b>1,611</b>	<b>2,309</b>	<b>699</b>	<b>43%</b>			<b>128.4</b>	<b>42.2</b>	<b>21,380</b>	
<u>Prosser</u>										
Single Family Homes	617	975	358	58%	0.043	0.014	41.6	13.2	6,820	
Multifamily/Mobile Homes	2	8	6	300%	0.034	0.040	0.3	0.3	100	
<b>Total</b>	<b>619</b>	<b>983</b>	<b>364</b>	<b>59%</b>			<b>41.8</b>	<b>13.5</b>	<b>6,920</b>	
<u>Sierra Meadows/Ponderosa Palisades</u>										
Single Family Homes	928	1,139	211	23%	0.059	0.019	67.1	21.4	11,010	
Multifamily/Mobile Homes	209	240	31	15%	0.047	0.055	11.2	13.2	4,140	
<b>Total</b>	<b>1,137</b>	<b>1,379</b>	<b>242</b>	<b>21%</b>			<b>78.3</b>	<b>34.6</b>	<b>15,150</b>	
<u>Tahoe Donner</u>										
Single Family Homes	4,175	4,834	659	16%	0.019	0.006	89.7	28.5	14,710	
Multifamily/Mobile Homes	521	608	87	17%	0.015	0.017	9.0	10.5	3,300	
<b>Total</b>	<b>4,696</b>	<b>5,442</b>	<b>746</b>	<b>16%</b>			<b>98.6</b>	<b>39.1</b>	<b>18,010</b>	

Note 1: Town of Truckee TransCAD traffic model land use files, factored by proportion of area within transit service area.

**TABLE B3: Buildout Truckee TART Ridership With Service Enhancements**

Route	Base Ridership	Plan Ridership Factors (1=No Change)				Free Fare	Overall	Ridership With Plan
		Headway	Days of Service	Hours of Service	Hours			
<b>FIXED ROUTE</b>								
<b>Mainline (Donner Pass Road)</b>								
Winter	9,409	1.46	1.00	1.23	1.50	2.70	25,400	
Summer	6,442	1.46	1.14	2.03	1.50	5.06	32,600	
Spring/Fall	12,336	1.46	1.13	1.63	1.50	4.03	49,800	
Subtotal	28,187						107,800	
<b>Donner Summit Service</b>								
Winter	4,106	1.00	1.00	2.20	1.50	3.30	13,600	
Summer	0	--	--	--	--	--	4,200	
Spring/Fall	0	--	--	--	--	--	--	
Subtotal	4,106						17,800	
<b>Glenshire / Olympic Heights</b>								
Winter	11,299	1.00	1.00	1.23	1.50	1.85	20,900	
Summer	3,458	1.00	1.14	2.03	1.50	3.47	12,000	
Spring/Fall	6,623	1.00	1.13	1.63	1.50	2.76	18,300	
Subtotal	21,380						51,200	
<b>Prosser</b>								
Winter	3,681	1.00	1.00	1.23	1.50	1.85	6,800	
Summer	1,111	1.00	1.14	2.03	1.50	3.47	3,900	
Spring/Fall	2,128	1.00	1.13	1.63	1.50	2.76	5,900	
Subtotal	6,920						16,600	
<b>Sierra Meadows/Ponderosa Palisades</b>								
Winter	6,895	1.00	1.00	1.23	1.50	1.85	12,700	
Summer	2,832	1.00	1.14	2.03	1.50	3.47	9,800	
Spring/Fall	5,423	1.00	1.13	1.63	1.50	2.76	15,000	
Subtotal	15,150						37,500	
<b>Tahoe Donner</b>								
Winter	8,679	1.00	1.00	1.23	1.50	1.85	16,000	
Summer	3,201	1.00	1.14	2.03	1.50	3.47	11,100	
Spring/Fall	6,130	1.00	1.13	1.63	1.50	2.76	16,900	
Subtotal	18,010						44,000	
<b>Subtotal: Fixed Route</b>								
Winter	--	--	--	--	--	--	95,400	
Summer	--	--	--	--	--	--	69,400	
Spring/Fall	--	--	--	--	--	--	105,900	
Total	--	--	--	--	--	--	274,900	
<b>DIAL-A-RIDE</b>								
Total Annual	12,968	1.00	1.04	1.75	1.10	2.00	26,000	
<b>TOTAL TRUCKEE TART</b>							300,900	