

2024 Town of Truckee Transit Development Plan



Prepared for the
Nevada County Transportation Commission



January 7, 2025



TRANSPORTATION
CONSULTANTS, INC.

Prepared by LSC Transportation Consultants

2024 Town of Truckee Transit Development Plan

Prepared for

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Eastern Nevada County is a rural and energetic region renowned for its outdoor recreational activities and close proximity to large tracts of public land, including the Lake Tahoe Basin. The Town of Truckee (Truckee), population 16,729, is both the cultural and economic center of Eastern Nevada County, serving as the destination for local, regional, and international visitors as well as a year-round local population. As one of the “points” of the Tahoe-area “Resort Triangle,” Truckee provides access to Palisades Tahoe, Northstar California, and the greater Lake Tahoe region. While Truckee itself is defined as rural and somewhat dispersed, it serves as a “gateway” to the Lake Tahoe region which attracts Eastern Nevada County and Truckee, are therefore important places for not only year-round residents but also the many tourists and seasonal workers supporting the local economy. Like many rural regions of northern California, public transit is an important component of the overall transportation system in Eastern Nevada County, helping to enhance mobility and quality of life and providing additional economic and environmental benefits. Furthermore, access to social and medical services, educational resources, and necessities are issues of universal concern, which continue to be important to full-time and part-time residents and visitors alike.

With the ongoing importance of transportation within the region, the Nevada County Transportation Commission (NCTC) has retained LSC Transportation Consultants, Inc., to prepare an update to the 2017 Transit Development Plan (2017 TDP) for Eastern Nevada County. For the purposes of this study, Eastern Nevada County is defined as the area east of Yuba Pass (near the intersection of Interstate 80 (I-80) and State Route (SR 20). As the Town of Truckee (Truckee) is the primary transit provider in the study area, the Plan has been renamed the “2024 Truckee Transit Development Plan” or “2024 Truckee TDP” for ease of reference and public understanding.

This Draft Plan begins with a summary of existing conditions and demographic data including population, transit-dependent populations, and current transit and transportation services within the region. This information, in conjunction with public and stakeholder input, was used to identify areas of high and low transit demand within the region. Next, operating statistics for public transit services in Eastern Nevada County were analyzed. A series of alternatives or potential changes to public transit services designed to increase cost efficiency and productivity of services were evaluated. Lastly, service recommendations are provided for two different scenarios: A) New recurring funding sources are available for public transit services, such as Measure E, and B) Only traditional operating funding sources are available. A capital plan is also outlined for the five-year planning period.

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STUDY AREA

Eastern Nevada County encompasses approximately 345 square miles of mountains, lakes, rivers, and valleys within the Sierra Nevada Range of California. As shown in Figure 1, the region is bounded by Sierra County to the north, Placer County to the south, and Washoe County, Nevada to the east. The area is known for its mountainous terrain that includes elevations ranging from 5,300 feet in Emigrant Gap to 9,100 feet at Castle Peak. The county is traversed by three major highways: Interstate I-80 running west-east, SR 89 running north-south, and SR 267 running northwest-southeast from the junction of I-80 in Truckee to the Placer County line.

The Town of Truckee (Truckee) is incorporated and serves as the major population, service, and economic center of Eastern Nevada County. It includes the majority of services for the region including lodging, educational institutions, government centers, commercial retail, tourist attractions, and medical facilities. Other communities within Eastern Nevada County, but outside the Town limits, include Soda Springs/Norden, Kingvale, and Floriston.

As I-80 passes through Truckee, most visitors to North Lake Tahoe must pass through Truckee to get to their final destination via SR 267 and/or SR 89. As such, access and circulation in Eastern Nevada County are closely tied to developments and activity centers in Eastern Placer County such as Northstar/Martis Valley, Palisades/Alpine Meadows, and the communities that comprise North Lake Tahoe. The Donner Summit ski resorts of Boreal (Nevada County), Sugar Bowl, and Royal Gorge/Serene Lakes (located just over the county border in Placer County) also impact transportation conditions in the Donner Summit portion of Eastern Nevada County.

POPULATION CHARACTERISTICS

Countywide Historic, Current, and Projected Population

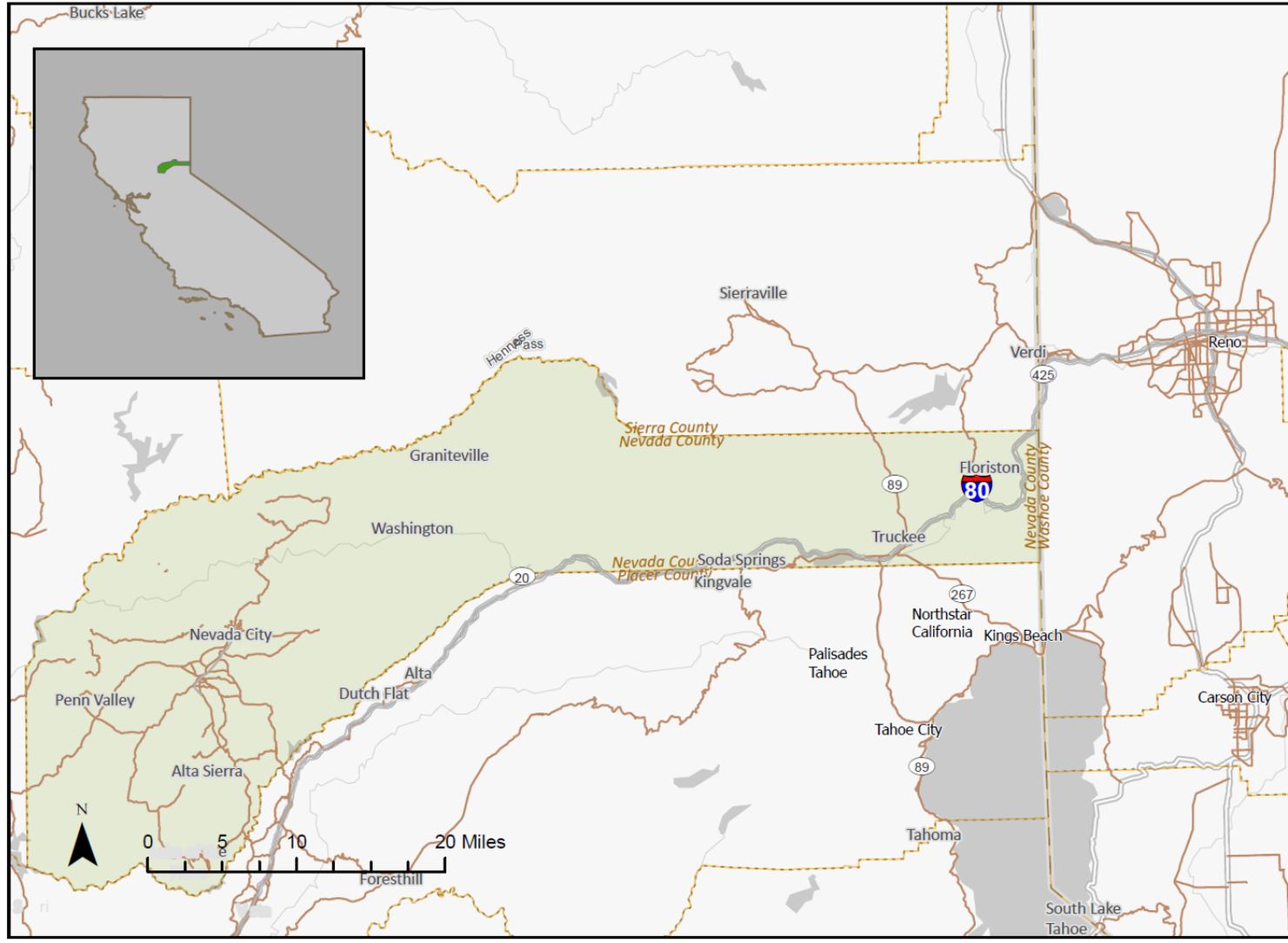
Population changes can greatly impact the demand for transit services. According to the California Department of Finance (CA DOF) and the 2020 Decennial Census (2020 Census), though Nevada County’s total population increased annually by about 1 percent between 2000 and 2010, its population has steadily declined over the last decade (Table 1).

	2000		2005		2010		2015		2020	
	Population	% Annual Growth								
Nevada County	92,033	-	97,454	1.15%	98,682	0.25%	98,156	-0.11%	97,775	-0.08%
Town of Truckee	13,864	-	15,364	2.08%	16,166	1.02%	16,033	-0.17%	17,611	1.90%
State of California	33,873,086	-	35,869,173	1.15%	37,223,900	0.74%	38,865,532	0.87%	39,648,938	0.40%

Source: California Department of Finance Population Estimates, Accessed 8/28/2023, the 2020 Decennial Census, and the 2021 American Community Survey 5-Year Estimates



Figure 1
Eastern Nevada County Site and Location Map



In comparison to previous decades, this was a steep decline from consistent growth of 17 percent between 1990 and 2000. The Town of Truckee’s population has since undulated between 15,000 and 17,000 people since 2005. While there was a small decline in population (-0.17 percent) in 2015, the 2021 American Community Survey 5-year Estimates (2021 ACS) Census indicates that the population has since rebounded and grown by 10 percent since 2015 with an annual average growth rate of 1.58 percent.

Table 2 summarizes population projections for Nevada County, Truckee, and California over the next 20 years. As shown, according to the CA DOF, Nevada County and California populations are expected to decrease slightly over the next 10 years (-0.3 percent and -0.2 percent, respectively) while Truckee’s population is expected to increase by 7 percent by 2030, according to the Town of Truckee 2040 General Plan (2040 General Plan). By 2040, Nevada County’s population is expected to continue declining (another -3.1 percent from 2030) while the Town is anticipated to grow by 11 percent in population.

	2020		2030			2040		
	Population	% Annual Change	Population	% Annual Change	% Total Change	Population	% Annual Change	% Total Change
Nevada County	97,775	-	97,464	-0.03%	-0.3%	94,444	-0.31%	-3.1%
Town of Truckee	17,611	-	18,900	0.7%	7%	21,000	1.1%	11%
State of California	39,520,071	-	39,430,871	-0.02%	-0.2%	40,106,449	0.17%	2%

Source: California Department of Finance Population Estimates (Accessed 8/28/2023), the Town of Truckee 2040 General Plan, and the 2021 American Community Survey 5-Year Estimates

Projections of Population by Age

Table 3 presents population projections by age group between the years 2020 and 2040, as estimated by the CA Dept. of Finance. This data provides insight into the future population trends of transit-dependent youth and older adult groups. Per Table 3, the population of mature retirees (ages 75 through 84) is expected to rise by 58 percent by 2030 before slowly dropping back down between 2030 and 2040. During this same period, the population of senior retirees (ages 85 or more) is also projected to grow by 45 percent. These substantial growth rates suggest an increased need for specialized public transit options will be necessary in the coming decades, especially to provide mobility and independence to support those who wish to “age in place.”

Year	Total Population	Preschool Age (0-4 years)	School Age (5-17 years)	College Age (18 - 24 years)	Working Age (25-61 years)	Young Retirees (62-74)	Mature Retirees (75-84 years)	Senior Retirees (85+)	Seniors (65 or more)
2020	102,184	4,039	11,668	8,100	42,649	22,635	9,287	3,806	30,545
2030	97,464	4,377	10,759	5,767	37,125	19,224	14,689	5,523	36,064
2040	94,444	3,998	11,720	5,511	36,440	14,737	13,732	8,306	33,673

Source: California Department of Finance Population Estimates

Table 3 also indicates that the “School Age” (ages 5-17) population will stay relatively the same over the coming 20 years. However, “College Age” (18-24 years) and “Working Age” (25-61 years) populations are also expected to decline moderately (by 32 percent and 15 percent, respectively) by the year 2040.

Transit Dependent Population

Nationwide, transit system ridership is drawn largely from various groups of persons who make up what is often referred to as the “transit-dependent” population. This category includes youth, elderly persons, persons with disabilities, low-income persons, and members of households with no available vehicles. There is considerable overlap among these groups. Table 4 and Figures 2 through 6 present key demographic data from the 2021 American Community Survey (2021 ACS), for Eastern Nevada County specifically Truckee, at the US Census block group level. The values reflect the total population of each group by block group with the percentages representing the concentration of each type of resident within that specific block group. It should also be noted that these census tracts and their corresponding block groups have been revised since the previous 2017 TDP. When referring to the previous 2017 TDP, some census tracts, and their corresponding block groups, have been changed numerically. A review of this data indicates the following:

- The total estimated population of Truckee is 17,611 per the most recent Census data¹. Areas with the highest population include Central Glenshire (2,735 residents or 16 percent of the total population), Prosser Lakeview/Gray’s Crossing (2,213 residents or 13 percent), Airport/South Polaris/South Glenshire (2,157 residents or 12 percent), and Lower Sierra Meadows (1,949 residents or 11 percent). The Tahoe Donner neighborhood, while split into three separate census block groups, make up about 11 percent of the total population as well.
- The total “Youth” (persons ages 5 to 17) make up 2,593, or 15 percent of the total population (Figure 2). This is a slight decline from the 2,910 or 17 percent of the total population identified in the 2017 TDP. While the block groups within the Glenshire neighborhood still have the highest overall concentration of youth (986 youths or 38 percent of the total youths in the region), there has been considerable growth in youth populations within the Ponderosa, Prosser, and Lower Sierra Meadows neighborhoods making up 38 percent of the total youth population. The Northern Gateway and Donner Lake block groups within Census Tract 12.09 have the lowest concentration of youths overall (5 Percent).
- Older adults over age 65 total 2,868 (or 16 percent of the total population). This is more than double the population recognized in the previous plan (1,303 seniors or 8 percent) of the Truckee population. The Census Tract with the highest number of older adults overall was Census Tract 12.07 (Ponderosa Palisades / Prosser Lakeview / Sierra Meadows / Downtown Truckee (787 seniors or 27 percent of the total senior population). The Airport/Polaris/Glenshire neighborhood (Census Tract 12.05, Block Group 1) had the highest number of seniors (333 seniors or 12 percent of the total senior population) followed by the Lower Sierra Meadows (Census Tract 12.07, Block Group 3) with 329 seniors or 12 percent of the total senior population). The block group possessing the lowest number of seniors is the Pioneer Trail/Comstock Drive neighborhood with only 3 percent of seniors (89 seniors). The number of older adults living in each block group is shown in Figure 3.

¹ American Community Survey 2021 – 5 Year Estimates, Accessed 09/15/2023

Table 4: Demographic Characteristics

Census Tract	Block Group	Area Description	Population		Youth (Ages 5 to 17)		Seniors (Age 65 and older)		Below Poverty Level		Individuals with Disabilities		Occupied Housing	Zero-Vehicle Housing Units	
			#	%	#	%	#	%	#	%	#	%	Units	#	%
9	4	Eastern Nevada County outside of Truckee	526	3%	30	1%	94	3%	67	4%	74	5%	234	0	0%
12.05	1	Airport / S Polaris / S Glenshire	2,157	12%	459	18%	333	12%	184	11%	97	7%	708	6	4%
	2	Central Glenshire	2,735	16%	439	17%	191	7%	177	10%	123	8%	853	100	71%
	3	Old Greenwood / Between Truckee and Glenshire	541	3%	88	3%	126	4%	0	0%	24	2%	262	0	0%
12.07	1	Ponderosa Palisades	699	4%	10	0%	156	5%	25	1%	63	4%	235	0	0%
	2	Prosser Lakeview/Gray's Crossing	2,213	13%	435	17%	200	7%	569	33%	199	14%	700	0	0%
	3	Lower Sierra Meadows	1,949	11%	386	15%	329	11%	255	15%	175	12%	741	0	0%
	4	Southern Downtown Truckee	973	6%	147	6%	102	4%	226	13%	88	6%	447	16	11%
12.08	1	Tahoe Donner near ski areas	663	4%	79	3%	122	4%	40	2%	84	6%	290	0	0%
	2	Armstrong Tract	1,188	7%	64	2%	247	9%	60	3%	151	10%	507	0	0%
12.09	1	Northern Gateway	663	4%	23	1%	102	4%	36	2%	72	5%	234	0	0%
	2	Donner Lake Area	748	4%	98	4%	242	8%	22	1%	82	6%	314	0	0%
12.10	1	Tahoe Donner Golf Course Area	687	4%	107	4%	186	6%	25	1%	52	4%	266	10	7%
	2	Prosser Lake Heights / Alder Hill	363	2%	38	1%	108	4%	0	0%	27	2%	173	0	0%
	3	Northeast Tahoe Donner	615	3%	40	2%	119	4%	0	0%	46	3%	209	9	6%
12.11	1	Pioneer Trail/Comstock Drive	394	2%	71	3%	89	3%	33	2%	43	3%	181	0	0%
	2	Alder Hill	497	3%	79	3%	122	4%	26	1%	54	4%	237	0	0%
Total			17,611		2,593	15%	2,868	16%	1,745	10%	1,455	8%	6,591	141	2%

Source: American Community Survey 2021 5 Year Estimates

Note: Individuals with Disabilities was determined using disability percentage by Census Tract applied to the total population of each Block Group.



Figure 3 Truckee Senior Population

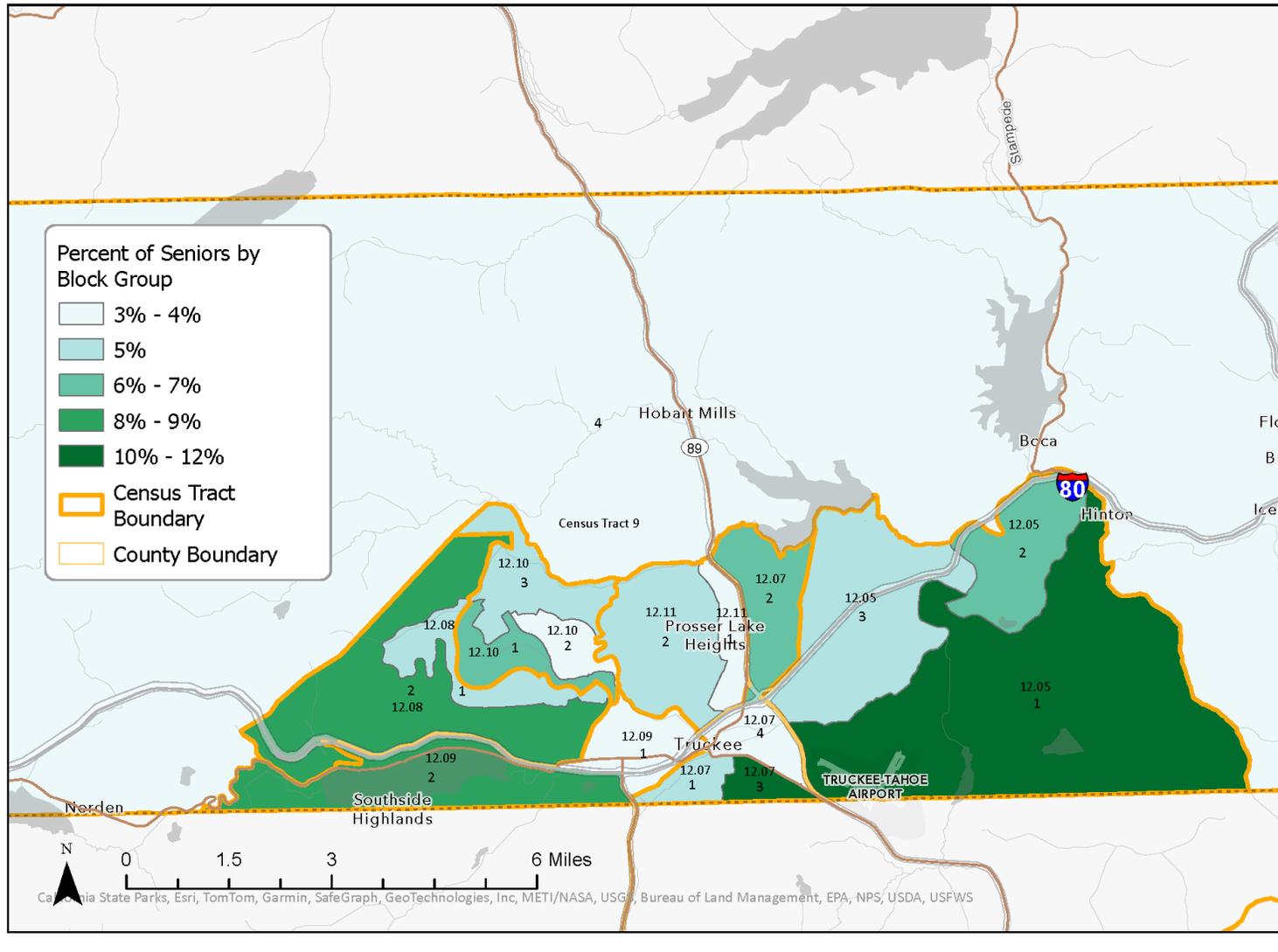




Figure 4
Truckee Population of Those Living in Poverty

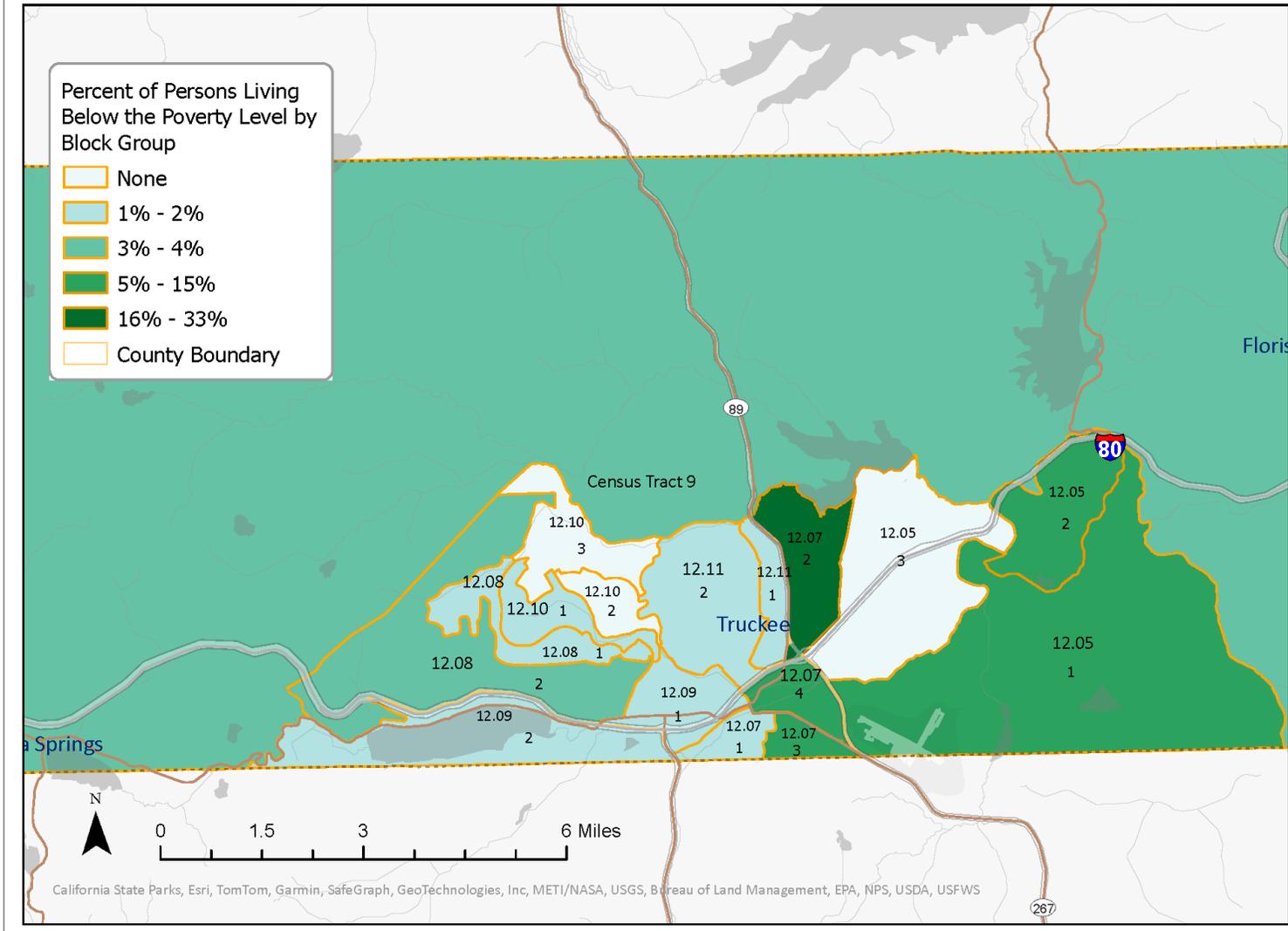
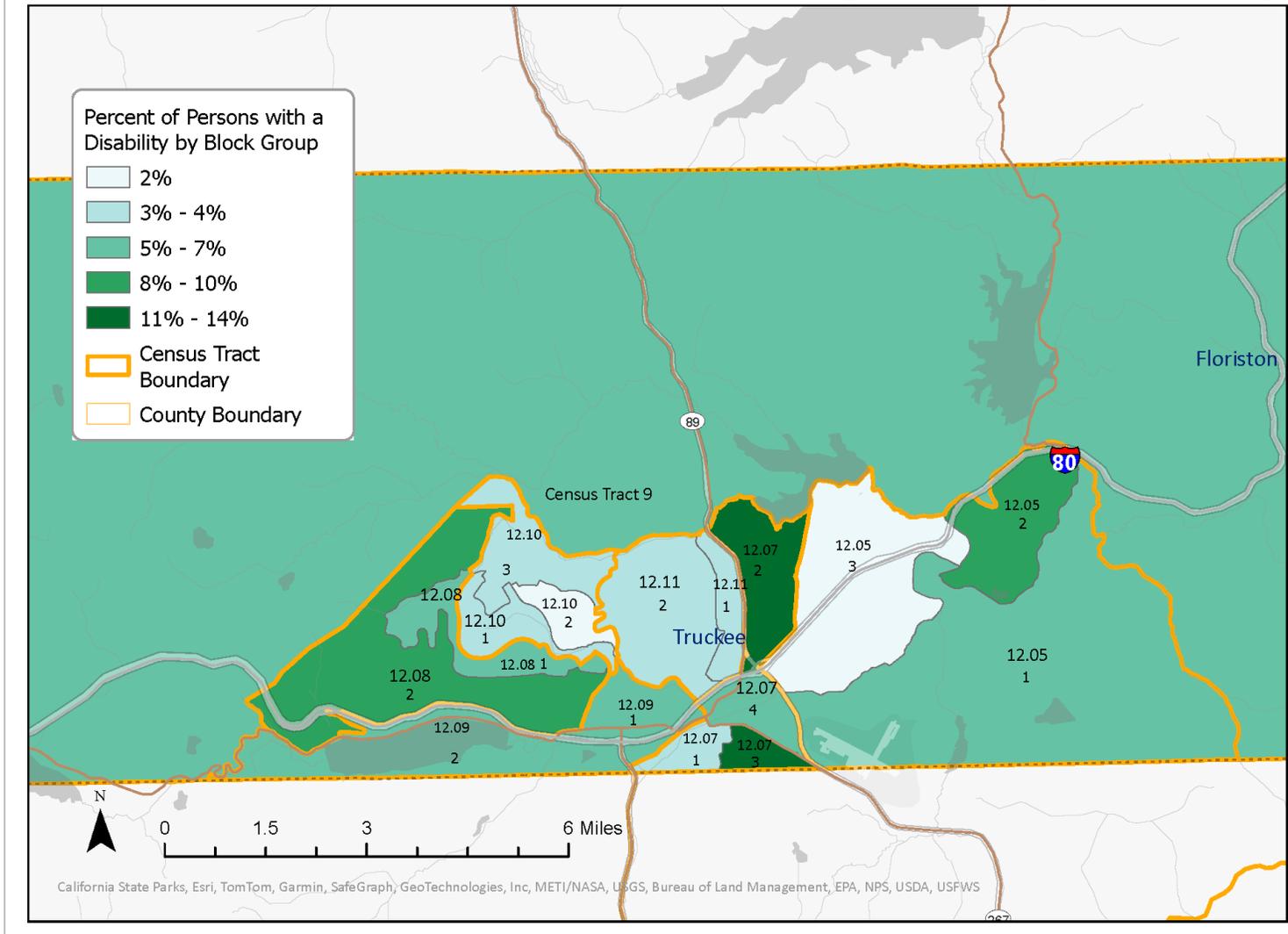




Figure 5
Truckee Population Living with a Disability



- There are a total of 1,745 persons (or 10 percent) living below the federal poverty level in Truckee. This is an increase of nearly 3 percent from the previous 2017 Plan. The Census Tract with the highest concentrations of poverty is Census Tract 12.07 with 28 percent of the total poverty population living within the Prosser Lakeview/Grays Crossing neighborhood (569 residents or nearly 33 percent of the total poverty population), followed by Lower Sierra Meadows (255 residents or 15 percent). This is shown in Figure 4.
- Persons over the age of 18 who have a disability total 1,455, or 8 percent of Truckee’s population. This is shown in Table 4 and Figure 5. As indicated in the table and figure, Prosser Lakeview/Gray’s Crossing has the greatest amount of people living with a disability with 199 disabled residents (14 percent).
- 141 households in Truckee currently do not have a vehicle available to them accounting for only 2 percent of the total households. The number of zero-vehicle households in each census tract block group is shown in Figure 6. The area with the highest number of zero-vehicle households is the Central Glenshire neighborhood (Census Tract 12.05, Block Group 2) with 100 households, or 71 percent of all zero-vehicle households.

Transit Needs Index

It is helpful to consider all five of the potentially transit-dependent groups simultaneously to gain a deeper understanding of which areas of Truckee have the greatest relative transit needs. To better compare the transit needs of different communities, a Transit Needs Index (TNI) (Table 5) was created for Truckee using the demographic data presented in Table 4.

The first step in developing the TNI was to calculate the density of each specific transit-dependent group within each block group (for example, there are approximately 30 youths per square mile in Census Tract 12.05, Block Group 1). Then, the ranges of densities for each subpopulation were divided into quintiles. Population densities in the highest quintile were assigned a score of 5 to represent high density and resulting high transit need, while the lowest population densities were assigned a score of 1 to represent the lower need for transit. The scores for each subgroup were then summed to yield an overall transit needs index rank for each census tract (Table 5). Ultimately, the TNI measures the relative demand for transit services from the population living in the census tracts, with possible values ranging from a low of 5 to a high of 25. A score of 25 indicates the greatest relative need for transit services considering all five transit-dependent subgroups.

Based on the TNI, the area of Study Area with the greatest need for transit services is the Lower Sierra Meadows neighborhood (Census Tract 12.07, Block Group 3). Areas of moderate transit need included Census Tract 12.07, Block Group 4 (Southern Downtown Truckee), and Census Tract 12.05, Block Group 2 (Central Glenshire).

Table 5: Transit Needs Index

Legend	
1	Very Low Rank
2	Low Rank
3	Medium Rank
4	High Rank
5	Very High Rank

Census Tract	Block Group	Area Description	Total Sq Mi	Youth (Ages 5 to 17)	Seniors (Age 65 and older)	Below Poverty Level	Individuals with Disabilities	Zero Vehicle Households	Score Total
9	4	Eastern Nevada County outside of Truckee	193.5	1	1	1	1	1	5
12.05	1	Airport / S Polaris / S Glenshire	14.8	1	1	1	1	1	5
	2	Central Glenshire	2.7	2	1	1	1	5	10
	3	Old Greenwood / Between Truckee and Glenshire	5.5	1	1	1	1	1	5
12.07	1	Ponderosa Palisades	0.9	1	2	1	1	1	6
	2	Prosser Lakeview/Gray's Crossing	2.1	2	1	2	2	1	8
	3	Lower Sierra Meadows	0.6	5	5	5	5	1	21
	4	Southern Downtown Truckee	1	2	1	2	2	3	10
12.08	1	Tahoe Donner near ski areas	1.5	1	1	1	1	1	5
	2	Armstrong Tract	6.5	1	1	1	1	1	5
12.09	1	Northern Gateway	1.6	1	1	1	1	1	5
	2	Donner Lake Area	2.9	1	1	1	1	1	5
12.1	1	Tahoe Donner Golf Course Area	1.2	1	1	1	1	2	6
	2	Prosser Lake Heights / Alder Hill	0.8	1	1	1	1	1	5
	3	Northeast Tahoe Donner	2	1	1	1	1	1	5
12.11	1	Pioneer Trail/Comstock Drive	0.9	1	1	1	1	1	5
	2	Alder Hill	3.3	1	1	1	1	1	5

Source: American Community Survey 2021 5 Year Estimates

Visitor Population

The Town of Truckee is a year-round community driven by a resort and recreation-based economy. The majority of visitors travel by auto from the San Francisco Bay and Sacramento areas. A smaller proportion of visitors arrive from more distant regional, national, and international locations via air travel from the Reno/Tahoe International Airport, which is served by the North Lake Tahoe Express.

As demonstrated by the recent success of microtransit services, the visitor population is willing to use public transit as a mode of travel within the Truckee/Tahoe area. Especially if combined with other Transportation Demand Measures such as parking management and fare-free service. However, absent higher frequency and expanded service hours and areas, the private vehicle has and will continue to remain the preferred mode of travel for visitors.

Economy and Employment

Originally established as a transportation and logging center, Truckee now has an economy based largely on tourism. This is due to the area's many recreational attractions, including Donner Lake and Donner Memorial State Park, historic downtown Truckee, ski areas such as Boreal, Sugar Bowl, Palisades Tahoe, and Northstar California, access to vast networks of hiking and mountain bike trails, and the access to Lake Tahoe via SR 89 and SR 267. With the increase in remote and hybrid work schedules post COVID-19 pandemic, as well as other contributing factors, the area does not experience such a drastic drop in tourism during the off-season.

Major employers can be significant transit trip generators due to their many employees who need to get to and from work. Table 6 shows the major employers for the study area, including areas in adjacent Eastern Placer County. Not surprisingly, employers associated with the tourism industry represent the majority of jobs in the geographic area followed by public and private organizations. Northstar California and Palisades Tahoe ski resorts (located in Placer County) are the largest regional employers, with 1,000-4,999 employees. Tahoe Forest Hospital, Tahoe Truckee Unified School District, Safeway, Tahoe Donner Association, and the Town of Truckee are the largest employers located within Truckee.

Labor Force

The California Employment Development Department provides data on the number of individuals in the labor force and unemployment rates. According to the data, there are around 9,220 individuals in the labor force as of 2023 in the Town of Truckee and the unemployment rate is around 4 percent. This is similar to the 2023 statewide unemployment rate of 5 percent.

Table 6: Truckee and Placer County Major Employers

Company	# of Employees
Tahoe Forest Hospital District	1002
Tahoe Truckee Unified School District	309
Safeway	145
Tahoe Donner Association	144
Town of Truckee	130
Mountain Hardware & Truckee Rents	91
New Moon Natural Foods	82
Truckee Donner Public Utility District	74
Truckee Donner Recreation and Park District	51
Truckee Fire District	50
Tahoe Truckee Sanitation Agency	39
<i>Other Regional Major Employers</i>	
Northstar California	1,000-4,999
Palisades Tahoe - Olympic Valley	1,000 - 4,999
Village Lodge - Sugar Bowl	500-999
Palisades Tahoe at Alpine Meadows	500-999
Ritz-Carlton Lake Tahoe	250-499

Source: Town Of Truckee, CA Annual Comprehensive Financial Report, 2021

Truckee Travel Demand Model Data

A good source of information regarding overall travel patterns is the Town of Truckee’s travel demand model. Figure 7 and Table 7 presents travel data for the Town of Truckee, as obtained from the 2018 Truckee Traffic Model, summarized into the key areas in the Truckee/Martis Valley area as well as for the key external roadways entering/exiting the area. As shown in the table, the largest number of summer PM peak-hour vehicle trips are those that either end (destination) or begin (origin) in the Gateway area which is a major ingress/egress from I-80 as well as SR 89 (1,607 trips and 1,424 trips, respectively). The traffic model estimates that the origin/destination pattern with the greatest number of trips is from I-80 East to I-80 West (475 trips). Gateway to/from Tahoe Donner is another common pattern (245 trips Gateway to Tahoe Donner, 238 trips Tahoe Donner to Gateway). In addition to the Gateway area, a substantial number of trips ended in the Crossroads, Brockway Road, and Downtown Truckee areas (1,176 trips, 1,142 trips, and 1,084 trips, respectively).

The Gateway Center, Crossroads Center, Brockway Road, and Downtown Truckee areas all include commercial centers that have the potential to generate a high amount of transit demand. Within these areas are major activity centers such as Sierra College, Truckee High School, Safeway, Grocery Outlet, Save Mart, Ace Hardware, Senior Services, Tahoe Forest Hospital (and associated medical offices), Nevada County offices, and the Truckee DMV, as well as miscellaneous other commercial areas with shopping and restaurants and higher-density residential neighborhoods.



Figure 7
Truckee Travel Demand Model Data Locations

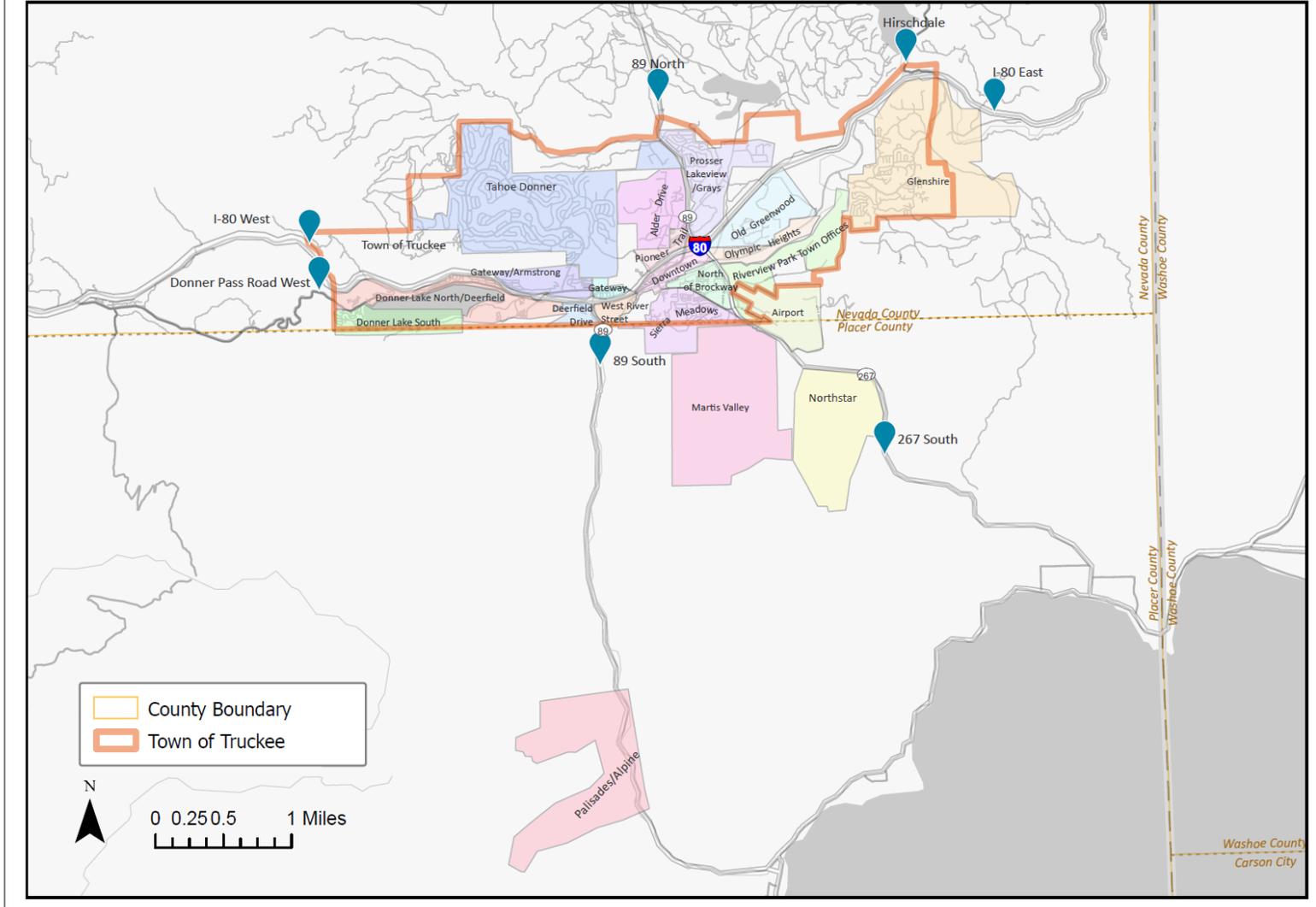


Table 7: Truckee Travel Demand Model Data

Summer PM Peak-Hour Vehicle-Trips

		Destination																Total	
		Down-town	Gateway	Martis Valley	Donner Lake	Tahoe Donner	Glen-shire	Northstar	Cross-roads	Brockway Rd. Area	Prosser Lakeview	I-80 West	Pass Rd West	89 North	Hirsch-dale	I-80 East	267 South		89 South
Origin	Downtown	119	146	53	42	66	121	26	125	157	97	34	4	24	1	51	69	55	1,133
	Gateway	115	229	43	97	245	108	24	173	115	89	47	11	18	1	52	58	160	1,424
	Martis Valley	54	53	109	28	63	96	40	48	152	73	7	2	9	1	38	124	12	897
	Donner Lake	29	90	13	110	38	18	6	52	18	19	35	35	5	0	26	24	18	519
	Tahoe Donner	43	238	17	31	170	7	8	121	15	23	29	6	14	1	73	54	54	850
	Glenshire	92	64	32	10	7	161	13	66	30	46	8	2	3	2	100	27	12	664
	Northstar	26	28	42	13	30	46	221	25	55	30	2	0	1	0	9	99	1	628
	Crossroads	111	195	42	61	125	88	22	109	113	73	21	3	10	1	25	30	166	1,027
	Brockway Rd. Area	136	82	89	15	23	41	23	97	182	62	12	3	13	1	59	123	55	962
	Prosser Lakeview	87	78	44	22	41	70	16	67	77	113	14	3	43	1	50	56	31	782
	I-80 West	36	52	6	33	22	6	1	25	9	13	0							202
	Donner Pass Rd West	6	15	2	34	5	1	0	4	3	4	0	Served by Existing Fixed Routes (Summer)						74
	89 North	32	25	11	7	13	3	1	13	13	42	9	Total Served = 3,627						168
	Hirschdale	1	1	1	1	0	2	0	1	1	1	5	Total Trips = 11,728						14
	I-80 East	56	62	34	27	53	79	7	31	46	47	475	Percent of Total Served = 31%						916
	267 South	88	78	153	29	44	23	95	41	117	64	107							840
89 South	52	170	11	17	38	8	1	177	41	27	87							628	
Total	1,084	1,607	702	576	982	877	504	1,176	1,142	823	208	70	140	8	482	664	564	11,728	

Source: Truckee Model, 2018

Currently, the Gateway, Brockway Road, and downtown Truckee areas are served by both the Truckee TART Local fixed route and Dial-A-Ride services. The Placer County TART SR 89 route and the Truckee TART local route serve the Crossroads area. Table 7 highlights trip pairs that are currently served by Truckee TART summer fixed route and/or by Placer TART. Summing the total summer peak-hour vehicle-trips for the origin/destination pairs currently served by TART and dividing by the total summer PM peak-hour vehicle-trips estimated by the traffic model (for travel within the model area), current services are available for only 31 percent of the total trips, as evidenced by current traffic patterns. According to this traffic model, the greatest number of trips being generated in areas that are not currently served by fixed-route public transit include Tahoe Donner – 1,832 daily trips, Glenshire – 1,541 daily trips, and Prosser Lakeview – 1,605 daily trips.

Means of Transportation to Work

According to the 2021 ACS, 18 out of the total 8,924 workers in Truckee take public transportation to work. It should be noted that this data pre-dates the Truckee Connect Microtransit Pilot Program described later in this plan. The 2021 ACS represents an extremely low transit commute mode split of 0.2 percent (Table 8). A substantial 75 percent travel to work in a private vehicle (69 percent drive alone and 6 percent carpool). Other modes of commuting to work include travel by bicycle (2 percent), walking (1 percent), and other means, including taxi and motorcycle (3 percent). An estimated 19 percent of workers living within the Town of Truckee work from home. This is an increase from the 11 percent of residents working from home in 2017. According to the 2021 ACS, 17.2 percent of California residents work from home.

Table 8: Truckee Resident Commuter Mode Split		
Mode	#	%
Drove alone	6,158	69.0%
Carpooled	535	6.0%
Public transportation (excluding taxicab)	18	0.2%
Walked	80	0.9%
Bicycle	143	1.6%
Taxicab, motorcycle, or other means	286	3.2%
Worked from home	1,704	19.1%

Source: American Community Survey 2021 5 Year Estimates

Commute Patterns

The US Census maintains the “Longitudinal Employer Household Dataset (LEHD),” which provides insight into commute patterns. It should be noted that some of the LEHD data can be misleading due to telecommuting patterns. However, this is the best-known source of data and provides a good overview of commute patterns. Table 9 presents commute pattern data for 2020 at the county and city/town level.

The top portion of the table presents information about where employees working in Truckee live, while the lower portion shows where those who live in Truckee (residents) commute to work.

Table 9: Truckee Commute Patterns					
2021					
Where Truckee Employees Live					
Counties	# of Jobs	% of Total	Cities/Towns	# of Jobs	% of Total
Nevada County, CA	3,385	41%	Truckee, CA	3,162	38%
Washoe County, NV	1,964	24%	Reno, NV	1,211	15%
Placer County, CA	775	9%	Sparks, NV	256	3%
Sacramento County, CA	292	4%	Incline Village CDP, NV	103	1%
El Dorado County, CA	235	3%	Sacramento, CA	80	1%
Sierra County, CA	108	1%	South Lake Tahoe, CA	79	1%
Santa Clara County, CA	104	1%	Roseville, CA	76	1%
Alameda County, CA	91	1%	San Francisco, CA	72	1%
Plumas County, CA	89	1%	Verdi, NV	66	1%
Contra Costa County, CA	83	1%	Kings Beach, CA	63	1%
All Other Locations	1,194	14%	All Other Locations	3,152	38%
Total Number of Jobs	8,320		Total Number of Jobs	8,320	
Where Truckee Residents Work and Commute to					
Counties	# of Jobs	% of Total	Cities and Towns	# of Jobs	% of Total
Nevada County, CA	3,519	42%	Truckee, CA	3,162	37%
Placer County, CA	2,084	25%	Reno, NV	442	5%
Washoe County, NV	610	7%	Sunnyside-Tahoe City, CA	328	4%
Sacramento County, CA	371	4%	Sacramento, CA	153	2%
Alameda County, CA	180	2%	San Francisco, CA	151	2%
San Francisco County, CA	151	2%	Roseville, CA	99	1%
El Dorado County, CA	149	2%	Dollar Point, CA	90	1%
Santa Clara County, CA	127	2%	Kings Beach, CA	83	1%
Butte County, CA	114	1%	Incline Village, NV	77	1%
Los Angeles County, CA	98	1%	Chico, CA	64	1%
All Other Locations	1,048	12%	All Other Locations	3,802	45%
Total Number of Jobs	8,451		Total Number of Jobs	8,451	
<i>Source: US Census Bureau LEHD Database, 2021</i>					

Where Truckee Employees Live

Out of the people who work in Truckee/Eastern Nevada County, less than half (41 percent) live within Nevada County, 24 percent live in Washoe County (including Reno, Sparks, and Incline Village), and 9 percent of area workers commute from Placer County. Of the people who work within the study area, 38 percent live in the Town of Truckee, followed by 15 percent commuting from Reno, NV.

Where Truckee Residents Work and Commute To

Table 9 indicates that 42 percent of study area residents work within Nevada County, with 37 percent of all residents working within the Town of Truckee. Another 25 percent work in Placer County.

Approximately 7 percent of residents commute to Washoe County, which includes 5 percent commuting from Reno, NV.

Truckee Workforce and Housing

Since the preparation of the last Short Range Transit Development Plan in 2017, housing needs for both the local profession and service workforce have continued to grow with wages not keeping up with the cost of housing. As such, more and more locals have migrated to the areas outside of Truckee where housing is more available and less expensive while new residents are finding it hard to find housing that is affordable. This in turn created longer commutes for workers thereby increasing vehicle miles traveled and associated greenhouse gas emissions.

To address this ongoing issue of housing shortages and affordability, the Town, in cooperation with private partners as well as the Mountain Housing Council of Tahoe Truckee, has developed several affordable housing projects in and around the Town limits. Additionally, there are several forthcoming projects as well as aggressive policies and programs to further promote and implement not only affordable housing but also infill development (i.e. the Railyard) with increased density and improved walkability and access to transit service. However, absent robust transit levels of service with convenient access and reliability, the projects, programs, and policies will have limited effectiveness on reductions in vehicle miles traveled and greenhouse gas emissions. Finally, without robust transit, there is also a risk of further isolating transit-dependent populations and limiting access to employment, education, health, and government services.

MAJOR ACTIVITY CENTERS

The identification of major activity centers that may be frequented by transit passengers is useful in determining where public transit services might be needed. These types of centers include educational centers, retail centers, government centers, medical facilities, human service organizations, senior housing, and recreational centers. The region's major activity centers are situated in and around Truckee. Major activity centers in Eastern Nevada County are presented, by category, in Figure 8. As can be seen in the figure, the majority of medical, retail, and government activity centers are located in central Truckee. The larger residential developments are located on the periphery of the Town and are not served by fixed-route transit.

Human Service Agencies

- Truckee-Donner Community Center
- Sierra Senior Services and Senior Apartments
- Elevation Truckee
- Sierra Community House
- Headstart
- Sierra Nevada Children's Services
- Tahoe Safe Alliance
- Nevada County Mental Health Department
- Alta California Regional Center
- Big Brothers Big Sisters
- Nevada County Health and Human Services Department

Medical Facilities

- Tahoe Forest Hospital
- Gateway Urgent Care
- Truckee Tahoe Medical Group (Urgent Care)

Government

- Truckee Town Hall
- Truckee Public Works
- Department of Motor Vehicles
- Post Office(s)
- County Library
- County Courthouse

Education

- Sierra College
- Truckee Elementary
- Glenshire Elementary
- Alder Creek Middle School
- Tahoe Truckee High
- Sugar Bowl Academy
- Sierra Mountain Community Education Center

Recreational

- Community Swimming Pool/Rec Center
- Truckee Regional Park
- Skate Park
- Riverview Sports Park
- Rodeo/Fair Grounds
- Donner Memorial State Park
- Donner Lake
- Tahoe Donner Equestrian Center
- Tahoe Donner Golf Course
- Coyote Moon Golf Course
- Northstar Golf Course
- Boreal Mountain Ski Resort
- Sugar Bowl Ski Area
- Donner Ski Ranch
- Tahoe Donner Ski Area
- Royal Gorge Cross Country Ski Resort
- Tahoe Donner Cross Country Center
- Northstar California

Retail

- Gateway Center (Safeway)
- Crossroads Center (Save Mart)
- Donner Plaza
- Raleys O-N-E Shopping Center (Soaring Way)
- Citizen Bank Plaza
- Commercial Row
- The Rock
- Westgate Center
- Pioneer Trail

RECENT AND FUTURE PLANNED DEVELOPMENT

Transportation and land use planning are closely linked, especially public transit where improved access and frequency can reduce the need for a private automobile and where urban design can serve multiple trip purposes in one trip by offering a diverse set of residential, commercial, and retail needs. This section provides a brief description of recent developments that have been constructed in the Truckee area over the last several years, followed by planned future developments that may impact transit ridership in the region. These developments are also shown in Figure 9 below

Recent Truckee Development

Since the 2017 TDP, the following major developments have been completed:

- **Soaring Ranch, Phase 1 (Raley's O-N-E Shopping Center)** – Located along Soaring Way between Brockway Road and the northwest corner of the Tahoe Truckee Airport this development was completed in 2022 and includes a Raleys O-N-E, two restaurants, and other commercial services such as an Ace Hardware and real estate offices.
- **Coburn Crossing (Barsell Property)** – This development was completed in 2020 and consists of a hotel with 114 rooms and 138 multifamily dwelling units, located just northeast of downtown Truckee west of Donner Pass Road and south of I-80. It is located along the existing Truckee TART route.
- **The Artist Lofts (Truckee Railyard Development)** – The Railyard Master Plan Area is located east of downtown Truckee and is bounded by Glenshire Drive to the north, Union Pacific Railroad right of way, and East River Street to the south, Donner Pass Road and Bridge Street to the west and undeveloped land to the east. Completed in 2021, the community includes 76 income-restricted rental apartments, ranging from studios to three-bedroom units, and ground floor commercial/retail space. Factory OS manufactured the modular units for this project.
- **Frishman Hollow II** – Completed in 2023, the development provides 68 additional affordable apartments next to the original Frishman Hollow development.
- **Grocery Outlet** – Completed in 2021, it serves as one of the major grocery stores in the area.

Potential future major developments proposed within the Truckee region include the following:

- **Soaring Ranch Phases 2 and 3 – Phase 2** is anticipated to break ground in Summer 2024. This is located near the Raley's off of Soaring Way (which was recently added as a stop on the fixed route). The development will include ground floor restaurants, retail spaces and offices with a mix of 69 multi-family apartments to include one bedroom, two bedroom, and three-bedroom units, with 8 units designated as affordable housing. Pending approval, **Phase 3** would provide up to 92 additional multi-family units with up to 26 of them designated as for-sale residences geared towards first-time homebuyers.



**Figure 8
Major Activity Centers**

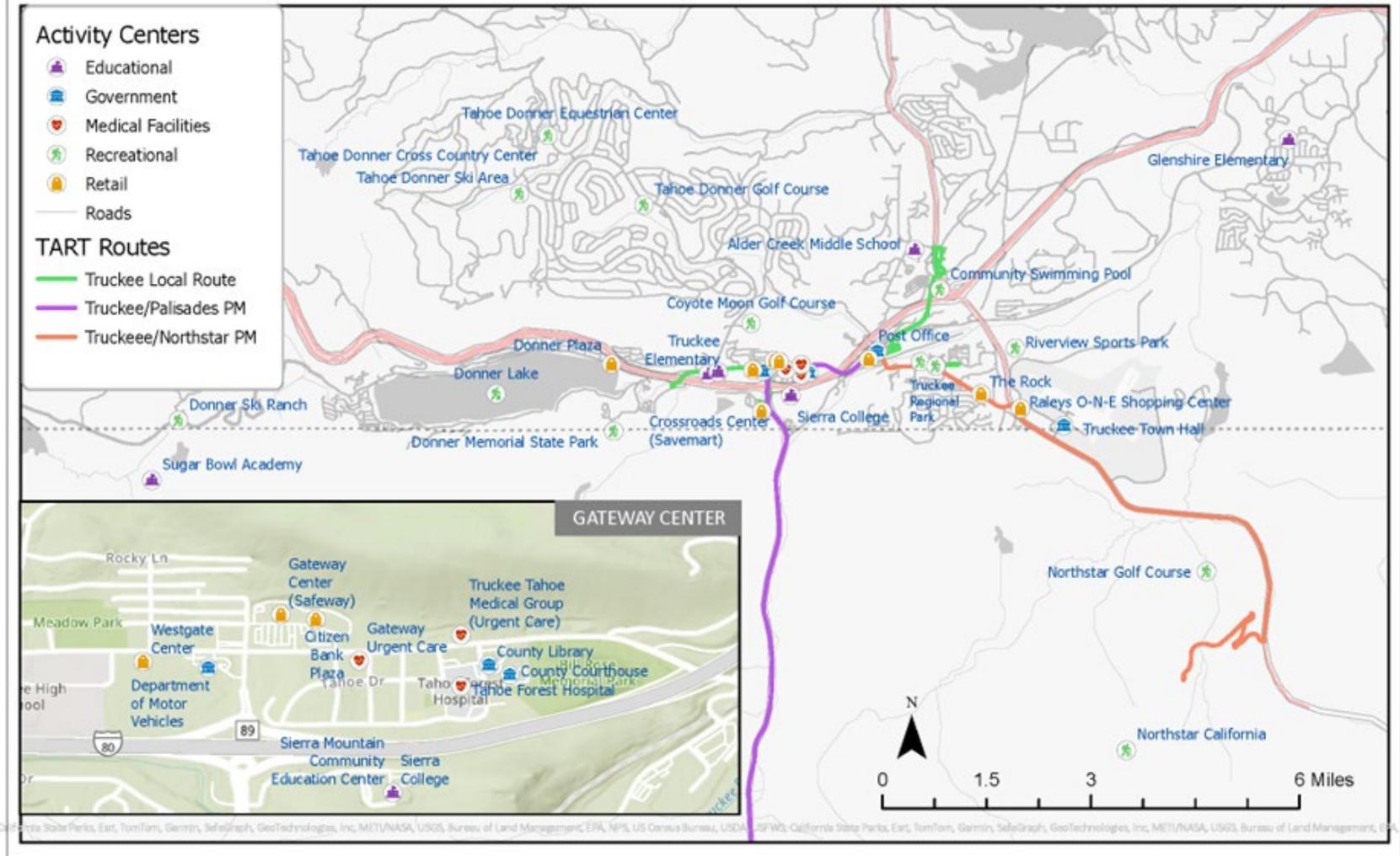
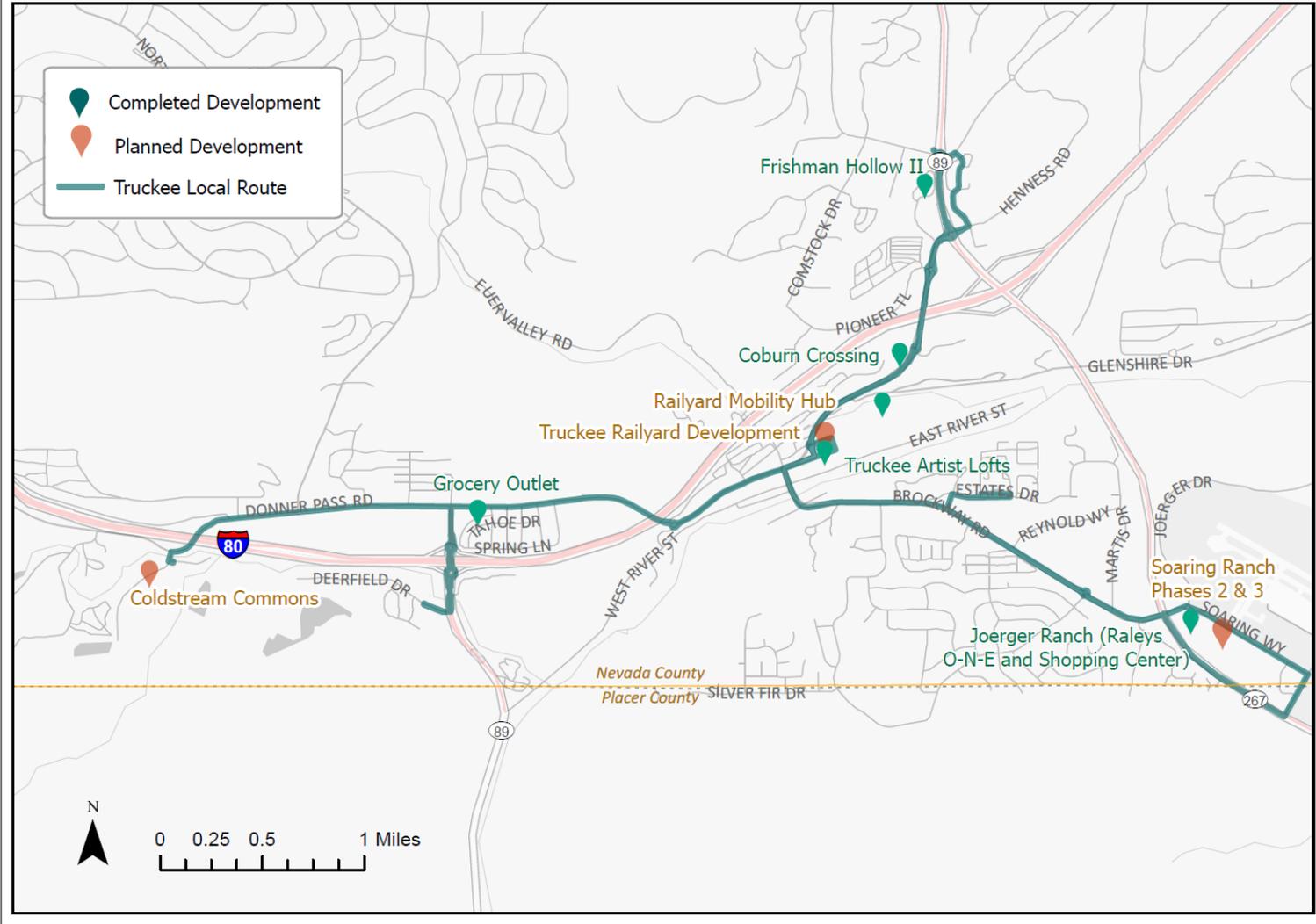




Figure 9 Recently Completed and Future Planned Developments



- **Coldstream (Planned Community 1)** – This development is currently under construction located just south of Deerfield Drive and north of the Union Pacific Railroad line, with access provided off of Coldstream Road just south of Donner Pass Road in the western portion of Truckee. The project includes 200 single-family units and 80 multi-family housing units, as well as 30,000 square feet of commercial development. It is planned to include 48 affordable housing units. The area is not currently directly served by transit, though the Truckee TART fixed-route passes near the entrance off of Donner Pass Road. A bus stop internal to the site is included in the initial phase of the project. This project may be completed as soon as 2024.
- **The Truckee Railyard Development** – Over the next several decades, the development of 20 parcels of the Railyard Master Plan area will include 570 residential units, a 60-room hotel, 70,000 square feet of retail space, 15,000 square feet of office space, and 25,000 square feet of civic use. The intent is to create an attractive and pedestrian-oriented development that extends from existing downtown Truckee. The Railyard development area is now served by the Truckee TART fixed routes at the Mobility Hub.
- **Tahoe Donner Downhill Ski Lodge Replacement Project** – The Lodge Replacement Project began in Summer 2024 and is anticipated to be completed by the 2024/25 ski season. It includes the new construction of a ski lodge to replace the existing structure. It will include a restaurant and cafeteria area, restrooms, ski school space, and operational and administrative offices.
- **Railyard Mobility Hub Project** – Located in the selected Truckee Railyard North Balloon site along East Church Street, construction began in late July 2023 and is expected to be complete by Spring 2024. Truckee and Placer TART buses now serve this stop. Phase 1 (which has been completed) includes improved access and internal transit circulation, transit vehicle pull-outs, space for future public art and interpretive opportunities, passenger shelters, native landscaping, stormwater treatment, Americans with Disabilities accessible sidewalks and restrooms, bike fix-it-stations and racks, shade structures, and benches, and space for Truckee’s new E-bike share stations. Phase 1 also includes underground infrastructure to support the future electrification of both the Town and Placer County’s transit fleets as well as charging for personal vehicles.
- Phase 2, which will be completed over multiple years, will include the construction of an enclosed climate-controlled Transit Center Building, additional streetscape enhancements, adjacent parking, and electric vehicle charging.

Recent and Future Regional Development

The following summarizes additional development occurring in the Eastern Placer County region as changes to these areas impact Truckee residents and visitors as well.

- **Village at Palisades Specific Plan** - The Specific Plan proposes a hospitality and recreation-based, all-season mountain resort community with up to 850 hotel, condominium-hotel, and fractional ownership residential units and a maximum of 1,493 resort bedrooms. The project includes the development of new commercial, retail, and recreational land uses similar to uses currently

allowed under the Olympic Valley General Plan and Land Use Ordinance. New and replacement commercial uses in the plan area would total up to 297,733 gross square feet. The Draft EIR period ended in January 2023.

- **Northstar Mountain Master Plan** - The plan would allow for expansion of existing ski terrain including six new ski lifts and associated trails, a high-speed gondola extending from the Castle Peak parking area to Northstar Village, new snowmaking and associated infrastructure, additional trails and trail widening, five skier bridges, four new skier service lodges and facilities, improvements to existing skier service sites, relocation of an existing cross country ski center, and two new campsite areas.

RECENT PLANNING STUDIES

The following studies were reviewed while updating the 2024 Truckee TDP to ensure the final five-year plan aligns with local and regional goals for transit and transportation:

- Nevada County 2045 Regional Transportation Plan (In Progress)
- Truckee TART Connect Review (In Progress)
- Town of Truckee 2040 General Plan (2023)
- Truckee Microtransit Study (2023)
- Innovative Clean Transit Zero-Emission Bus Rollout Plan – Town of Truckee (2023)
- Town of Truckee Triennial Performance Audit (FY 2018-19 – FY 2020-21) (2022)
- Coordinated Public Transit Plan – Human Services Transportation Plan (2021)
- Truckee Transit Center Relocation Feasibility Study (2020)
- Nevada County Active Transportation Plan (2019)
- Eastern Nevada County Transit Development Plan (2018)
- Truckee Long Range Transit Plan (2017)
- Truckee Railyard Master Plan (2017)
- Nevada and Placer County Unmet Transportation Needs Hearing FY 2023-24 (2023)
- Western Nevada County Transit Development Plan (2021)
- Resort Triangle Transportation Plan (2020)
- Linking Tahoe: Lake Tahoe Basin Transit Master Plan (2017)
- Palisades Specific Plan/EIR
- Systems Plan Update for the Tahoe Truckee Area Regional Transit in Eastern Placer County (2016)

A complete summary of each as they relate to this TDP is included under Appendix A.

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OVERVIEW OF MAJOR EXISTING TRANSIT SERVICES

INTRODUCTION

Over three decades ago, Truckee began operating transit services shortly after its incorporation in March 1993, at which time it began contracting with a private firm for transit management, supervision, vehicle maintenance, and operations.

Currently, several transit services are operated in and around Truckee with connections to the North Shore area of Lake Tahoe. Through a contractor, the Town of Truckee provides fixed-route services on a year-round basis within the Town limits (Truckee Local Fixed Route), Dial-A-Ride (DAR), as well as the recently piloted Truckee TART Connect microtransit service.

Placer County also operates year-round public transit service between Truckee, Olympic Valley, and Tahoe City to the south via SR 89, as well as between Truckee, Northstar, Kings Beach, and Crystal Bay via SR 267, with partial support provided by the Town of Truckee. Both the Town and Placer County services are branded as Tahoe Truckee Area Regional Transit (TART), although they are separate public transit services. The Town also operates a seasonal fixed-route evening service during the summer and winter, providing service to Northstar via SR 267. A similar seasonal fixed-route evening service was also provided to Palisades Tahoe via SR 89 as recently as winter 22/23, however, this was discontinued due to extremely low ridership.

For purposes of this document, public transit services operated by the Town of Truckee are referred to as “Truckee TART” while public transit services operated by Placer County are referred to as “Placer TART”. Other transportation service providers also serve the area, including Greyhound, Amtrak, and human service agencies. These services are described in detail at the end of the chapter.

TRUCKEE TRANSPORTATION AND TRANSIT SERVICES

Truckee TART (Services Operated by the Town of Truckee)

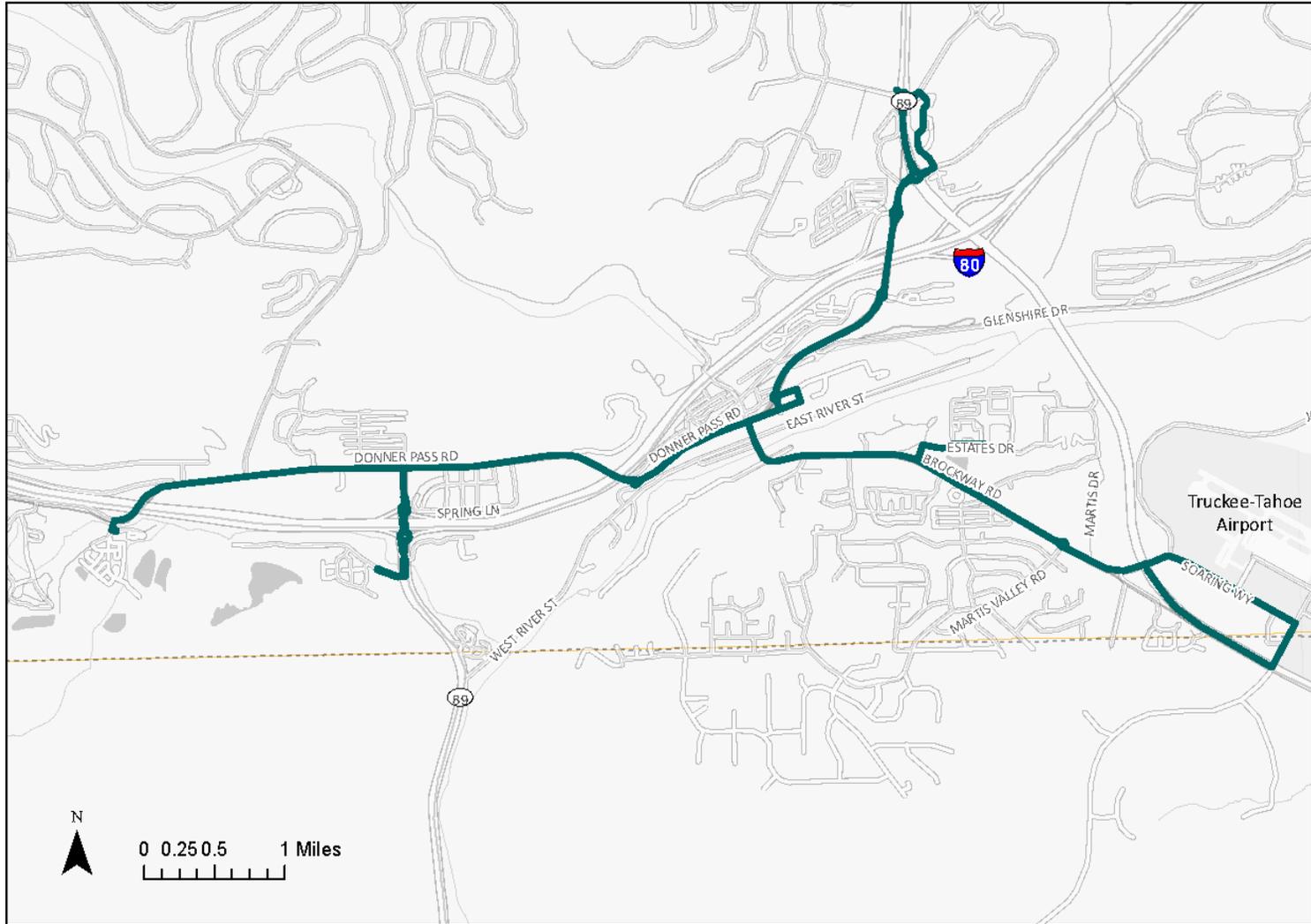
Routes

The Town of Truckee operates the Truckee elements of the Tahoe Truckee Area Regional Transit (TART) program. While the overall TART program is marketed and branded as a regional service, the Town’s services are managed and operated separately from the other TART services, such as the routes along SR 89, SR 267, and SR 28 (located exclusively in the Lake Tahoe Basin) that are operated and managed by Placer County. The “Truckee TART” services consist of the following:

- The **Truckee Local Fixed Route** is a fixed route “fare-free” service that runs hourly service seven days a week from 6:30 AM to 6:30 PM. The route operates primarily along Donner Pass Road (as far west as Coldstream Road as of Winter 2023/24), on Brockway Road/Martis Valley Road (as far east as Soaring Way, Airport Drive, and SR 267), and on Truckee Way (as far north as Gray’s Crossing) (Figure 10). It also travels south on SR 89 as far as Crossroads Center upon passenger request.



Figure 10
Truckee TART Local Route



- The **Truckee Dial-A-Ride** provides daily service within Town limits year-round between 6:30 AM to 6:30 PM. While services are available to the general public on a space-available basis, priority is given to ride requests by seniors and eligible persons with disabilities. Ride reservations are required 24 hours in advance, and same-day requests are not accepted. No fare is charged to ADA-eligible passengers. Other adult passengers are charged \$6 per ride, while seniors and children under 12 years of age are charged \$2 per ride.
- An evening **Truckee/Northstar Route** is operated from 6:00 PM to 11:00 PM in summer and winter, on an hourly frequency. It operates between the Truckee Train Depot and Northstar (including both the Village and Sawmill Heights) as shown in Figure 11.
- **Truckee TART Connect Pilot Program** provides on-demand microtransit services within the Town boundaries. Passengers can book their trip through the phone app or by calling dispatch directly. Service is provided between 6:30 AM to 12:00 AM during peak seasons (late June through Labor Day, and mid-December through early April), and between 6:30 AM to 10:00 PM during off-peak seasons.

The Town does not directly employ drivers and dispatchers to operate these services, but rather contracts with Paratransit Services, Inc. for the Truckee Local Fixed Route, DAR, and Northstar Route. However, the Town owns the vehicles used in these services and fuels and maintains the vehicles. In addition, Town staff manages the service, including obtaining the state and federal funding crucial to supporting the service. The Town currently contracts with Downtowner for Truckee TART Connect services as a turnkey contract in which Downtowner provides the vehicles, drivers, and ride booking app technology. However, this is not a long-term contract as the service does not currently have a long-term and sustainable funding source.

Truckee TART Connect

The Town of Truckee’s microtransit Pilot Program is referred to as: “TART Connect.” This service was first introduced as a demonstration project in the summer of 2022, which was later reviewed in the Truckee Microtransit Study (March 2023). The Truckee TART Connect pilot project was well received by the community, prompting Town officials to extend and expand the service. Currently, funding has been allocated for the service through the spring of 2024, however, a long-term sustainable funding source does not exist to support the level of service provided as part of the pilots. The current service area is shown in Figure 12.

The following is a brief timeline of the TART Connect service:

- The initial pilot service was operated from June 25 to September 5, 2022, within a limited geographical area consisting of Tahoe Donner, Glenshire, the Hospital, Downtown/Donner Pass Road core, Gateway, and Brockway Road. During this 73-day period, the service operated 7 days a week from 10:00 AM to 10:00 PM. This service was provided utilizing 7 vehicles.
- Truckee TART Connect service resumed for the winter season on December 15, 2022, with the same operating schedule as the summer pilot and a slightly expanded service area to include West River Street and the Alder Creek Middle School. This service was provided utilizing 5 vehicles.



Figure 11
Truckee TART/Northstar Route

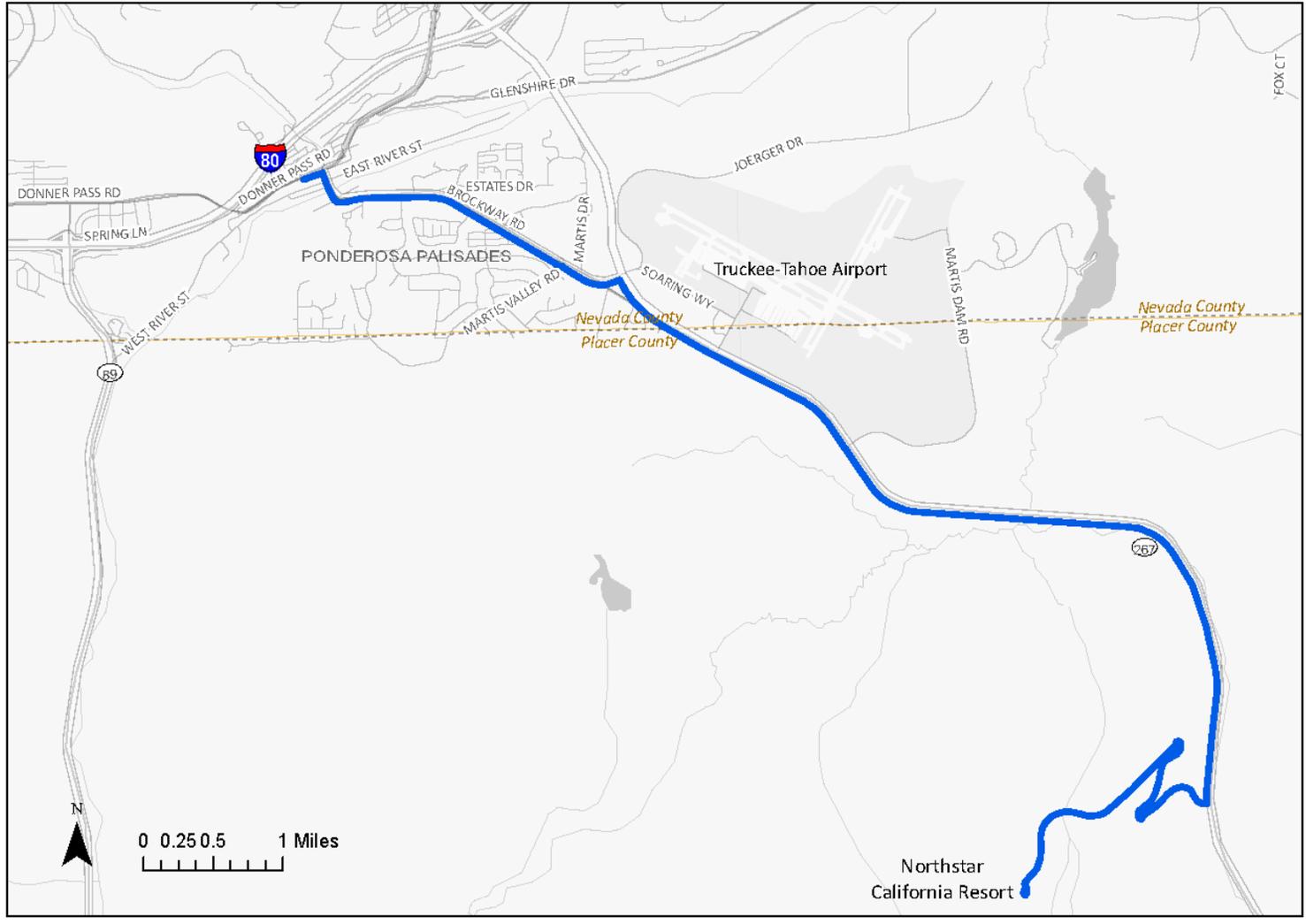
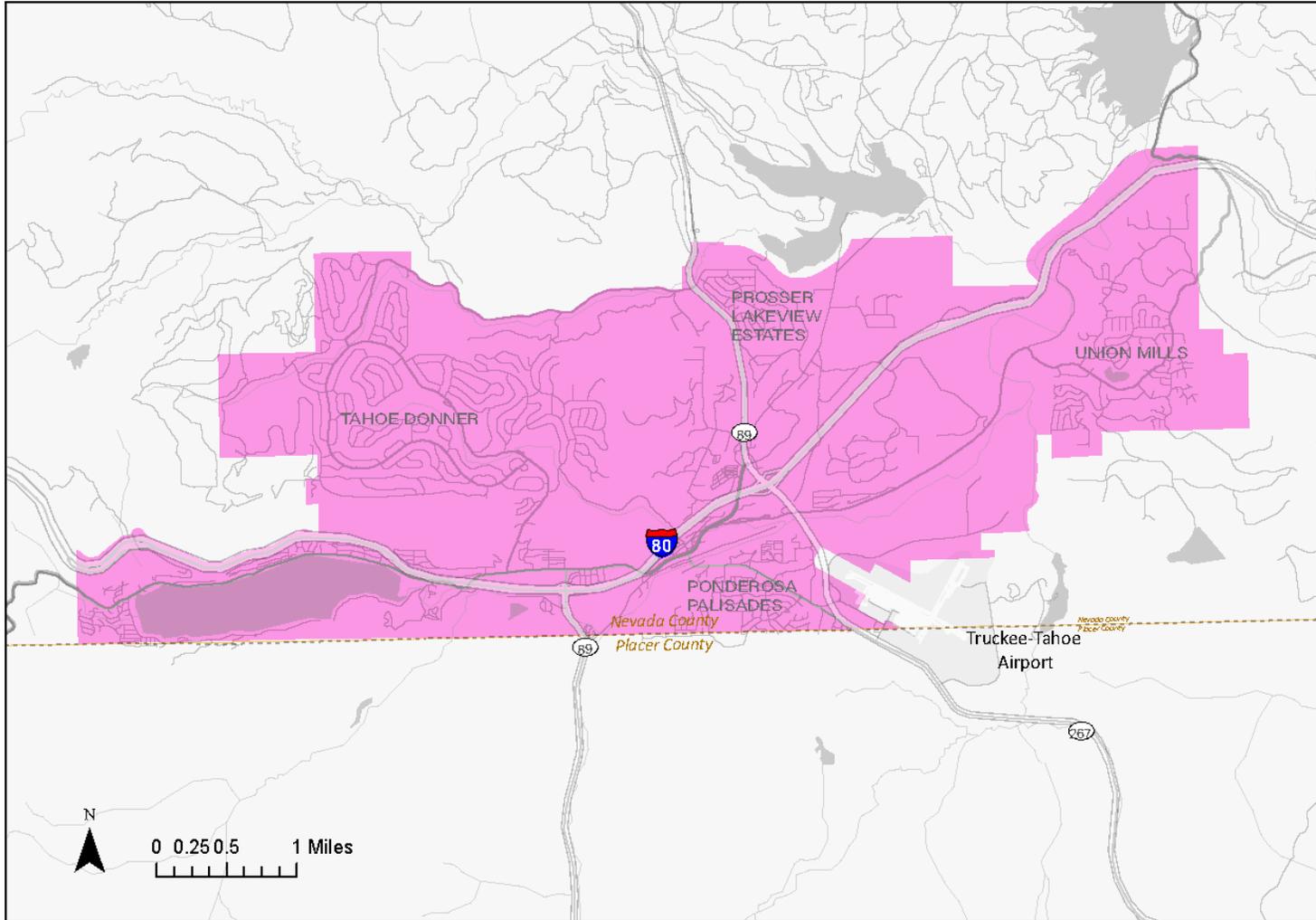




Figure 12
Truckee TART Connect and DAR Service Area



- In March 2023, the service was extended by the Truckee Town Council through June 30, 2023, and expanded the service area to include all of the Town limits. It was also decided that the Truckee TART Connect would continue to be available seven days per week. The hours were extended from 6:30 AM to 10:00 PM. This service was provided utilizing 5 vehicles.
- In June 2023, the Truckee TART Connect service was extended by the Truckee Town Council through June 30, 2024. The Town Council approved funding to operate the service 7 days per week during the additional year, with extended hours till midnight during the summer and winter seasons. This service was provided utilizing 9 vehicles.

Special Events Shuttles

Truckee has continued to provide special event shuttles for Truckee Thursdays and the 4th of July Parade. The popularity of Truckee Thursdays has continued to grow since its inception over 15 years ago. The event includes a food court, artisan vendors, merchant and community displays, children’s activities, live music, and a beer garden each Thursday of the month during the summer season, excluding holiday weeks. Truckee currently has an agreement with Northstar to provide shuttles to and from the events for up to eight weeks of the season. The 4th of July Parade event shuttles are also provided under this agreement, providing services to and from the 4th of July parade.

New in 2023 was a 4th of July Fireworks shuttle that operated from 4 PM – 11 PM from Truckee High School campus to West End Beach. This shuttle service was also provided through a contract with Northstar and done in cooperation with the Truckee Donner Recreation and Park District, the 4th of July Fireworks sponsor and event host. This is an event management model that the Town intends to make a routine operational requirement for existing and any future large-scale events.

VEHICLE FLEET

As shown in Table 10, the Town currently owns seven vehicles. Two of the larger 30-passenger vehicles are primarily used for the fixed route and two of the smaller 15-passenger vehicles are used primarily for DAR. One 22-passenger vehicle is used for both the DAR and fixed route. The Town also has two 9-person passenger vans that are used for DAR and occasionally fixed routes.

Fleet No.	Make/Model	Vehicle Length	No. Pax/ Wheelchair	Total Capacity	Year	Use	Fuel Type	Useful Life Miles	Current Mileage as of 7/26/23	Useful Life Years	Estimated Replacement
925	Chevy Starcraft	22 ft	6 + 4 WC	15	2016	DAR	Diesel	150,000	147,900	5	2024
926	Chevy Starcraft	22ft	6 + 4 WC	15	2016	DAR	Diesel	150,000	157,903	5	2024
927	Ford El Dorado Aero Elite 320	27.5 ft	24 + 2 WC or 30	31	2016	Fixed Route	Diesel	200,000	116,688	7	2026
928	Ford El Dorado Aero Elite 320	27.5 ft	24 + 2 WC or 30	31	2016	Fixed Route	Diesel	200,000	133,100	7	2026
929	Ford El Dorado Aero Elite 270	27 ft	16 + 2 WC or 21	22	2017	Fixed Route and DAR	Diesel	200,000	203,524	7	2024
930	Glaval AWD Ford Transit 350	21 ft	6 + 2 WC or 8	9	2020	Fixed Route and DAR	Gasoline	150,000	73,000	5	2025
931	Glaval AWD Ford Transit 350	21 ft	6 + 2 WC or 8	9	2020	Fixed Route and DAR	Gasoline	150,000	91,967	5	2025

Source: Town of Truckee Fleet List, 2023

The average age of the fleet is about six years old and the average mileage for the fleet is 132,000. As several vehicles are nearing their useful life, three vehicles require replacement in 2024. The two backup vehicles were replaced in 2020 and won't need replacing until 2025.

FACILITIES AND SHELTERS

There are three essential transportation facilities within Truckee. The Truckee Depot serves as the downtown train station and welcome center in Truckee. As discussed in previous chapters, it is served by Amtrak train, Greyhound, and Truckee Local Fixed Route. The Railyard Mobility Hub has already completed several components of Phase 1 and began providing service stops to Truckee Local Fixed Route and Placer TART in the Spring of 2024. Currently, it consists of several shelters and benches. The Corporate Yard, located at 10969 Stevens Lane, is anticipating an expansion project that would be the final phase of the Public Services Center project. This project would provide for a larger dedicated space for administration, storage, and vehicle maintenance year-round.



In addition to the Truckee Depot and Mobility Hub, the Town of Truckee TART system includes the following transit shelter stops:

- Senior Apartments
- Hampton Inn (not Town maintained)
- Henness Flat Apartments
- Martis on Brockway Road near the roundabout (eastbound)
- Regional Park (westbound)
- Coldstream Commons
- Grocery Outlet (not Town maintained)
- Gateway Center (westbound)
- Crossroads Center on SR 89
- Just south of the Mousehole (Union Pacific RR) on SR 89

Some ongoing concerns regarding the maintenance of transit shelters include security and accessibility. There have been recurring instances of people spending the night in shelters. Therefore, many shelters have since been retrofitted with garage-style doors that are closed and locked after service hours. During the winter season, it can also be a challenge to clear bus shelters and bus signs of snow. This poses a particular challenge to passengers with disabilities.

The Truckee TART fixed route and DAR programs are operated under contract by Paratransit Services. The contractor reports to the Town's Transportation Program Manager, who in turn reports to the Director of Public Works. Paratransit Services has a dedicated staff consisting of a General Manager, Operational Supervisor, dispatchers, and drivers. TART Connect vehicles are stored and operated by Downtowner from the old Town of Truckee Corporation Yard located at 10720 Riverview Drive while Paratransit stores and operates the Truckee TART vehicles out of the Corporation Yard located at 10969 Stevens Lane.

BICYCLE AND PEDESTRIAN CONNECTIVITY

An individual's trip is understood as their entire journey from origin to destination. Individuals may use a number of modes of transport to complete the journey; they may walk, drive, ride a bicycle, take a bus,

etc. The TART fixed routes provide bus service that frames the core of public transportation trips in Truckee and into Placer County, but individuals must complete the first and last portion on their own. This is referred to as the first mile/last mile challenge, even though actual distances vary greatly and can also be a psychological barrier to potential transit riders. This is especially true within the Town limits where both commercial and residential land use densities are low and with many residential areas served by only one or two points of ingress/egress, making travel in and out of neighborhoods circuitous and indirect. Additionally, many areas of Truckee are also bifurcated by natural land features such as the Truckee River, Donner Lake, and areas of steep terrain as well as transcontinental railroad facilities which impede direct travel by all modes, extending travel distances far beyond those experienced in areas served by higher density development and/or those served by a traditional grid pattern street network.

Bike Share Pilot Program

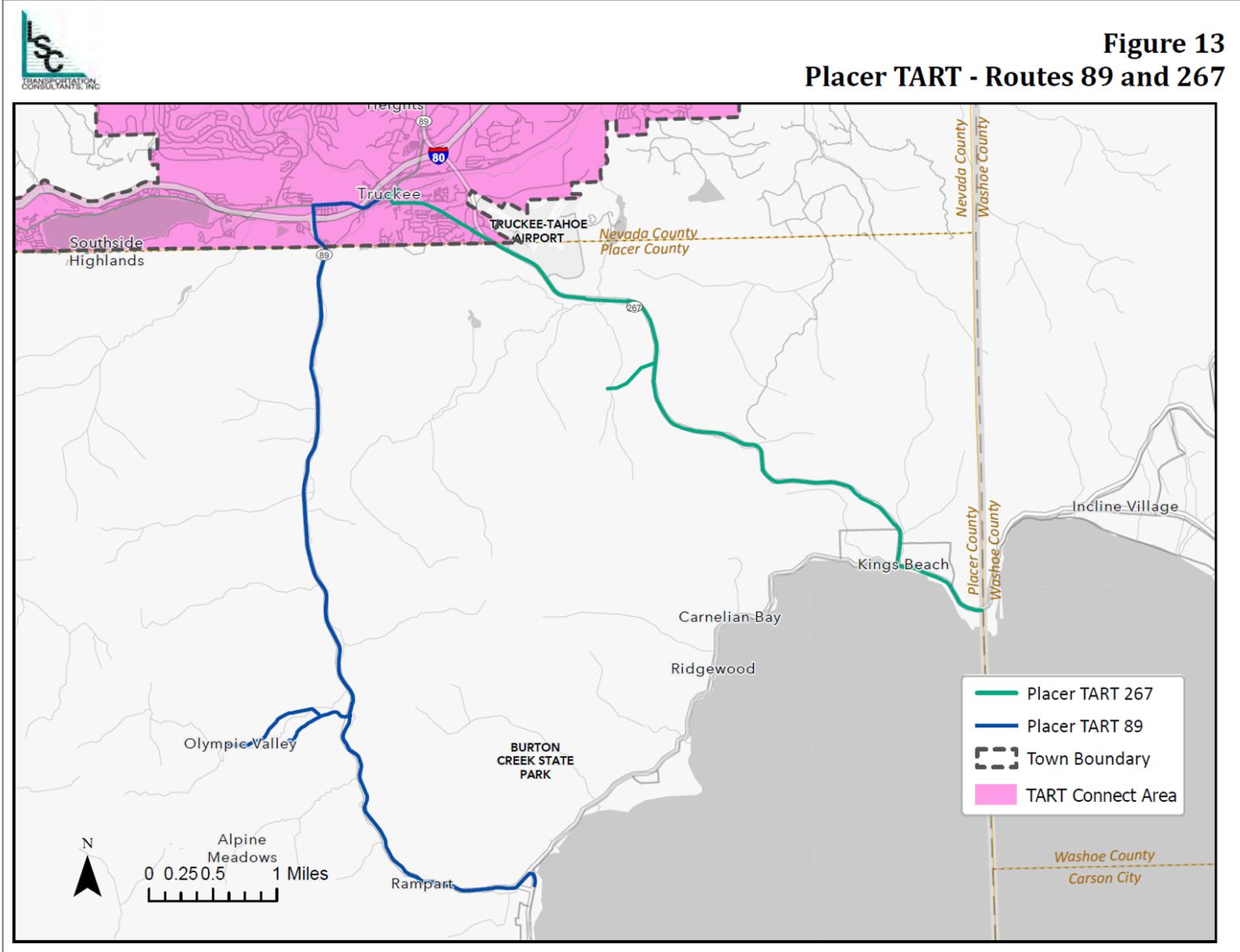
In 2023, The Town of Truckee implemented a Town-wide bike share program as a “first mile/last mile” solution with the goal of improving access to and from transit stops, reducing parking demand in and around transit stops, and reducing community dependency on the automobile. The program is intended to increase bike trips by improving access to e-bike technology, including access for lower-income residents and visitors who may not have the resources to purchase an e-bike. The program is also intended to provide additional mode choice and promote the overall viability of bike travel as a local and regional mobility option for a variety of trip purposes, including those that may arrive at their destination via carpool or vanpool and require access to bike share for discretionary trips during workday breaks to take care of personal business. The long-term goal of the bike share program is to place bike stations strategically to extend the reach of transit, with the ultimate goal of increasing ridership and access to mobility.

Within the first two years, the seasonal program has provided nearly 8,000 trips, covering about 45,000 miles and offsetting 45,000 pounds of harmful carbon emissions in. Currently, the stations are located along the main corridors from the west end of Donner Lake to the Legacy Trailhead in Glenshire, to the Truckee Tahoe Airport, and to the Trout Creek Trailhead in Tahoe Donner. The objective is to extend the bike share infrastructure deeper into the neighborhoods, providing a larger, more widespread network and improving access to this mobility option.

The current program is in year 2 of a 3-year pilot with future years dependent on both ongoing financial and institutional support from the Town and/or from outside sources such as state and federal grants or through a public-private partnership.

PLACER TAHOE AREA REGIONAL TRANSIT

Public transit services in the North Tahoe region (in both California and Nevada) are provided by the Placer Tahoe Area Regional Transit (Placer TART) services operated by the Placer County Department of Public Works. This program also connects the North Lake Tahoe area to Truckee via SR 89 and SR 267 (Figure 13).



Placer TART operates hourly route service between Tahoe City, Olympic Valley, and Truckee along SR 89 with additional runs during the winter and summer months for peak commute periods. Service is offered generally between 6:30 AM and 6:30 PM year-round between Tahoe City and Truckee. Bus service is offered on SR 267 between Crystal Bay and Truckee year-round providing hourly service to Northstar Ski Resort between 7:00 AM and 6:00 PM.

While both the Placer County TART Highway (Hwy) 89 and Hwy 267 services have historically terminated at the Truckee Train Depot to connect with the Truckee TART Local Route service, this location has changed with the development of the Truckee Mobility hub discussed in the previous chapter. Generally, both the Hwy 89 and Hwy 267 routes depart the Mobility Hub at 30 minutes past the hour and just before the top of the hour, respectively. Truckee Local Fixed Route generally arrives at the Mobility Hub (from Coldstream) at 24 minutes past the hour and (from Henness Flat) just before the top of the hour. Therefore, passengers transferring between the Truckee Local Fixed Route and Placer County TART services only wait between 15 and 30 minutes to transfer between routes depending on the route.

TART is operated by the Placer County Department of Public Works. The Placer TART operations and maintenance facility is located at 970 Cabin Creek Road, approximately two miles south of Truckee along the SR 89 corridor. The fare is free to all passengers along both the Hwy 89 and Hwy 267 routes.

Placer County Complementary Paratransit Service

Placer TART offers a complementary ADA paratransit service between 6:00 AM to 6:00 PM 7 days a week in the same areas served by the Placer TART fixed route buses (Hwy 89, Hwy 267, and the Mainline). Reservations must be made 24 hours in advance and trips may be requested up to 14 days in advance of the trip. This service is currently free to passengers who qualify. This service is provided through an agreement between the Town and Placer County and provided by the Town's contracted operator, Paratransit Services.

OTHER TRANSPORTATION PROVIDERS

In addition to the local general public systems discussed above, the following services also provide transit and transportation within Truckee.

Tahoe Forest Hospital

The Long-Term Care Center of Tahoe Forest Hospital in Truckee provides limited transportation for its 37 residents. The hospital acquired one van through a Community Foundation Grant that can accommodate four seated passengers plus two passengers in wheelchairs. The van is used to transport residents to scheduled activities (generally in Reno) and a scheduled scenic drive (once per month). In addition, transportation is provided for out-of-area medical appointments when family members are unable to assist with the trip. Only one or two passengers are typically transported at a time for medical appointments. Staff coordinates with Elevation Truckee, a local therapy/learning center for developmentally disabled individuals, to arrange DAR trips between the hospital and Elevation on Donner Pass Road

Nevada County Health and Human Services Agency

This County agency provides the Truckee community with many vital resources for assistance including adult protective services, in-home support services, public conservatorship, and senior nursing programs. The Truckee offices are located at The Joseph Center on Levon Avenue. The agency does not provide transportation for clients but may assess the transportation needs of disabled clients.

The Nevada County Health and Human Services Department administers a volunteer driver program for veterans. The Veteran's Service Office (VSO) in Nevada County provides transportation to the Reno Veterans Administration (VA) Medical Center on Tuesdays and Wednesdays through local volunteer drivers. Transportation is also available for medical appointments in other locations (such as Auburn and Sacramento) on a case-by-case basis.

Sierra Senior Services

Sierra Senior Services is a non-profit advocacy organization for seniors in the Truckee region. The agency offers a donation-based senior nutrition program (which includes both Meals-on-Wheels and a congregate senior lunch program), wellness clinics and programs, resources and referrals, and a plethora of community activities. Sierra Senior Services prepares and serves congregate meals at the Truckee Donner Senior Apartments on Estates Drive, although Sierra Senior Services does not operate the Senior Apartments themselves. The Senior Apartments are also available to both seniors and disabled persons. Both the Truckee fixed route and the DAR service serve the Senior Apartments multiple times per day.

Alta California Regional Center (ACRC)

ACRC provides assistance and services to people of all ages with specific developmental disabilities (including Intellectual Disability, Cerebral Palsy, Epilepsy, and Autism) and their families. ACRC's mission is to "create partnerships to support all eligible individuals with developmental disabilities, children at risk, and their families in choosing services and supports through individual lifelong planning as a means to achieve healthy and productive lives in their communities." Eligible persons are assigned a Service Coordinator, who helps identify and coordinate needed services through either pre-existing resources in the community or services purchased for the consumer by ACRC. With respect to transit service in Truckee, ACRC pays for consumers to ride DAR to and from life skills programs such as Choices (discussed below). For consumers in the North Lake Tahoe area, ACRC reimburses family members to transport clients to the Truckee programs. All of ACRC's Truckee consumers (this includes Choices consumers) are considered ADA-eligible and utilize public transit including DAR, Truckee TART fixed-routes, and Placer TART.

Tahoe-Truckee Unified School District-Special Education

Several teachers at the local school district coordinate with DAR to arrange trips for students. Common TTUSD origins and destinations include Alder Creek Middle School, Truckee High School, Sierra Expeditionary Learning School, Hampton Inn Truckee, and In His Care. DAR analysis shows that, during the school calendar months, TTUSD passengers make up about twelve percent of total DAR ridership.

North Lake Tahoe Express

The North Lake Tahoe Express is an airport shuttle service operating between the Reno Tahoe International Airport and the North Lake Tahoe and Truckee regions. The Green and Red Routes provide service between the Truckee Train Depot, 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 10:30 AM and 3:15 PM and departs the Truckee/Northstar area for the airport in the morning between 9:10 AM and 10:15 AM and in the afternoon between 2:55 PM and 4:00 PM. The Red Route departs the Reno-Tahoe Airport at 10:00 AM, 12:00 PM, 3:00 PM, 6:30 PM, and midnight and departs the Truckee Train Depot at 6:45 AM, 8:45 AM, 10:25 AM, 1:30 PM, and 5:45 PM. Reservations are required 24 hours in advance, and the service is operated year-round. One-way fares are around \$100 for individuals and discount rates for groups.

Private Ridesharing, Taxicabs, and Shuttles

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.

Transportation Network Companies – 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.

There are a variety of taxicab companies available in the Tahoe-Truckee area. These include services provided by Tahoe Thunder Taxi, Anytime Taxi, High Sierra Taxi, and many other private providers in the Truckee Tahoe region.

Several private shuttle companies (including Tahoe Ski Trips, 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.

Greyhound Lines, Incorporated and Flixbus

Greyhound (which was recently acquired by Flixbus) operates service along the I-80 corridor between Reno and Sacramento (and beyond). There are a total of two runs per day along I-80 serving the Truckee Train Depot in the eastbound direction and two in the westbound direction. The eastbound routes leave Sacramento at 9:35 AM and 7:25 PM, arriving in Truckee at 12:15 PM and 10:05 PM. Westbound buses traveling to Sacramento depart Truckee at 10:40 AM and 3:40 PM arriving in Sacramento at 1:00 PM and 6:15 PM. Fares between Truckee and Sacramento are \$25 to \$50. It is possible to make a day return trip from Truckee to both Reno and Sacramento via this service.

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 in 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.

RIDERSHIP ON REGIONAL TRUCKEE PUBLIC TRANSIT SERVICES

Historical Regionwide Ridership

Ridership for transit services in Eastern Nevada County since the previous TDP has consistently grown aside from a slight dip in ridership during FY 2020-21 as a result of the Covid-19 Pandemic (Pandemic). Since then, ridership has increased systemwide by nearly 50 percent of what it was during FY 2017-18 (Table 11 and Figure 14). Over the last several years (FY 2020-21 to FY 2022-23), ridership along the Truckee Local Fixed Route and the Northstar Night Route have increased by 70 percent and 163 percent, respectively. DAR services saw the largest dip in ridership (64 percent) during the Pandemic but regained ridership the following year.

Total ridership figures for Placer TART's Hwy 89 and Hwy 267 Routes are also displayed in the table. As shown, ridership along the Hwy 89 Route was 90,354 passenger-trips, while ridership along the Hwy 267 Route was 81,052 passenger-trips in FY 2022-23. Between the two routes, ridership has increased by 13 percent since the previous TDP was completed in 2017.

Note that the general upward trend in ridership for Eastern Nevada County transit services is in sharp contrast to most other public transit services in the state and is likely a reflection of being a resort/tourist area. A large portion of the region's economy is driven by seasonal recreation, specifically snow sports in the winter. Ski resorts rely heavily on international employees who travel to the region on a work visa for the winter months. Historically, this has resulted in ridership increases during the winter months. Many of these workers arrive here without vehicles and therefore rely on public transportation to access jobs and social activities.

TART Truckee Local Fixed Route and Truckee DAR Ridership by Month

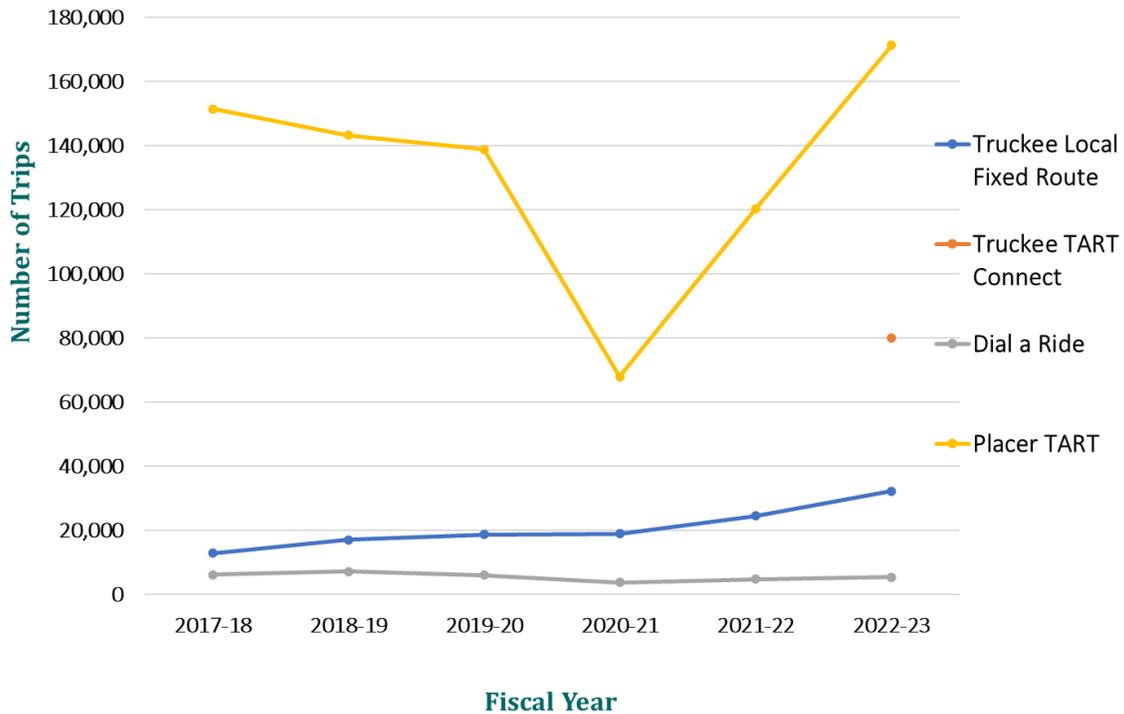
Ridership data by month and service for Fiscal Year 2022-23 is presented in Table 12, while Figure 15 below presents Truckee TART Systemwide ridership information graphically. As shown, ridership varies by season, however less dramatically than in previous years. During FY 2022-23, the Truckee Local Fixed Route experienced its peak month during November (3,469 passenger-trips or 11 percent of the annual total), followed by a high number of passenger trips in both January and December (both 10 percent of the annual total, respectively). Systemwide, the shoulder season months (April through May and September through November) have the greatest proportion of year-round passenger trips (43 percent), followed by the Winter season months (33 percent).

Table 11: Truckee Historical Ridership
Fiscal Years 2017-18 through 2022-23

Service		Fiscal Year						Change from 2017-18 to 2022-23 ⁽²⁾	
		2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		
Truckee TART Services	Local Route	#	12,920	17,055	18,673	18,874	24,500	32,242	19,322
		% Change	--	32%	9%	1%	30%	32%	150%
	Northstar Night	#	--	--	1,864	1,297	844	3,421	1,557
		% Change	--	--	--	-30%	-35%	305%	84%
	Olympic Valley Night	#	--	--	1,891	1,450	1,450	919	-972
		% Change	--	--	--	-23%	0%	-37%	-51%
	Truckee Thursday/Special Events	#			13,881	--	7,002	6,858	-8,823
		% Change			--	--	--	-28%	-64%
	DAR	#	6,198	7,171	6,064	3,698	4,815	5,331	-867
		% Change	--	14%	-18%	-64%	23%	10%	-14%
TART Connect	#	--	--	--	--	--	80,128	--	
	% Change	--	--	--	--	--	--	--	
Systemwide	#	19,118	24,226	28,492	25,319	31,609	112,827	93,709	
	% Change	--	21%	15%	-13%	20%	72%	49%	
Placer TART	89 Route	#	77,146	70,586	65,732	33,438	59,383	90,354	13,208
		% Change	--	-9%	-7%	-97%	44%	34%	17%
	267 Route	#	74,402	72,719	73,089	34,542	60,861	81,052	6,650
		% Change	--	-2%	1%	-112%	43%	25%	9%
	Systemwide	#	151,548	143,305	138,821	67,980	120,244	171,406	19,858
		% Change	--	-6%	-3%	-104%	43%	30%	13%

Note (1): Includes only Placer County TART routes serving Truckee.
 Note (2): Assume that in cases where 2017 data does not exist, data is using the next available year.
 Source: Town of Truckee TART and Placer TART Annual Reporting, 2023

Figure 14: Placer Hwy 89 and Hwy 267 Routes and Truckee TART Historical Ridership



The Dial-a-Ride service has relatively consistent levels of ridership throughout the year, as shown in Table 12 and Figure 15. The months with the highest passenger-trips are scattered throughout the year, with March, June, and November producing the greatest number of trips (approximately 9 percent of the total annual trips for each month). It should be noted that the ease of the newly released Truckee TART Connect may carry some passengers who previously took Dial-a-Ride. Even with this consideration, Dial-a-Ride services have increased ridership from the previous fiscal year by nearly 10 percent.

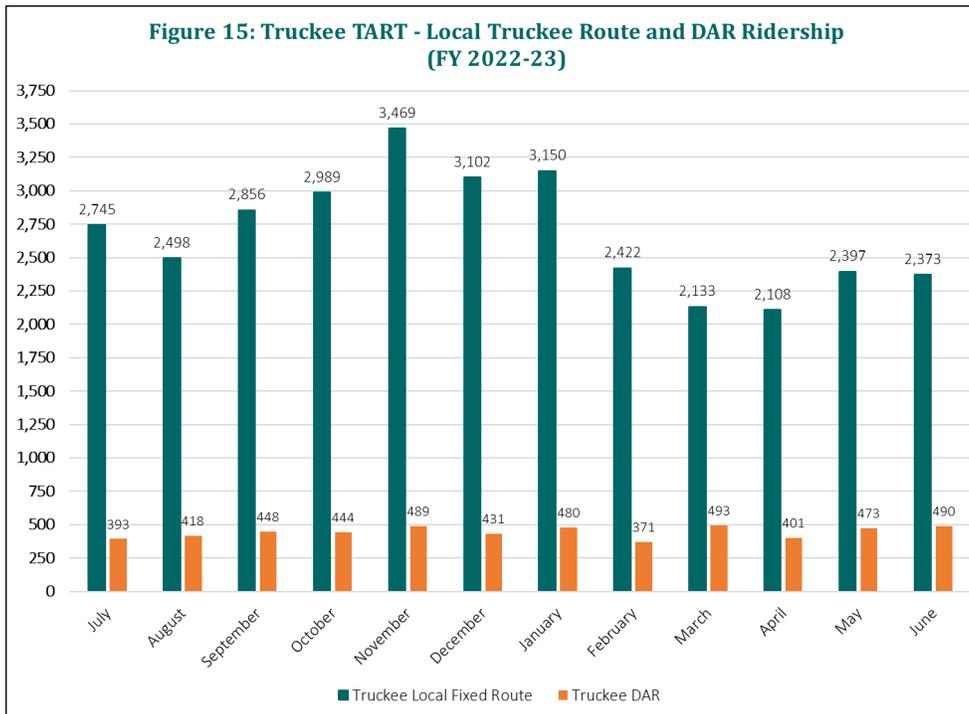
Table 12: Truckee TART Transit Services Passenger Boardings by Month

Fiscal Year 2022-23

Month	Truckee Local Fixed Route		Truckee DAR		Total	Percent of Total
	#	%	#	%		
July	2,745	9%	393	7%	3,138	8%
August	2,498	8%	418	8%	2,916	8%
September	2,856	9%	448	8%	3,304	9%
October	2,989	9%	444	8%	3,433	9%
November	3,469	11%	489	9%	3,958	11%
December	3,102	10%	431	8%	3,533	9%
January	3,150	10%	480	9%	3,630	10%
February	2,422	8%	371	7%	2,793	7%
March	2,133	7%	493	9%	2,626	7%
April	2,108	7%	401	8%	2,509	7%
May	2,397	7%	473	9%	2,870	8%
June	2,373	7%	490	9%	2,863	8%
Total	32,242		5,331		37,574	
Truckee TART Systemwide						
% Winter (December - March)	12,582	33%				
% Summer (June - August)	8,917	24%				
% Shoulder (April - May, Sept - Nov)	16,074	43%				

Source: Town of Truckee TART Annual Reporting, 2023

Figure 15: Truckee TART - Local Truckee Route and DAR Ridership (FY 2022-23)



Truckee TART Local Fixed Route and Truckee DAR Ridership by Passenger-Type

Table 13 presents ridership on the Truckee Local Fixed Route and Truckee DAR for Fiscal Year 2022-23 by passenger type. On the Truckee Local Fixed Route, a majority (97 percent) of passengers are the general public, followed by children (2 percent), and senior and/or disabled passengers (1 percent). As shown, Truckee Dial-a-Ride ridership is largely senior and/or disabled (totaling 97 percent), with the general public passengers making up 3 percent of ridership, and child passengers accounting for the remaining 0.1 percent of annual ridership. Overall, the general public passengers total nearly 83 percent of ridership, followed by senior and/or disabled passengers (16 percent), and child/free riders (2 percent).

Fare Type	Truckee Local Fixed Route		Dial-A-Ride		Total	
	#	%	#	%	#	%
General Public	28,673	97%	178	3%	28,851	83%
Senior / Disabled /ADA	314	1%	5,125	97%	5,439	16%
Child / Free	510	2%	4	0%	514	1%
Total	29,497	85%	5,307	15%	34,804	100%

Note: Children over the age of 3 are included in the General Public category.
Source: Town of Truckee TART Annual Reporting, 2023

Truckee Local Fixed-Route Boarding and Alighting Activity by Stop

Boarding and alighting activity by stop is shown in Table 14. As expected, major bus stop activity occurs at the Truckee Depot (21 percent of total activity), followed by the Gateway Center/Grocery Outlet stops with a combined total of nearly 18 percent of total activity. Other popular stops include Donner Pass Road/South Shore Drive (7 percent), Donner Pass Road/Cold Stream Road (6 percent), and Edwin Road/Henness Road (6 percent). The Village Green and Cedar House Hotel stops along Brockway have the least amount of passenger activity (0.4 percent and 0.1 percent, respectively).

Truckee TART Connect Ridership

While Truckee is a year-round community, second-home occupancy and visitor activity are highest in the peak winter and summer tourism seasons. This also occurs when seasonal international workers arrive, primarily without personal vehicles, to work at the region's many ski resorts. Based on this tourism pattern, it would be expected that Truckee TART Connect ridership would be greatest during the peak seasons when there are more people in town, and lower during the off-peak seasons of spring and fall.

Table 15 shows how Truckee TART Connect ridership has varied by season and month since June 2022. During the first three consecutive seasons of operations (winter 2022-23, spring 2023, and summer 2023), total ridership followed the anticipated seasonal pattern, dropping from winter to spring, and then rising during the summer. While this initial trend suggests tourism is influencing ridership, the spring's

drop in ridership can also be attributed to the season including fewer months and service days than winter.

Table 14: Truckee Transit Fixed Route Passenger Activity By Stop

FY 2022-23

Stop	Annual (Eastbound and Westbound)			% Total Passenger	Average Daily Boardings
	On	Off	Total		
Truckee Depot	6,017	7,663	13,680	21%	16
Donner Pass Rd/Gateway/Safeway	2,389	4,066	6,455	10%	7
Donner Pass Rd/Grocery Outlet	3,383	1,591	4,974	8%	9
Donner Pass Rd/South Shore Dr	2,183	2,221	4,404	7%	6
Donner Pass Rd/Cold Stream Rd	2,629	1,344	3,973	6%	7
Edwin Rd/Henness Rd (Bus Shelter)	2,268	1,509	3,777	6%	6
Deerfield Dr/Crossroads Ctr/Post Office	1,319	2,070	3,389	5%	4
Brockway Rd/The Rock/ Fifty-Fifty	1,822	1,440	3,262	5%	5
Truckee Way/Coburn Crossing Apts	1,917	1,182	3,099	5%	5
Estates Dr/Senior Apts	2,057	1,021	3,078	5%	6
Truckee Way/Rue Ivy	934	594	1,528	2%	3
Donner Pass Rd/Meadow Way/7-11	702	772	1,474	2%	2
Donner Pass Rd/Donner Mem SP	908	539	1,447	2%	2
Donner Pass Rd/TF Medical Offices	271	980	1,251	2%	1
Roundhouse Way/Artist Loft Apts	366	680	1,046	2%	1
Donner Pass Rd/TF Cancer Ctr	396	581	977	2%	1
Donner Pass Rd/Northwoods Blvd	276	549	825	1.3%	1
Donner Pass Rd/Westgate/Wild Cherries	378	410	788	1.2%	1
Donner Pass Rd/Highway Rd	127	650	777	1.2%	0
Brockway Rd/Regional Park	389	329	718	1.1%	1
Donner Pass Rd/Moraine Rd/Sticks	210	359	569	0.9%	1
Donner Pass Rd/Rec Center	131	436	567	0.9%	0
Donner Pass Rd/Truckee High School	372	122	494	0.8%	1
Brockway Rd/Palisades Dr/7-11	139	313	452	0.7%	0
Brockway Rd/Reynold Way	323	112	435	0.7%	1
Donner Pass Rd/Tri-Counties Bank Plaza	204	164	368	0.6%	1
Brockway Rd/Village Green MHP	87	190	277	0.4%	0
Brockway Rd/Ceder House Hotel	35	30	65	0.1%	0
No Crossroads PU	10	14	24	0.0%	0
Totals	32,242	31,931	64,173		

Source: Town of Truckee TART Annual Reporting, 2023

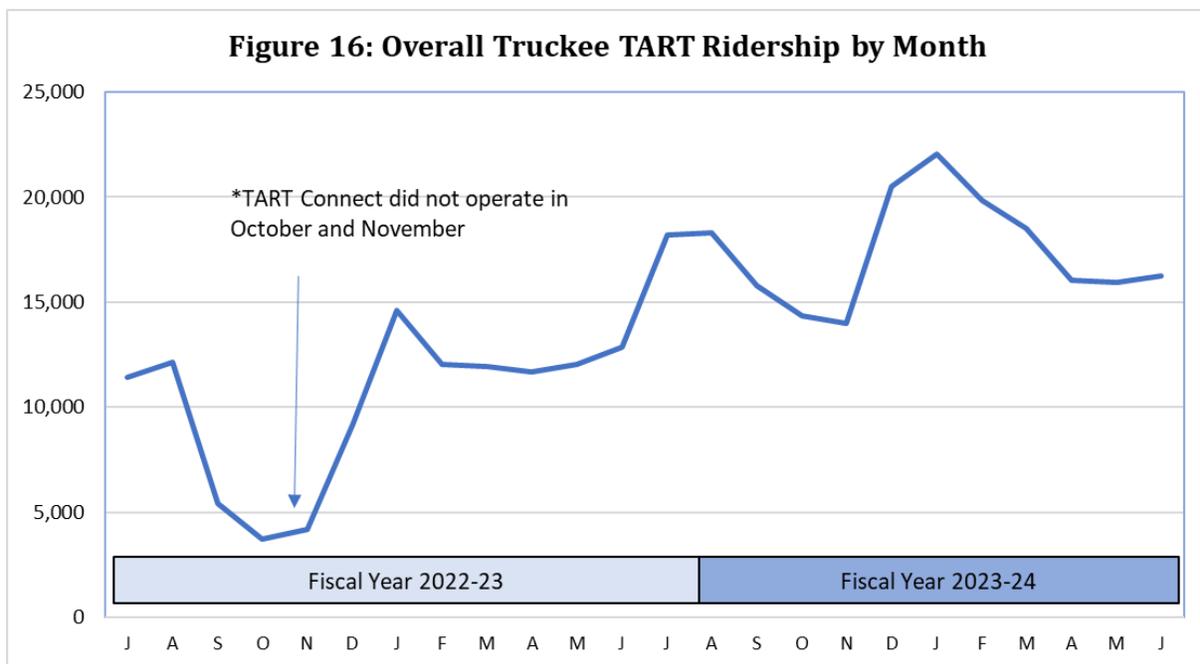
Table 15: Truckee TART Connect Ridership by Season and Month

Month	Total Passengers	Average Passengers per Day
Summer 2022		
June	776	129
July	7,714	249
August	9,354	302
September	1,712	342
Full Season	19,556	268
Winter 2022-23		
December	5,089	299
January	10,242	330
February	8,885	317
March	8,911	287
Full Season	33,127	310
% Change From Previous Season		16%
Spring 2023		
April	9,062	302
May	9,169	296
June	9,990	333
Full Season	28,221	310
% Change From Previous Season		0%
Summer 2023		
July	15,607	503
August	15,219	491
Full Season	30,826	497
% Change From Previous Season		60%
Fall 2023		
September	13,127	438
October	11,809	394
November	11,766	392
Full Season	36,702	403
% Change From Previous Season		-19%
Winter 2023-24		
December	17,567	567
January	18,980	612
February	16,782	579
March	15,778	509
Full Season	69,107	566
% Change From Previous Season		40%

Source: LSC Transportation Consultants, Inc. based on Downtowner data.

To better compare the different seasons, the average number of passenger-trips carried per day is also presented. While the average number of passenger-trips completed per day stayed unchanged from winter to spring of 2023, it should be noted that snow and poor road conditions had a measurable impact on how many passengers could be served per day during the winter. Demand greatly increased during summer 2023 when an average of 497 passenger-trips were carried per day. This came as a result of increased service area, hours, and the addition of 3 vehicles.

Year-over-year trends in ridership can be compared for the summer season. Focusing on the peak months of July and August 2023, ridership was 80 percent higher than 2022 ridership. While some of this increase was a result of the expanded service area and hours, the strong growth in ridership indicates that a greater number of residents and visitors knew of and used the service compared to the previous year. In contrast, the winter season saw an 82 percent increase in average daily ridership from the previous winter season of 2023-23. Figure 16 illustrates how the TART Connect service has positively impacted overall public transit use (fixed route, DAR, and TART Connect) in the Town of Truckee.



Placer TART Passenger - Truckee Route Activity

As shown in Figure 13 and described above, the Placer TART services connect Truckee to Eastern Placer County and vice versa. While only a portion of the Placer TART Hwy 89 and Placer TART Hwy 267 routes lie within the Eastern Nevada County study area, these connecting services provide over 40,000 passenger trips to, from, and within the Town each year, as shown in Tables 16 and 17. The current Truckee Train Depot was used for over 20,000 passenger trips (or approximately 60 percent of the total annual Truckee trips) along Placer TART Hwy 89 and Placer TART Hwy 267 Truckee routes combined. Other major trends during FY 2022-23 included the following:

- In addition to the Truckee Train Depot, other popular Truckee stops along TART 89 included Donner Pass Road at the Bank of America (5,244 passenger trips or 30 percent of total

Northbound stop activity), followed by Donner Pass Road at the Safeway shopping center (3,505 passenger trips or 20 percent of Southbound stop activity) as shown in Table 16.

- Similar to the previous TDP, the Placer TART Hwy 267 route does not carry as many passengers as the Hwy 89 route. The Truckee Train Depot continues to have the highest number of boardings with 8,346 passenger boardings and alightings (72 percent of total TART 267 boardings within Truckee). Other popular stops along this route include Brockway and Palisades Drive.
- Of the 41,524 passenger trips occurring to, from, and within Truckee, 13 percent (5,507 passenger-trips) were wholly within the Town and the remaining 87 percent (36,017 passenger-trips) were passengers traveling either to or from the Town.

Table 16: Placer County TART Hwy 89 Boarding & Alighting in Truckee					
FY 2022-23					
	FY 2022-23		% of Psgrs - Both Directions		
	ON	OFF	ON	OFF	Total
Hwy 89 Northbound					
Hwy. 89 @ West River St.	167	243	8%	2%	2%
Hwy 89 @ Deerfield (College)	125	1,504	6%	10%	10%
Hwy. 89 @ CHP Office	90	1,432	4%	9%	9%
Donner Pass Rd. B of A	1,429	3,815	71%	25%	31%
Donner Pass Rd. @ Pine St. Hosp.	207	683	10%	5%	5%
Truckee Train Depot	0	7,406	0%	49%	43%
TOTAL	2,018	15,083			
Hwy 89 Southbound					
Truckee Train Depot	8,331	0	56%	0%	49%
Donner Pass Rd. @Hospital Offices	240	197	2%	9%	3%
Donner Pass Rd. @ Safeway	2,337	1,168	16%	55%	21%
Hwy. 89 between DMV & freeway	1,179	208	8%	10%	8%
Hwy. 89 @ Deerfield & Crossroad	2,697	479	18%	23%	19%
Hwy. 89 West River St. trailer park	133	66	1%	3%	1%
TOTAL	14,917	2,118			
Hwy 89 Total Both Directions					
Psgr-Trips Wholly Within Truckee	4,136				
Psgr-Trips To/From Truckee	25,864				
Total Psgr-Trips in Truckee	30,000				
% Psgr-Trips Within Truckee	14%				
% Psgr-Trips To/From Truckee	86%				
<i>Source: FY 2022-23 Placer County TART Boarding and Alighting Report</i>					

Table 17: Placer County TART Hwy 267 Boarding & Alighting in Truckee

FY 2022-23

	FY 2022-23		% of Psgrs - Both Directions		
	ON	OFF	ON	OFF	Total
HWY 267 Northbound					
Airport Rd & Truckee Town Hall	3	14	5%	1%	1%
Airport	7	41	11%	3%	3%
Hampton Inn & Suites	9	50	14%	3%	4%
Best Western	14	39	21%	3%	3%
Across from Village Green	5	58	8%	4%	4%
Brockway Rd & Palisades Dr	4	488	6%	33%	31%
Truckee Train Depot	24	811	36%	54%	53%
TOTAL	66	1,501			
HWY 267 Southbound					
Truckee Train Depot	7,397	114	74%	8%	66%
Brockway Rd & Palisades Dr	355	273	4%	19%	5%
Village Green (2nd Driveway)	155	44	2%	3%	2%
Across from Best Western	214	198	2%	14%	4%
Hampton Inn & Suites	683	430	7%	30%	10%
Airport Rd & Truckee Town Hall	860	282	9%	20%	10%
Airport	359	81	4%	6%	4%
TOTAL	10,023	1,422			
Hwy 267 Total Both Directions					
Psg-Trips Wholly Within Truckee	1,371				
Psg-Trips To/From Truckee	10,153				
Total Psg-Trips in Truckee	11,524				
% Psg-Trips Within Truckee	12%				
% Psg-Trips To/From Truckee	88%				
Sum of Hwy 89 and Hwy 267 Routes					
Psg-Trips Wholly Within Truckee	5,507				
Psg-Trips To/From Truckee	36,017				
Total Psg-Trips in Truckee	41,524				
% Psg-Trips Within Truckee	13%				
% Psg-Trips To/From Truckee	87%				
<i>Source: FY 2022-23 Placer County TART Boarding and Alighting Report</i>					

TRUCKEE TART SERVICE LEVELS AND BUDGET

Revenues

Table 18 presents actual Truckee TART operating revenues by source for FY 2022-23. Note that this does not include funding for TART Connect services which have been funded separately through partner contributions, General Funds, and other Town discretionary funding. Due to this reason, the Town has treated TART Connect as a Capital Improvement Program project with no revenues or corresponding expenditures captured in the Transit Program operating budget. Also of note is that funding currently

provided through the Tahoe Truckee Airport District, which represents 10 percent of the FY 2022 operating budget, and has historically been provided to subsidize free fares, will no longer be available in future years. This policy decision has the potential to impact not only the ability to continue the “fare-free” program by the Town but also impact fare-box recovery requirement under TDA when that requirement goes back into effect. The farebox ratio requirement has been suspended by the State as transit agencies recover operationally from decreases in ridership and associated farebox as a result of COVID and the shift to the “work from home” model.

As shown in the table, transit operating sources in FY 2022-23 are composed of state funds (53.9 percent), followed by federal funds (26.9 percent), and local funds (15.4 percent). Overall, Local Transportation Funds (LTF) account for \$759,989, or 42.8 percent of operating revenues. This is typically the largest funding source for public transit operators in California.

Table 18: Town of Truckee Transit Revenues		
<i>Fiscal Year 2022</i>		
Source	Revenue Total	Percent Total
<u>Operating Revenue</u>		
Local Funds		
Grays Crossing Contributions	\$60,076	3.4%
NCTC - CTA Fund	\$33,027	1.9%
Partnership Funding - TTAD & Placer County	\$180,000	10.1%
<i>Subtotal</i>	<i>\$273,103</i>	<i>15.4%</i>
State Funds		
Local Transportation Funds	\$759,989	42.8%
State Transit Assistance	\$74,894	4.2%
LCTOP Grant	\$121,449	6.8%
<i>Subtotal</i>	<i>\$956,332</i>	<i>53.9%</i>
Federal Funds		
FTA 5311	\$290,736	16.4%
FTA 5310 - Operations	\$187,500	10.6%
<i>Subtotal</i>	<i>\$478,236</i>	<i>26.9%</i>
Other Sources		
Farebox, Transfer In CFDs and Air Quality, Interest	\$67,859	3.8%
<i>Subtotal</i>	<i>\$67,859</i>	<i>3.8%</i>
<i>Total Operating Revenue</i>	<i>\$1,775,530</i>	<i>100.0%</i>
<u>Capital Revenue</u>		
Transit & Intercity Rail Capital Program	\$700,000	41.8%
State of Good Repair Grant	\$165,678	9.9%
STA Capital	\$810,000	48.3%
<i>Total Capital Revenue</i>	<i>\$1,675,678</i>	<i>100.0%</i>
Total Revenue	\$3,451,208	--
<i>Source: Town of Truckee 2022/23 Estimated Actual Revenue Budget</i>		

The total of Federal Transit Administration (FTA) grants in FY 22/23 equals a significant portion of the operating budget (\$478,236 or 26.9 percent). However, it is worth noting that over half of this amount stems from CARES/CRSSA funding which is a temporary COVID relief funding source. Other significant revenue sources for the Truckee TART budget include mitigation fees from the Gray's Crossing development (\$60,076) and Partnership Funding between Truckee Tahoe Airport District and Placer County (\$180,000). Table 18 also presents the Town of Truckee TART capital revenues by source for FY 2022-23. Funds available for capital purposes such as vehicle replacement equal up to \$1,675.678.

Capital funding varies significantly from year to year depending on needs and grant funding success. Total revenue for the Truckee transit services is \$3,451,208.

Expenses

Actual Truckee TART operating expenses for FY 2022-23 are presented in Table 19. The table does not include operating assistance the Town gives to Placer County for the portion of the Placer TART routes within Truckee or TART Connect. Total operating expenses for the fiscal year totaled \$1,585,263. The primary operating expense is the operating contract for fixed-route services (\$498,100) followed by the DAR service expenses (\$255,600).

Table 19: Truckee Transit Local Services Fiscal Year 2022-23 Operating Expenses and Cost Allocation				
Line Item	Allocation			Total Expense
	Fixed	Per Hour	Per Mile	
Town Personnel Expenses				
Salaries and Benefits	\$275,935	\$0	\$0	\$275,935
<i>Subtotal: Personnel</i>	\$275,935	\$0	\$0	\$275,935
Truckee Local Services				
Fixed Route (Paratransit Contract)	\$251,825	\$246,275	\$0	\$498,100
Dial-A-Ride (Paratransit Contract)	\$129,224	\$126,376	\$0	\$255,600
<i>Subtotal</i>	\$381,049	\$372,651	\$0	\$753,700
General Services and Supplies				
Fixed Costs	\$236,403	\$0	\$0	\$236,403
CalTIP Insurance	\$0	\$62,547	\$0	\$62,547
Fleet Maintenance Allocation	\$0	\$0	\$131,678	\$131,678
Vehicles - Fuel	\$0	\$0	\$60,000	\$60,000
<i>Subtotal</i>	\$236,403	\$62,547	\$191,678	\$490,628
Total Operating Costs	\$893,387	\$435,198	\$191,678	\$1,520,263
<i>Service Factors for FY 2022-23</i>		Vehicle Service Hours	Vehicle Total Miles	
		7,681	145,217	
Vehicle Revenue Hour Cost Factor	\$56.66			
Vehicle Total Mile Cost Factor	\$1.32			
Annual Fixed Cost	\$893,387			
<i>Source: Town of Truckee FY 2022/23 Expenditures Budget - FY 2022/23 Estimated Actual</i>				

Cost Allocation Model

When developing and evaluating service alternatives, it is useful to develop a “cost model” which can easily show the financial impact of any proposed changes. Table 19 also presents the FY 2022-23 cost allocation model for Truckee TART operations. It should be noted that the cost model shows the total operating cost rather than the total subsidy, which is the total operating cost minus passenger fare revenues. Each cost item is allocated to the quantity on which it is most dependent. Maintenance costs, for example, are allocated to vehicle service miles. This provides a more accurate estimate of costs than a simple total-cost-per-vehicle-hour factor, which does not vary with the differing mileage associated with an hour of service on DAR versus the fixed route.

Paratransit Services, the operating contractor, is paid a fixed monthly fee and per revenue vehicle hour (the time when vehicles are in service) for services provided. Fuel and vehicle maintenance (which represents per-mile costs) are provided by the Town of Truckee. As such, the Truckee TART cost model service factors represent vehicle revenue service hours but total vehicle miles (including both revenue and deadhead miles), as an increase in deadhead travel would increase the Town’s per-mile cost but not per-hour costs. For FY 2022-23, the Truckee TART equation is:

$$\begin{aligned} \text{Operating Cost} &= \$1.32 \times \text{total vehicle miles} \\ &+ \$56.66 \text{ per vehicle service hour} \\ &+ \$893,387 \text{ annually for fixed costs} \end{aligned}$$

This equation can be used to estimate the cost of any changes in service, such as the operation of additional routes or changes in service span. It is used as part of this study to evaluate the performance of each service in Table 20, discussed below, as well as the cost impacts of service alternatives later in the study. It should be noted that the cost model does not include depreciation or capital items (such as vehicle purchases) made during the fiscal year.

TRUCKEE TART SERVICES PERFORMANCE EVALUATION

To gain further insight into the efficiency and effectiveness of transit services in Truckee, it is useful to conduct a detailed analysis of a variety of performance measures on a route or service type level.

Operating Characteristics by Service

Table 20 presents operating and performance data, including service levels operated by Eastern Nevada County Transit Services in Fiscal Year 2022-23. When considering FY 2022-23 performance data as well as the FY 2022-23 Estimated Actual Budget, the following major themes emerged:

- Total Operating Costs per Passenger Trip ranged from \$76.40 (Dial a Ride) to \$6.85 (Special Event Shuttle Services). Truckee TART Connect costs per passenger trip (\$33.49) was only a few dollars more than the existing Truckee Local Fixed Route and Night Services combined (\$30.70).
- Also shown in Table 20 is the **Marginal Operating Cost per Vehicle Service Hour**. This performance indicator does not include fixed costs and is therefore a better representation of what it would cost to add incremental hours of service. According to Table 20, the marginal operating cost per vehicle service hour varies from \$45.70 (TART Connect) to \$241.94 (4th of

July event shuttles). Truckee Thursday's event shuttle service also had a fairly high cost per revenue vehicle hour at \$216.45. Dial a Ride and Fixed Route services had the lowest marginal cost per vehicle revenue hour at \$79.28 and \$88.13 per hour, respectively.

- **Trips per Vehicle Revenue Hour** ranged from 35.3 trips per hour (4th of July Special Event Shuttle) to 2.7 trips per hour (Dial a Ride). Truckee Thursday had 21.9 trips per vehicle revenue hour, followed by Truckee TART (7 trips per vehicle revenue hour).
- **Truckee TART Connect's annual performance and costs** are summarized in Tables 20 and 21. With 5.6 trips per vehicle revenue hour, Truckee Connect performs better than Dial-a-Ride services by this metric. Its operating costs per passenger trip fall in the median range of all other services at \$15.96 per trip. As shown, the total annual operating costs are in the sum of \$1,278,461.
- The **cost of the Truckee Thursday and 4th of July shuttle services** equates to \$51,103 (Table 22). While costs per vehicle revenue hour are an average of \$170.34, these services provide the greatest number of trips per vehicle revenue hour of all the services with Truckee Thursday shuttles providing 21.3 passenger trips per hour and the 4th of July shuttle services carrying 34.3 passenger trips per hour.

Placer TART operating data and performance were based on data provided by Placer County (Table 23). As noted in the table, the Placer TART services are representative of the Hwy 89 and Hwy 267 routes that serve Truckee. By approximating the annual revenue hours and miles used to serve the Truckee section of each route, as well as boardings to, from, and within Truckee, a cost per revenue hour and revenue mile was calculated using Truckee's current cost to Placer County for subsidizing their services.

Table 20: Truckee Operating Data and Performance Indicators

Fiscal Year 2022-2023

	Truckee Local Services ⁽¹⁾					Placer TART ⁽²⁾		Total Placer TART Services within Truckee		
	Dial-A-Ride	Truckee Fixed Routes	Truckee Thursday Shuttles	4th of July Parade & Fireworks	Total Local Services	TART Connect	Total Town of Truckee Services		Route 89	Route 267
Operating Data										
One-Way Passenger Trips	5,331	36,582	5,625	1,233	48,771	80,128	128,899	30,000	11,524	41,524
Vehicle Revenue Hours	2,127	5,554	264	36	7,981	14,425	22,406	631	1,008	1,639
Vehicle Revenue Miles	24,373	109,155	--	--	133,528	243,880	377,408	13,377	22,383	35,760
Vehicle Total Miles	29,509	115,708	--	--	145,217	274,713	419,930	--	--	--
<u>Annual Costs</u>										
Marginal Operating Costs	\$159,468	\$467,407	\$43,075	\$8,028	\$677,978	\$659,287	\$1,337,265	\$125,000	\$115,664	\$240,664
Allocated Fixed Costs	\$247,404	\$645,984	--	--	\$893,387	\$619,173	\$2,405,948	--	--	--
Total Annual Operating Costs	\$406,872	\$1,113,391	\$43,075	\$8,028	\$1,571,365	\$1,278,461	\$2,849,826	\$125,000	\$115,664	\$240,664
Farebox Revenues	\$1,697	\$0	\$0	\$0	\$0	\$0	\$1,697	\$0	\$0	0
Subsidy Required	\$405,175	\$1,113,391	\$43,075	\$8,028	\$1,571,365	\$1,278,461	\$2,848,129	\$125,000	\$115,664	\$240,664
Performance Indicators										
Average Fare	\$0.32	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.01	\$0.00	\$0.00	0
Operating Cost Per Passenger Trip	\$76.32	\$30.44	\$7.66	\$6.51	\$32.22	\$15.96	\$22.11	\$4.17	\$10.04	\$5.80
Marginal Cost per Passenger-Trip	\$29.91	\$12.78	\$7.66	\$6.51	\$13.90	\$8.23	\$10.37	\$4.17	\$10.04	\$5.80
Marginal Cost per Vehicle Revenue-Hour	\$74.97	\$84.15	\$163.16	\$223.00	\$84.94	\$45.70	\$59.68	\$198.24	\$114.74	\$146.87
Subsidy Per Trip	\$76.00	\$30.44	\$7.66	\$6.51	\$32.22	\$15.96	\$22.10	\$4.17	\$10.04	\$5.80
Farebox Recovery Ratio	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Trips Per Vehicle Revenue-Hour	2.5	6.6	21.3	34.3	6.1	5.6	5.8	47.6	11.4	25.3
Trips Per Vehicle Revenue-Mile	0.2	0.3	NA	NA	0.4	0.3	0.3	2.2	0.5	1.2
Trips per Vehicle Total Miles	0.2	0.3	NA	NA	0.3	0.3	0.3	--	--	--

Source: Town of Truckee Public Transit Budget Est. 2022/23 Actuals and TART Connect spreadsheets

Note 1: Truckee Local Services fixed costs are allocated between DAR, FixedRoute only.

Note 2: Placer TART data represent only ridership and costs associated with the Town of Truckee area.

Table 21: Truckee TART Connect Performance
 FY 2022-23 (July 2022-June 2023)

Performance Data and Indicators	Total
Passengers	80,128
Vehicle Service Hours	14,425
Vehicle Service Miles	243,880
Downtowner Driver Costs (Hourly)	\$547,210
Downtowner Fuel Costs (Miles)	\$112,077
Downtowner Fixed Costs	\$619,173
Total Operating Cost	\$1,278,461
Passenger-Trips per Hour	5.6
Passenger-Trips per Mile	0.3
Operating Cost per Passenger-Trip	\$15.96
Total Operating Cost per Vehicle Hour	\$88.63

Source: Truckee TART Connect Monthly Performance Reports

Table 22: Holiday and Special Event Shuttles Operating Data and Performance Indicators

	Truckee Thursday	July 4th Parade & Fireworks	Total
Operating Data			
One-Way Passenger Trips	5,625	1,233	6,858
Vehicle Revenue Hours	264	36	300
Costs			
Total Annual Operating Costs	\$43,075	\$8,028	\$51,103
Performance Indicators			
Operating Cost Per Passenger Trip	\$7.66	\$6.51	\$7.45
Operating Cost Per Vehicle Revenue Hour	\$163.16	\$223.00	\$170.34
Trips Per Vehicle Revenue Hour	21.3	34.3	22.9

Source: Truckee TART Shuttle Information, 2023

Table 23: Placer TART 89 and 267 Routes Operating Data and Performance Indicators

FY 2022-23 Data for Truckee Only

	Hwy 89 Route	Hwy 267 Route	Total
Operating Data			
Boardings with the Town of Truckee	30,000	11,524	41,524
Vehicle Revenue Hours	631	1,008	1,639
Vehicle Revenue Miles	13,377	22,383	35,760
Costs			
Total Annual Operating Cost ⁽¹⁾	\$125,000	\$115,664	\$240,664
Performance Indicators			
Operating Cost Per Passenger Trip	\$4.17	\$10.04	\$5.80
Operating Cost Per Vehicle Revenue Hour	\$198.24	\$114.74	\$146.87
Operating Cost Per Vehicle Revenue Mile	\$9.34	\$5.17	\$6.73
Trips Per Vehicle Revenue Hour	47.6	11.4	25.3
<p>Note: Charges to Truckee per contract with Placer County Source: Truckee 2023-24 Budget</p>			

PUBLIC AND STAKEHOLDER OUTREACH

INTRODUCTION

Over the last several years there have been two major surveys conducted regarding transportation in the Eastern Nevada County region. These survey efforts and their results are described in detail below followed by a summary of interviews with six key stakeholders regarding current challenges and needs related to the current TDP planning effort.

2022 ONBOARD TRUCKEE TART PASSENGER SURVEY

During March and July of 2022, the Tahoe Regional Planning Agency contracted with Warner Transportation Consulting, to conduct on-board surveys for both Placer and Truckee TART. A total of 378 passengers participated in the Placer and Truckee TART surveys, 37 of which were riding the Truckee Local Fixed Route. While this is a relatively small sample of ridership, the survey still found the following high-level assumptions to be true:

- Passengers strongly agreed that bus drivers are courteous, buses are comfortable and clean, and that they feel safe riding Truckee TART.
- During the summer months, fewer passengers agreed that operating hours were frequent enough.
- “Keep fares free” and “Provide later services along Truckee Local Fixed Route” were the greatest priorities amongst passengers. Shelters and benches at bus stops and more information about scheduled arrival times were also relatively high priorities.
- More than half (58 percent) of those riding and taking the survey were between the ages of 25 to 59 years old.
- 67 percent of passengers taking the survey had an annual income of \$25,000 or less.

When looking into more specific rider behavior and trip purpose by season, it was found that during the summer, 60 percent of those surveyed use transit to go to and from work, with another 30 percent using TART to shop. During the winter season, fewer riders use TART for work commuting (18 percent) with 43 percent of respondents indicating that they use TART to shop.

Of the 37 people responding to the Truckee TART-specific survey, 100 percent indicated that they walk to the bus stop from their homes. During the winter season, 90 percent still responded that they walk with the other 10 percent taking TART Connect to the bus stop. It should be noted that TART Connect was still in its initial pilot phase and not Town-wide when these surveys were conducted.

When asked where respondents typically take the TART during the winter season, 50 percent responded that they take TART to downtown Truckee, followed by 19 percent taking TART to Tahoe Forest Hospital. During the summer months, this pattern shifts with 40 percent of respondents using TART to get to Tahoe Forest Hospital and another 30 percent using services to get to and from Gateway Shopping Center.

2023 TART CONNECT COMMUNITY PASSENGER SURVEY

LSC conducted a general community survey regarding the Truckee TART Connect service during November and December 2023. The survey was designed to gather input on how the Truckee TART Connect is used and perceived by residents, local employees, and visitors alike. In all, 593 people participated, 566 of whom completed the survey in English and 27 of whom completed the survey in Spanish. A complete and detailed summary of these responses is included in Appendix C of the Truckee TART Connect Review. Major themes of the survey responses included the following:

- The majority of the survey respondents were full-time Truckee residents (70 percent), followed by 11 percent who were part-time Truckee residents, 10 percent who were visitors to Truckee, and 9 percent who were employed in Truckee.
- The most popular neighborhoods were Tahoe Donner (35 percent), Glenshire (17 percent), and Sierra Meadows (8 percent). Of the 16 percent who answered “Other,” most live in other North Lake Tahoe communities or near Northstar Resort.
- Almost all (98 percent) of the survey participants were aware of Truckee TART Connect. Of these respondents, a considerable proportion of respondents reported that they learned about Truckee TART Connect by either word of mouth or social media (74 percent).
- The top reasons why the survey respondents reported they ride Truckee TART Connect are to avoid driving after drinking (46 percent), to avoid parking hassles and costs (41 percent), to get to recreation and events (34 percent), and to help the environment (33 percent).
- The most common issue inhibiting the survey respondents from riding Truckee TART Connect is the long wait times (48 percent).
- 68 percent of the community survey respondents rated (10 out of 10) that they would recommend the Truckee TART Connect.

The survey respondents were provided with the opportunity to provide any additional comments they had regarding the Truckee TART Connect. About half of the comments were positive compliments for the program (47 percent). Regarding potential service improvements, the most common request was for wait times to be shortened (12 percent), with many suggesting that Truckee TART Connect hire additional drivers or allow for pre-scheduled rides. 9 percent requested for the service area to be expanded. These consisted of 8 requests for services just south of Truckee in Martis Valley (including the Placer County portion of Sierra Meadows), 7 requests for service to Northstar, 8 to Donner Summit/Sugar Bowl, and 3 to Olympic Valley.

STAKEHOLDER INTERVIEWS

During the fall months of 2023, stakeholder interviews were conducted with the following regional organizations: Sierra Community House, Sierra Senior Services, Tahoe Forest Health System, Tahoe Truckee Unified School System, and Elevation Truckee. A summary of these interviews is as follows:

Elevation provides programs for residents of Truckee and North Lake Tahoe with developmental disabilities with the goals of developing self-expression, functional and healthy living skills, and vocational

skills. Program participants take DAR to their office location on Donner Pass Road. Sometimes TART Connect or the fixed route is used for outings. In the past, Elevation provided some transportation for clients. Programs are typically offered Monday - Friday 9 AM to 3 PM. Agency representatives indicated a need for another DAR bus to transport passengers to/from locations outside of Truckee in North Lake Tahoe, as many participants live in Kings Beach.

Sierra Senior Services provides congregate meals at the Senior Center as well as Meals on Wheels. Truckee Donner Senior Apartments are located adjacent to the Senior Center off of Estates Drive. There are 60 Senior Apartments and many of the seniors use DAR, the fixed route, and TART Connect for medical appointments and grocery shopping. Sierra Senior Services representatives indicated a need for transportation to medical appointments in Reno. Sierra Senior Services would like to offer more transportation to clients in the future.

Tahoe Forest Hospital – Many employees and patients use Truckee TART to get to the hospital, partially due to the lack of parking at the hospital. TART Connect is becoming more popular among employees and patients. Roughly half of the 1,300 hospital employees live in Reno. A vanpool program was suggested as a good alternative form of transportation for these employees. (The Town was recently awarded funding through the State’s Carbon Reduction Program to start a Reno to Truckee Vanpool program that is intended to meet this and similar trip purposes.) Ideally, hospital staff would like to see fixed-route buses with greater frequency and a microtransit service that can cross jurisdictional boundaries. It was also noted that Plumas County no longer has pediatrics and OBGYN services. There may be a need for residents from other counties to travel to the hospital in Truckee for such services.

Sierra Community House provides a variety of services for primarily disadvantaged residents including hunger relief, crisis intervention, legal support, and prevention programs. Sierra Community House also serves both Truckee and North Lake Tahoe and therefore has expressed a need for more frequent and improved connections between Placer and Truckee TART. Many community members served by Sierra Community House live in North Lake Tahoe and work in Truckee or vice versa. Typical transit destinations for community members are located on Donner Pass Road but some are as far as the West end of Donner Lake. Staff indicated that many community members use and enjoy TART Connect. This service can be particularly useful on food distribution days. Staff reinforced the need for advertising TART Connect services in Spanish as well as creating a Spanish version of the app and perhaps providing greater assistance in scheduling rides for older adults. Scheduling TART Connect in advance can sometimes be a difficulty for community members given the service model is “on-demand”.

In the **Tahoe Truckee Unified School District**, which includes both Truckee and North Lake Tahoe, yellow bus service is available; however, the district is routinely short of bus drivers and therefore not running 7 routes. The district sees that only a few students take TART Connect to school. Separate discussions with TART Connect drivers indicate that TART Connect is heavily used by students after school. Students attending Sierra Vista High School at 11661 Donner Pass Road and living in North Lake Tahoe have limited public transit options. The trip takes them 1.5 hours. There are also newer families in apartment complexes such as Meadow View Apartments, Coldstream Commons, and the Artist Lofts who have no or one vehicle. It is challenging to get these parents to attend school conferences or activities. Generally, the

school district would like to see earlier/late service as well as half-hourly frequency. School enrollment has stayed relatively the same over the years and this is expected to continue going forward.

Junta Regional de Programas Comunitarios

On May 29th, an LSC Transportation Consultants staff member attended a Junta Regional de Programas meeting in Kings Beach. During the meeting, the TDP was presented through a Spanish interpreter. Information was also made available at their resources table and attendees were encouraged to participate in the online survey.

ONLINE COMMUNITY SURVEY

During April, May, and June of 2024, an online community survey was distributed via email listservs. The links were also sent to several local news media outlets and posted to the Town's website and social media accounts. The survey collected 59 responses (51 in English and 8 in Spanish). The following is a summary of the survey results with a more detailed analysis provided under Appendix B.

The survey as a whole revealed that many participants have been happy with Truckee TART Connect and appreciate the Town's effort in making transportation available. Most survey participants lived in either Tahoe Donner (23.7 percent), Glenshire (16.9 percent), or Sierra Meadows (11.9 percent). 20 percent of respondents indicated that they work in Downtown Truckee, followed by 18.2 percent that commute to Alpine, Palisades, Northstar, Kings Beach, and Tahoe City for work.

When it came to expressing support for various types of TART Connect alternatives, limiting services to the Downtown, Sierra Meadow, and Hospital area of Truckee was the least popular with 93.8 percent of participants expressing that they do not support that service change. Reducing service to between 6:00 PM and 10:00 PM was the second least popular alternative with 70.6 percent of participants stating they did not support that change to service.

When considering possible changes to the fixed route services, adding another van to TART Connect while reducing Truckee TART Local Fixed Route service to end at 5:30 PM was supported by more than half of respondents (56.1 percent). However, those who did not support this alternative were very adamant in this service not feeling equitable to people not wanting to rely on a phone app/microtransit for their trips home after work. Running services half-hourly received fairly mixed opinions with 45.2 percent indicating support while 33.3 percent remained neutral, and 21.4 percent expressed no support for this change in service. Those who didn't support this alternative explained that they thought the costs would outweigh the benefits.

SERVICE AND FARE ALTERNATIVES

INTRODUCTION

This chapter presents service alternatives for Truckee TART that are designed to serve the mobility needs of residents, visitors, and commuters in the Eastern Nevada County service area (focusing on the Town of Truckee) and to make services more productive and cost-effective. Potential ridership and operating costs are estimated for each service alternative. Ridership estimates are based on historical ridership data and standard transit industry demand estimation models. The service elements presented in this chapter are designed “a la carte.” In other words, each is evaluated as a stand-alone option, though when combined, the overall results may differ. The Plan Chapter presents preferred service alternatives which were selected based on public input and discussion with the project team.

This chapter considers both fixed route and microtransit (Truckee TART Connect) options:

The last TDP was completed in 2017. Many of the recommendations included in that plan have since been implemented. These include expanded service hours and year-round Sunday service, as shown in Table 24. Another major change for Truckee TART since the previous TDP was adopted was the implementation of a Town-wide microtransit service pilot program(s), known as TART Connect. For the most part, the highly popular TART Connect service has been an effective service alternative to the neighborhood fixed routes recommended in the 2017 plan. However, it should be noted at the time of preparing this TDP, a long-term sustainable funding sources for the current TART Connect level of service has not been established to continue the service beyond. The Town Council did vote in favor of continue TART Connect for FY24/25 while a local tax measure is contemplated to continue the service into the future.

Table 24: 2017 TDP Recommendation Status

Alternative	Status	Notes
Expanded Hours of Non-Winter Service	Implemented	Hours expanded year-round
Sunday Service in Non-Winter Seasons	Implemented	Sunday service is in effect
Half-Hourly Service - Existing Route	Not Implemented	
Eliminate Crossroads Stop	Not Implemented	
2-Route Service	Not Implemented	
Neighborhood Shuttles - Summer Service 5:30 - 11:00 PM	Not Implemented	
Neighborhood Shuttles - Peak Summer Saturday Evenings	Not Implemented	A Pilot Microtransit Service began
Neighborhood Shuttles - Winter Service 5:30 PM - 11:00 PM	Not Implemented	in 2022 - meeting the need for
Neighborhood Shuttles - Peak Winter 5:30 PM - 11:00 PM	Not Implemented	these shuttles.
Neighborhood Shuttles - Peak Winter Days 7:00 AM - 5:30 PM	Not Implemented	
Commuter Bus Year Round 7-Days-A-Week (1)	Partially Implemented	A commuter study is currently
Commuter Bus Weekdays Year-Round, Weekends Summer/Winter	Partially Implemented	being led by TMA
Commuter Bus Weekdays Year-Round, Weekends Winter Only	Partially Implemented	Vanpools have recently been
Mid-day Non-Commuter Run	Partially Implemented	implemented in partnership with
Vanpool Subsidy	Partially Implemented	Enterprise
Extend DAR Service Until 7 PM	Partially Implemented	
Eliminate Fixed Route Fares	Implemented	Fare free service in effect.

Source: 2017 Eastern Nevada TDP

OPERATING COSTS OVERVIEW

The FY 2024-25 operating costs estimates for Truckee Local Fixed Route alternatives were based on the proposed FY 2023-24 Truckee Public Transit Budget, increased by 3 percent to reflect inflation. Specifically, this analysis assumes a marginal cost (not including contractor or Town fixed costs) of \$65.73 per vehicle service hour, plus an estimated marginal cost of \$1.80 per vehicle service mile.

For TART Connect microtransit alternatives, the marginal operating cost per hour is assumed to be \$39.11 based on the current cost per vehicle service hour charged by the microtransit contractor and anticipated inflation of 3 percent. Fuel costs for TART Connect are estimated to be \$0.84 per mile based on FY 2023-24 invoices and anticipated inflation.

Cost estimates in the alternatives evaluation consider “marginal costs”. Marginal costs do not include fixed costs but rather include only the additional cost of adding “x” amount of hours and/or miles of service over the status quo. Costs such as driver salaries are dependent on the amount of vehicle hours while fuel costs are dependent on the number of vehicle miles. However, fixed costs such as administrative staff, salaries, and utilities will not change if vehicle hours and miles are increased or decreased. If fixed costs are included in an analysis, they will be identified specifically. As such, monthly fixed costs for the microtransit contractor are not included in the marginal operating cost estimates of the microtransit alternatives. It should be noted that significant changes to service levels for either fixed route or Truckee TART Connect could spur a change to the operating contracts, including the level of fixed costs.

STATUS QUO (NO CHANGES TO EXISTING SERVICES)

The cost of maintaining Truckee TART services at the level currently provided was projected to establish a base cost for the provision of Truckee TART services in FY 2024-25. As shown in Table 24, it is projected that the Truckee Local Fixed Route, Northstar Night Service, and Dial-a-Ride (DAR) will operate 124,500 total miles and 6,900 revenue service hours and carry around 37,200 one-way passenger-trips in FY 2024-25. It should be noted that total miles are less than FY 2022-23 as the Local Route no longer serves Donner Lake stops west of Coldstream.

While the Palisades Night Service ceased service in winter 2023-24, the service may be reconsidered and evaluated based on future demand as a result of the resort parking management program and future build-out at Village. Recent Local Fixed Route and Northstar Night Service ridership data indicate a decrease in fixed route ridership by about 27 percent from FY 2022-23 to FY 2023-24 to date. DAR ridership has increased by 4 percent as of FY 2023-24 to date compared to the prior year. As noted later in this report, Truckee TART Connect ridership has increased dramatically (over 200 percent) from FY 2022-23 to FY 2023-24 so far. This indicates a shift of some passengers from the fixed routes to microtransit.

To maintain services as they are currently being provided, estimated marginal operating costs are anticipated to be \$678,200 in FY 2024-25. This is approximately \$51,000 more than it was to operate these services in FY 2022-23.

FIXED ROUTE SERVICE ALTERNATIVES

This section first discusses the cost of providing Truckee Local Fixed Route service without any changes (Status Quo), followed by alternatives intended to improve fixed route service efficiency. Ridership and cost impacts for fixed route alternatives are presented in Table 25.

Table 25: TART Truckee Local Services - Alternatives							
Alternative	Operating Days	Total Annual			Ridership Impact (One-Way Trips)		
		Total	Marginal				
		Vehicle Miles	Vehicle Hours	Operating Cost	Daily	Annual	
Status Quo ⁽¹⁾							
Total Local Fixed Route Year-Round	365	67,978	4,380	\$418,600	81	29,500	
Total Night Service Only	213	15,281	852	\$85,700	10	2,100	
Dial-A-Ride	365	26,706	1,833	\$171,600	15	5,600	
Total	365	110,000	7,100	\$678,200	102	37,200	
NET IMPACT							
Half-Hourly Service (Adding 1 Additional Bus)							
Current Configuration Year-round	365	67,978	4,380	\$418,600	31	11,400	
Net Impact East/West Route Configuration Year-round	365	74,986	4,380	\$432,900	32	11,700	
Replace Fixed Route with Microtransit from 5:30 PM to 6:30 PM							
Fixed Route	365	-5,402	-365	(\$34,300)	-5.6	-2,044	
Truckee TART Connect	365	6,745	365	\$20,000	5.6	2,044	
Net Impact		1,343	0	(\$14,300)	0	0	
Replace Fixed Route with Microtransit							
Truckee TART Connect	365	89,100	5,300	\$282,500	81	29,500	
Fixed Route	365	-67,978	-4,380	(\$418,600)	-81	-29,500	
Net Impact				(\$136,100)	0	0	
Northstar Night Service							
Discontinue		-15,281	-852	(\$85,700)	-9.9	-2,100	
Operate as Hybrid Fixed Route/Microtransit Service with Downtowner	213	15,281	852	\$46,200	12.3	2,625	
Net Impact of Hybrid Fixed Route/Microtransit Option		0	0	(\$39,500)	2	525	
Note 1: Status Quo not including TART Connect							

Modifications to Existing Truckee TART Fixed Route Services

The following fixed route alternatives were evaluated to improve connectivity to Placer TART and increase the efficiency and productivity of the Truckee TART Local Fixed Route services.

Improve Connectivity to North Lake Tahoe via Placer TART

The Truckee-Tahoe regional geography, commonly referred to as the “Resort Triangle,” requires continued interregional coordination between the Town, Nevada County, and Placer County, as described in earlier chapters. A common theme identified by the public and community stakeholders during the planning process was a need to decrease travel and transfer times for passengers traveling between

Truckee and North Lake Tahoe to meet the community's need to access winter and summer recreation destinations, employment centers, health care providers, and other necessary services.

As a result, wait times and connection locations between Placer TART and Truckee TART were reviewed in detail and presented in Appendix B. In summary, with Truckee TART's current headways of hourly service, it is difficult to improve the timed connections between all of the Town (1) and Placer (2) TART services in both directions. While closely timed connections occur in one travel direction, they are generally long in the opposite direction. Connecting to Placer TART services has been made easier with the addition of Truckee TART Connect, which can be used for "first-mile/last-mile connections" within Truckee to stops serving regional Placer TART routes.

Rather than modify the Truckee Local Fixed Route to improve timed connections with Placer TART services, the Truckee TART Connect could instead allow for "standing reservations" to assist those needing to make connections at the Railyard Mobility Hub regularly. If technology allows, TART Connect vans could be "stationed" at the Railyard Mobility Hub at times in which Placer TART Hwy 89 Northbound and Placer TART Hwy 267 Northbound buses arrive. This could be particularly helpful for North Lake Tahoe travelers who need to get to an appointment in Truckee and for Truckee residents returning from destinations located along Hwy 89 and Hwy 267.

Another potential long-term consideration would be to reroute Placer TART along the bypass to avoid downtown. In this scenario, Placer TART Hwy 267 northbound route would travel north on Hwy 267 over the Truckee River Bridge via the bypass after serving Soaring Way and continue to Henness Flat, then loop around south serve the Railyard Mobility Hub. Southbound Hwy 267 buses would travel along Truckee Way and Hwy 267 bypass. In this scenario, both Placer and Truckee TART would serve Henness Flat providing a convenient one-bus service (no transfer required) connection between northeast Truckee (with a concentration of affordable housing) and Northstar / Kings Beach, as well as an additional connection between northeast Truckee and the Railyard Mobility Hub around 20 minutes after the Truckee Local Fixed Route comes through. The travel time for the Placer TART Hwy 267 Route on either Brockway Road or the Hwy 267 bypass would be similar, and potentially quicker along Hwy 267, if there are significant traffic delays downtown.

This would somewhat improve the connection time for Henness Flat residents accessing employment and/or services along the Hwy 89 corridor to Tahoe City. However, they would still need to wait 35 to 40 minutes to transfer.

Streamline Fixed Route Service

One element to consider in the interest of productivity and efficiency is whether there are segments of the Truckee Local Fixed Route that have significantly less ridership than others. If so, service could be reduced in those areas and increased on other more productive sections of the route.

As discussed in earlier chapters, fixed route boardings were greatest at the Truckee Depot (note that data includes time before the Railyard Mobility Hub was constructed) with 16 average daily boardings, followed by Donner Pass Road/Grocery Outlet (7 boardings), Gateway Center/Safeway (7 boardings), and Coldstream Road (7 boardings). Other areas with major boarding activity were the Estates Drive/Senior

Apartments stop, the Henness Road stop, and the South Shore Drive/Donner Pass Road stop, each with 6 boardings per day. These average daily boardings are shown by season in Figures 17 18, and 19.

As shown in Table 26, the Truckee Depot has the most boardings with nearly 21 boardings per day during the winter season and just over 14 boardings per day during non-winter periods. Some of the stops along Brockway Road see less than one boarding per day on average. Overall, winter boarding activity is higher than non-winter boarding activity. This is particularly evident at the Coburn Crossing Apartments

To further understand ridership patterns by geographic area, the Study Team considered the Truckee Local Fixed Route as the following three “spokes” of service (Figure 20):

- 1) **The West Spoke** travels between the Railyard Mobility Hub in downtown Truckee and Coldstream;
- 2) **The East Spoke** includes service between the Railyard Mobility Hub and Henness Flat and;
- 3) **The South Spoke** encompasses all stops between the Railyard Mobility Hub and The Rock (but has recently been extended down Soaring Way to serve future development as well as commercial uses such as Raleys O-N-E and The Hampton Inn).

As shown in Table 27, the West Spoke has the greatest passenger boarding activity with 42 average daily boardings, followed by the East Spoke with 33 average daily boardings. The South Spoke has the lowest boarding activity, with only 13 average daily boardings on a year-round basis. While the South Spoke has the lowest proportion of average daily boardings, there are also fewer stops along this spoke. It should also be noted that Placer TART Hwy 267 Route also serves many of the stops along the South Spoke, but it does not serve the Senior Apartments directly. As noted above, the Truckee Local Fixed Route was recently extended to serve Soaring Way. This will likely increase ridership along the South Spoke going forward, particularly as Soaring Ranch Way Phase 2 will likely be constructed over the next five years. The data shows that the West Spoke warrants the most fixed route service; however, there is sufficient existing and future demand on the South and East Spokes to maintain regular service along those corridors.

As shown earlier in Table 25, there was an average of 6 daily boardings year-round at the west end of Donner Lake (Donner Pass Road/South Shore Drive). This stop is no longer served by the Truckee Local Fixed Route, mainly because of the distance and time required to reach the Donner Lake area and the fact that the Truckee TART Connect and DAR serve the area. Table 25 demonstrates that there is demand for public transit at the west end of Donner Lake. If the Truckee TART Connect Pilot Program is not continued, another transit option, such as enhancing DAR or fixed route, would need to be put in place.

Figure 17

Non-Winter (Fall, Spring, and Summer) Average Daily Passenger Boardings

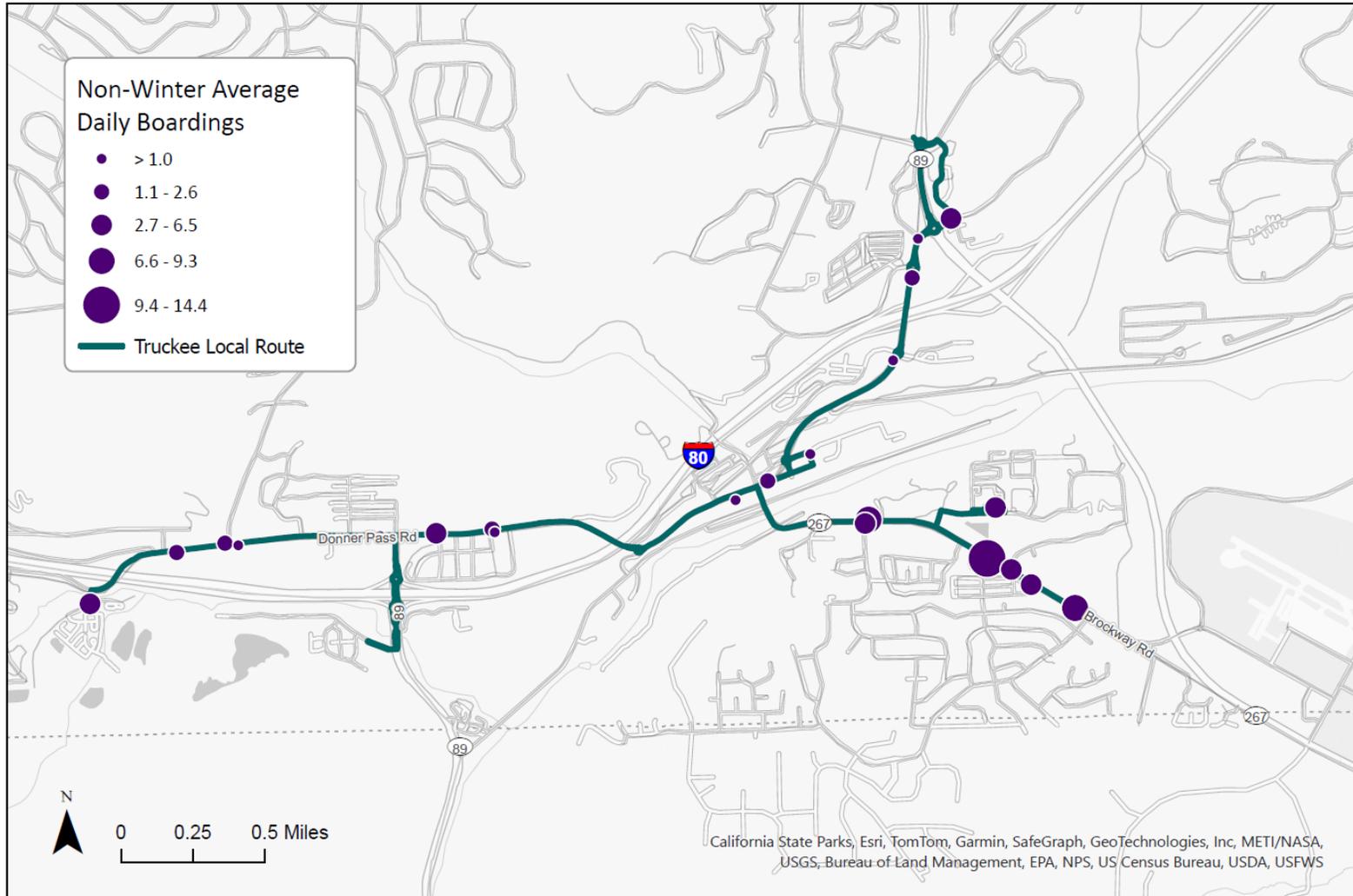


Figure 18
Winter Average Daily Passenger Boardings

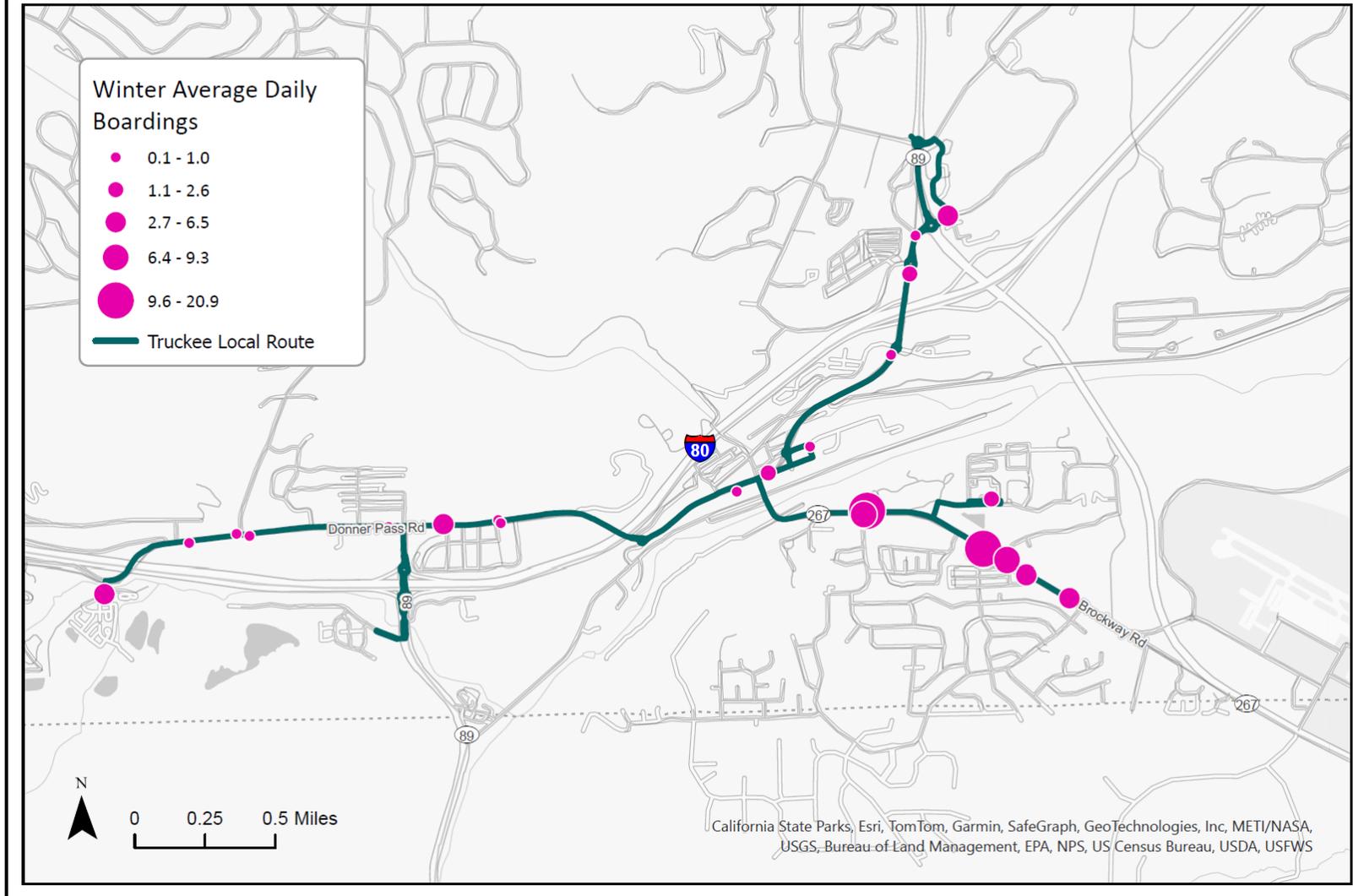




Figure 19
Year Round Average Daily Passenger Boardings

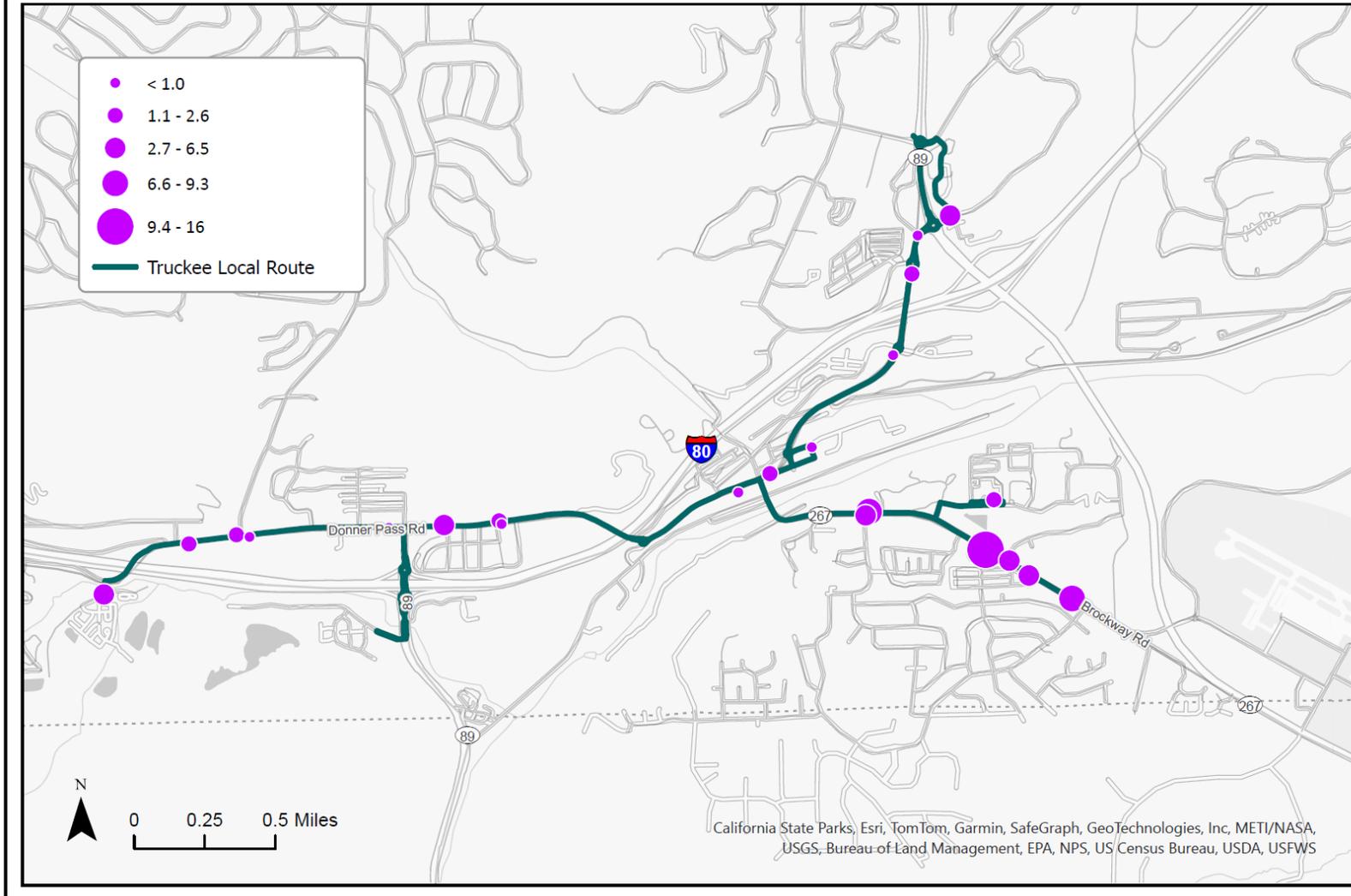




Figure 20
Truckee Local Route "Spokes"

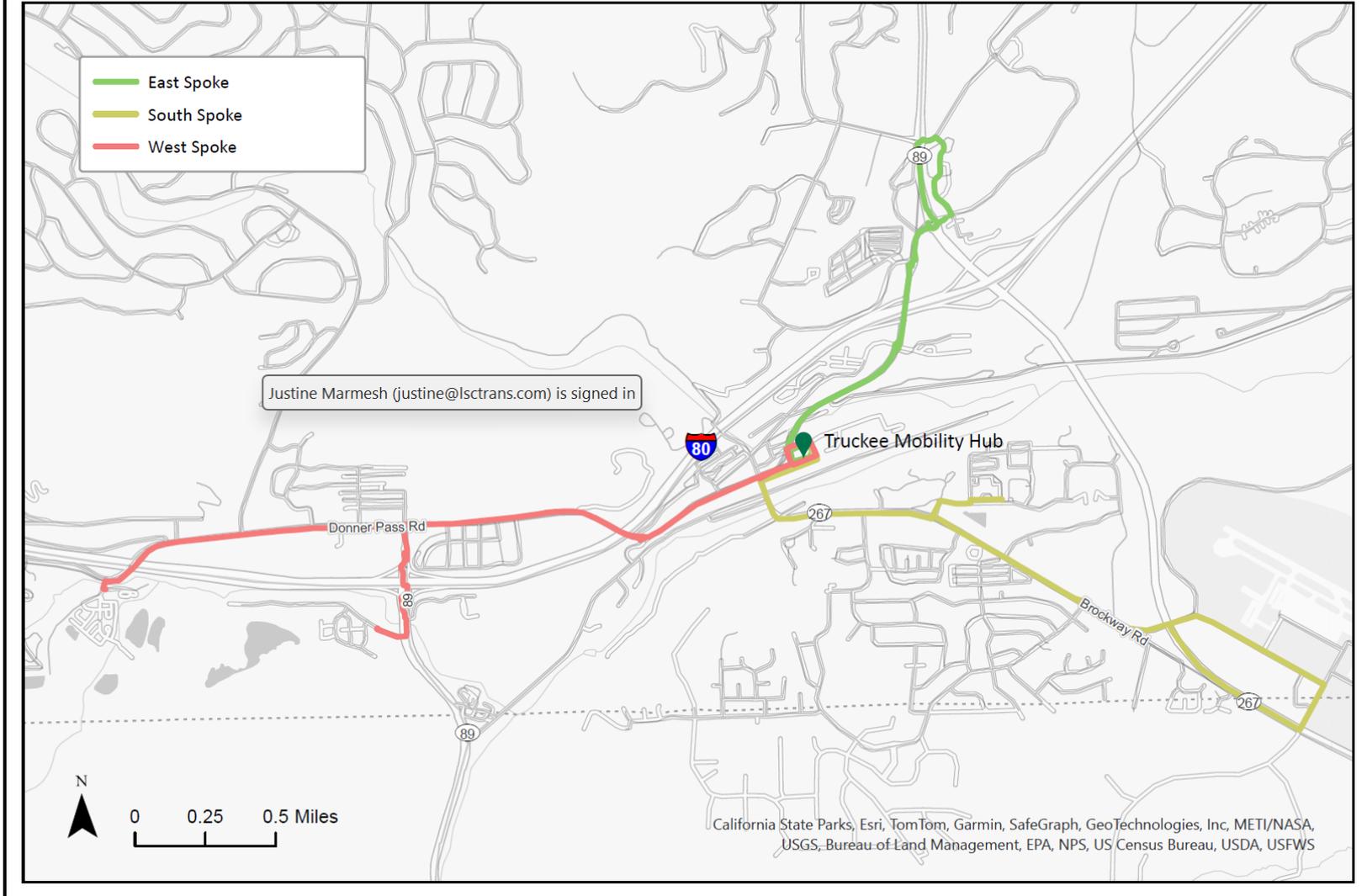


Table 26: Truckee Transit Fixed Route Passenger Activity By Stop (Winter and Non-Winter)

FY 2022-23

Stop	Average Non-Winter Daily Boardings	Average Winter Daily Boardings	Average Daily Boardings (Year Round)
Truckee Depot	14.4	20.9	16
Donner Pass Rd/Gateway/Safeway	5.9	7.9	7
Donner Pass Rd/Grocery Outlet	8.7	10.5	9
Donner Pass Rd/South Shore Dr	4.9	8.2	6
Donner Pass Rd/Cold Stream Rd	7.7	6.1	7
Edwin Rd/Henness Rd (Bus Shelter)	6.3	6.1	6
Deerfield Dr/Crossroads Ctr/Post Office	3.4	4.1	4
Brockway Rd/The Rock/ Fifty-Fifty	4.7	5.6	5
Truckee Way/Coburn Crossing Apts	3.6	8.8	5
Estates Dr/Senior Apts	6.0	4.8	6
Truckee Way/Rue Ivy	2.7	2.1	3
Donner Pass Rd/Meadow Way/7-11	1.9	2.1	2
Donner Pass Rd/Donner Mem SP	2.1	3.3	2
Donner Pass Rd/TF Medical Offices	0.8	0.6	1
Roundhouse Way/Artist Loft Apts	1.1	0.9	1
Donner Pass Rd/TF Cancer Ctr	1.0	1.2	1
Donner Pass Rd/Northwoods Blvd	0.9	0.5	1
Donner Pass Rd/Westgate/Wild Cherries	1.2	0.7	1
Donner Pass Rd/Highway Rd	0.3	0.4	0
Brockway Rd/Regional Park	1.1	0.9	1
Donner Pass Rd/Moraine Rd/Sticks	0.5	0.7	1
Donner Pass Rd/Rec Center	0.4	0.3	0
Donner Pass Rd/Truckee High School	1.0	1.0	1
Brockway Rd/Palisades Dr/7-11	0.4	0.4	0
Brockway Rd/Reynold Way	0.9	0.8	1
Donner Pass Rd/Tri-Counties Bank Plaza	0.6	0.5	1
Brockway Rd/Village Green MHP	0.2	0.2	0
Brockway Rd/Ceder House Hotel	0.1	0.1	0
Totals	83.0	99.8	88.3

Source: Town of Truckee TART Annual Reporting, 2023

Table 27: Truckee TART Average Daily Ridership by "Spoke"

Spoke	Between....	Non		Winter		Year	
		Winter	%	Winter	%	Round	%
East	Truckee Depot/Mobility Hub and Henness Flat	29	34.7%	41	40.8%	33	36.9%
West	Truckee Depot/Mobility Hub and Coldstream	41	49.0%	46	46.3%	42	48.1%
South	Mobility Hub and Fifty Fifty (The Rock)	14	16.3%	13	12.9%	13	15.1%
Total		83	100%	100	100%	88	100%

Half-Hourly Service

A goal of previous TDP’s as well as the newly adopted Truckee General Plan is to improve headways from the current 1-hour headways to 30-minute headways. The Truckee Local Fixed Route currently operates on hourly headways. Increasing the frequency to 30 minutes would have a significant impact on ridership; however, it would come with a significant increase in cost. For this TDP, year-round, half-hourly service was evaluated. Assuming the current route configuration and the need to add one additional bus, this alternative would increase the cost by approximately \$418,600 and would increase ridership by 11,400 trips annually equating to approximately \$36.72 per passenger.

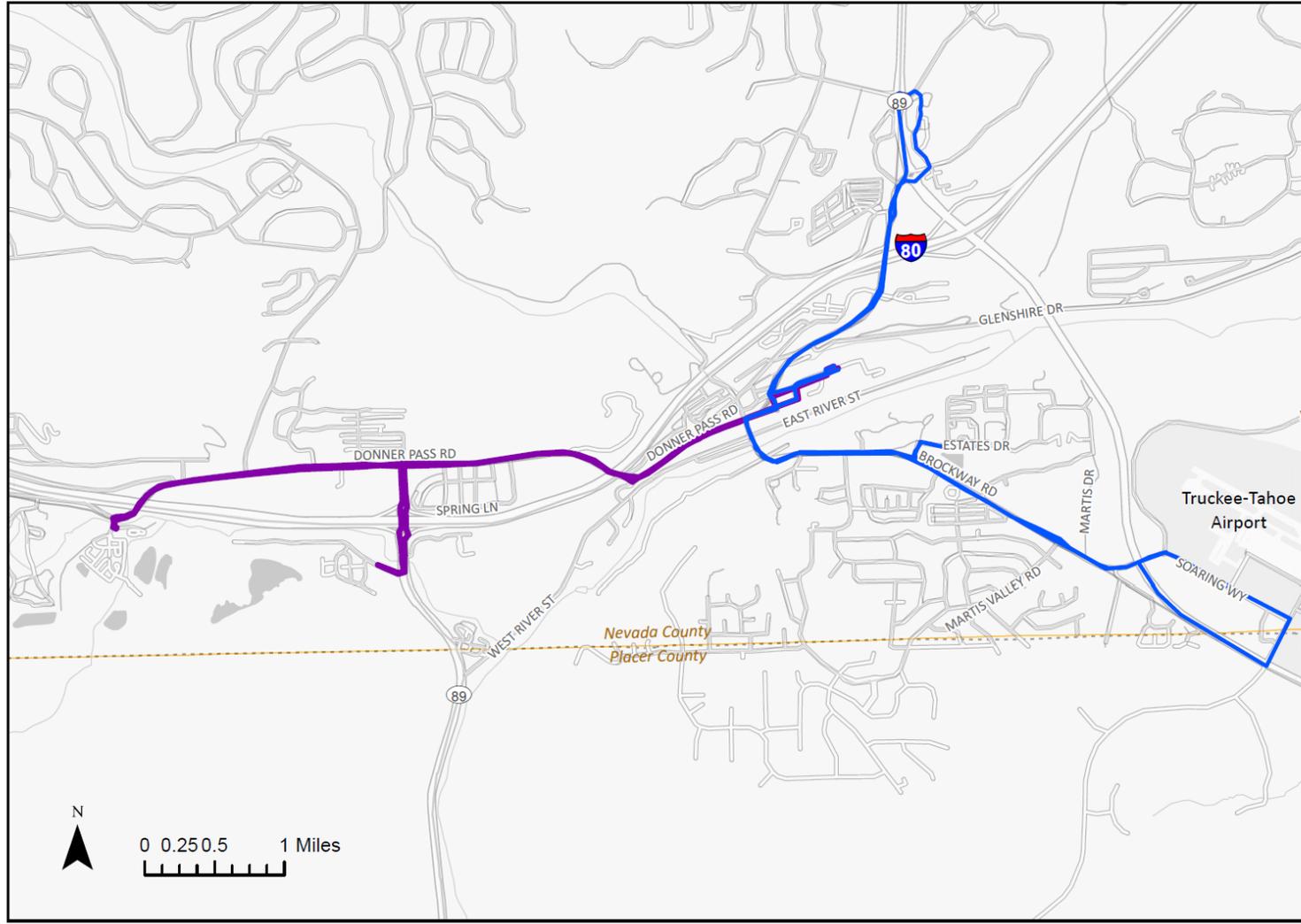
Another option to provide half-hourly service would be to separate the fixed route into two different “loops”, as illustrated in Figure 21. One bus could provide service between Coldstream Commons and the Railyard Mobility Hub, while the other bus could provide service between Soaring Way/Truckee Tahoe Airport and Henness Flat. Both buses would meet at the Railyard Mobility Hub every 30 minutes. The East Loop would stop at the Mobility Hub three times, so as to provide connections to the West Loop and the beginning and the end of the run, as well as after serving Henness Flats to make the timed transfer with Placer TART 89 route. Under this option, the Mobility Hub is served one more time than the current configuration, thereby adding time and mileage to the route.

The benefit of the East/West configuration is that passengers boarding along the South Spoke could travel to the Mobility Hub and destinations in northeast Truckee without riding the bus all the way to Coldstream and back. Based on ridership patterns seen on TART Connect and boardings observed along the South Spoke of the fixed route, it is estimated that an additional 300 passenger trips would be served on the East/West Loop configuration due to shorter travel times.

Of particular concern for this option is that there would not be sufficient time in the schedule to serve the entire East Loop, while allowing time for a driver break. Additionally, seasonal traffic congestion and/or inclement weather would add to the delays. To make the 30-minute cycle time, the East Loop would likely need to be shortened to turnaround at the Rock Commercial Complex, as previously operated. This would eliminate service to Soaring Way. As Raley’s and other developments along Soaring Way are important transit destinations, this would decrease the ridership benefit of this option.



Figure 21
Truckee TART Alternatives – East and West Loop



Replace Fixed Route with Microtransit During Low Activity Times

As noted above, the Truckee TART Connect has a lower marginal operating cost per hour than the Truckee Local Fixed Route. Therefore, it is worth considering if there are times of day when it would be more cost-effective for Truckee TART Connect to provide public transit service instead of the Truckee Local Fixed Route.

Although the Truckee TART Connect may have a lower marginal operating cost per hour, the nature of the on-demand microtransit service limits the number of trips that can be grouped or carried at the same time. For example, during the first 8 months of FY 2023-24 the Truckee Local Fixed Route (not including Night Service) carried 6.3 passenger-trips per vehicle hour while the Truckee TART Connect carried 5.4 passenger-trips per vehicle hour. These values represent averages for the entire eight-month period and do not reflect variations in ridership by time of day.

Table 28 depicts ridership by hour for the combined eastbound and westbound directions of the Truckee Local Fixed Route for FY 2022-23. As shown, peak passenger activity occurred during the hours of 2:30 PM – 3:30 PM and 3:30 PM – 4:30 PM (9 and 8.4 passengers per hour, respectively). Passenger activity then dropped to 5.6 passengers per hour between 5:30 PM and 6:30 PM. This productivity value could also likely be achieved with one Truckee TART Connect vehicle.

Table 28: Average Truckee Local Fixed Route Boardings per Hour	
FY 2022-23	
Hour Beginning	Average Passengers Per Hour
6:30 AM	8.1
7:30 AM	7.2
8:30 AM	6.1
9:30 AM	6.9
10:30 AM	7.3
11:30 AM	7.6
12:30 PM	7.3
1:30 PM	6.8
2:30 PM	9.0
3:30 PM	8.4
4:30 PM	7.7
5:30 PM	5.6

If Truckee Local Fixed Route service ended at 5:30 PM and an additional Truckee TART Connect van was added between 5:30 PM and 6:30 PM (the additional vehicle would be needed to soak up the demand from the loss of the fixed route), the Town would save \$33,700 annually from not operating the fixed route but incur an additional \$20,000 by adding another vehicle to the TART Connect service during that hour. The net impact would be a savings of \$14,300. It is assumed that there would be no net impact on ridership, as with only one additional vehicle, the Truckee TART Connect would not have the capacity to carry more than the 5 – 6 passenger-trips already carried during that hour.

According to Truckee TART Connect data for peak and off-peak summer days, around 8 vehicles are required for service between 5:30 PM and 6:30 PM on off-peak days and 9 vehicles (maximum available in the fleet in FY 23/24) are required for service between 5:30 PM and 6:30 PM on peak summer days to achieve reasonable response times. Therefore, an additional vehicle would need to be added to be included in the fleet of active vehicles as part of this alternative during the peak season to keep microtransit wait times similar to what they are now.

A final consideration for this alternative is the fact that many fixed route users would now be forced to use two different types of services. For example, if one commutes to work on the fixed route but doesn't end work until 5:30 PM, they would have to take Truckee TART Connect home. This could provide some confusion for passengers.

Transit Service to Donner Lake

In the past, Truckee TART Local Route served the west end of Donner Lake. On average, there were 6 boardings at the stop per day on a year-round basis (5 in the summer and 8 in the winter). Service to the west end of Donner Lake was recently discontinued to improve the on-time performance of the Truckee Local Fixed Route, as well as to add service to the newly constructed Railyard Mobility Hub and the Soaring Way/Truckee Tahoe Airport. As Donner Lake is served by both microtransit and DAR, discontinuing fixed route service to the area is a good use of resources and helps reduce redundancies in the system while still meeting demand.

At the time of preparing this plan, the Truckee TART Connect is still operating as a “pilot program,” as there is currently no long-term funding source identified. If additional funding is not realized, Truckee TART Connect service may need to be reduced or restructured in a way that aligns with current fiscal resources. Options for restructuring Truckee TART Connect service to in turn reduce costs are discussed in the microtransit alternatives section. In a scenario where Donner Lake is no longer part of the Truckee TART Connect service area, the west end of Donner Lake may warrant a replacement public transit option.

Currently DAR serves the west end of Donner Lake and would become the only transit option if TART Connect were reduced or discontinued. Therefore, it is worth a review of whether or not the number of peak DAR vehicles would need to be increased to meet additional demand from the Donner Lake area in this scenario. A one-way trip between Truckee and the west end of Donner Lake takes around 13 to 15 minutes. Based on the 6 boardings per day observed on the fixed route, it can be assumed that DAR would need around 3 hours of “available” time throughout the day to meet this demand without requiring an additional DAR vehicle. A review of sample DAR run sheets shows that there is sufficient downtime to meet this additional demand. However, there may be time constraints for general public

DAR riders when ADA group trips are scheduled, as ADA trips are given priority. Donner Lake residents and visitors may also find the advance reservation requirement on DAR to be less convenient than regularly scheduled fixed route service.

Eliminate Fixed Route and Replace with Truckee TART Connect

The Truckee TART Connect service has become tremendously popular. Ridership data suggests that there has been a shift in transit use from the Truckee Local Fixed Route to the Truckee TART Connect by current users and an overall growth in new riders. Given the significant ridership growth observed on the Truckee TART Connect since the service was first implemented and the lower marginal operating cost per hour, eliminating the Truckee Local Fixed Route completely and serving Truckee solely with microtransit and the DAR warrants consideration.

Currently, the Truckee Local fixed route carries around 6 to 7 passenger-trips per vehicle service hour and Truckee TART Connect carries 5 to 6 passengers per vehicle service hour. Therefore, for Truckee TART Connect to fully replace the fixed route, two new Truckee TART Connect vehicles would need to be added to the fleet to carry additional passengers during peak times. This would add significant vehicle service hours and miles as well as costs and increase peak vehicles needed from 9 to 11.

An important consideration for this alternative is that if the Truckee TART Connect service were expanded to meet the demands of fixed route passengers in addition to the existing microtransit passengers, there would likely be a need to amend the existing contract with the contractor, which may result in a higher operating cost per hour. However, for the sake of this analysis, using the same marginal operating cost per hour for the contractor, as currently provided, replacing the fixed route with microtransit would result in annual savings of around \$136,100. As Truckee TART Connect is already available to fixed route passengers, it is assumed there would be no increase in ridership.

If Truckee DAR were discontinued and all paratransit trips were comingled on Truckee TART, this could likely be accomplished without adding another peak microtransit vehicle. However, the annual operating cost savings for the Truckee public transit programs as a whole would be reduced to around \$96,000 per year.

Other topics that should be taken into consideration when determining whether to continue operating the fixed route in addition to Truckee TART Connect are as follows:

- Truckee residents commuting to work via public transit may prefer regularly scheduled fixed route service which allows them to reach their destination at a specific time. The same trip on Truckee TART Connect may involve a variable, and in some cases, extended wait times with an unknown arrival time.
- The cost of two microtransit vans is around \$150,000 each. Currently, there are no all-wheel drive EV vans available for transit use making the operation of EV's during periods of inclement weather difficult without tire chains. Therefore, until this type of vehicle is available, at least a portion of new microtransit vehicle procurement would need to have internal combustion engines.

- As more microtransit vehicles are added to the Truckee TART Connect service, it should also be considered how this alternative meets regional greenhouse gas and traffic reduction goals. Transitioning the fleet to EVs would eliminate some of these concerns; however, it is possible that even more vehicles would need to be purchased if they are electric, as cold weather and hills reduce range.
- Lastly, the existing Corp Yard on Stevens Lane is currently at capacity for vehicle storage, with three vehicles currently being stored outside. Therefore, having a larger fleet increases the need for larger storage and new charging facilities. Additionally, in acknowledging these constraints, the Town recently created new Capital Improvement Projects associated with Corp Yard expansion to address this current and future need.

Replace Truckee Thursday Shuttles with Microtransit

Truckee Thursdays is a popular community event that occurs on Thursday evenings in downtown Truckee during the summer from June through August. To mitigate traffic congestion, vehicle miles traveled, and parking demand as well as to improve the event-goer experience, the Town funds the operation of Truckee Thursday Shuttles each day of the event between various neighborhoods and downtown. The Truckee Thursday Shuttles could potentially be replaced with microtransit by increasing the number of Truckee TART Connect vehicles available on Thursdays, however this is not being recommended.

Ridership on the Truckee Thursday Shuttles averages about 722 passenger-trips per day and 21 passenger-trips per vehicle service hour. This is highly productive for a fixed route service, and much more productive than Truckee Tart Connect; the Truckee TART Connect carries around 5.6 passengers per vehicle service hour and around 400 to 600 passenger-trips per day (depending on season) with a much longer span of service. Therefore, continuing the fixed route Truckee Thursday Shuttle program is the best option in terms of reliability, capacity, and overall productivity.

Northstar Night Route

The evening fixed route service between Truckee and Northstar resort has historically experienced relatively low ridership, around 10 one-way passenger-trips per evening during peak summer and winter months. This equates to around 3 one-way passenger trips per vehicle service hour.

Two options were considered for the Northstar Night Route. One option would be to eliminate the service altogether, which would save on the order of \$83,600 annually and would cause ridership to decrease by around 2,100 trips per year.

Another option would be to provide the Northstar Night Service as a hybrid fixed route/microtransit service model using one van. To group trips more effectively along this 8-mile route, the Northstar microtransit vehicle would depart downtown Truckee and Northstar Village at set times and only provide on-demand pick-ups/drop-offs along Brockway Road during specific time windows. Passengers could use the existing Truckee TART Connect service to connect to the Northstar hybrid fixed route/microtransit service, and Northstar residents could use the Northstar DAR to connect to the new Northstar hybrid fixed route/microtransit service. The current Northstar Route provides 3 passenger-trips per hour, which is a demand that microtransit service could effectively serve with one vehicle. However, during peak seasons all vehicles in the Truckee TART Connect fleet are typically used for regular local service.

Therefore, an additional vehicle would need to be added to implement this alternative without reducing the current level of service within the Town limits.

As the current microtransit model has a lower operating cost per hour, converting the existing Northstar Night Service into a hybrid fixed route/microtransit service would result in annual operating cost savings of \$39,500. Given the popularity of Truckee TART Connect and ridership patterns in other resort areas such as Jackson and Aspen, it can be assumed that a fixed route/microtransit service to Northstar would increase ridership by 25 percent over the fixed route, or by around 3 passenger-trips per day. This option would also have the benefit of allowing for ADA deviations, as long as a wheelchair accessible vehicle is used.

Future Development

One aspect of effective land use and transit planning is to ensure that future housing, employment, medical, and commercial developments can be served by public transit. In Truckee, there are three major Planned Communities (PC) that are currently entitled and under development: the Coldstream area, Gray's Crossing, and Joerger Ranch along Soaring Way. All these PC's are currently served by the fixed route, therefore there is no need at this time for new routes to be considered to serve these PC's. Additionally, Truckee TART Connect serves all homes within the Town boundaries.

MICROTRANSIT SERVICE ALTERNATIVES

The Truckee TART Connect microtransit program has experienced significant success since it was first introduced during the summer of 2022. The Truckee TART Connect is productive and cost-effective relative to other services historically provided by the Town; in FY 2024-25, assuming no service changes, the Truckee TART Connect is projected to carry 5.6 passenger-trips per hour at a marginal cost of about \$10.00 per passenger-trip and a total operating cost per trip of around \$13.40 per trip. While the microtransit program is successful, long-term future funding has not been identified. This section considers alternatives to improve the quality and cost efficiency of the Truckee TART Connect so that operations can continue if no new additional funding is realized.

The impacts of the various microtransit alternatives compared to status quo operations are presented in Table 28. The analysis shown assumes that the contractor would continue operating the Truckee TART Connect and that the hourly cost would be \$39.11 based on the current contract and anticipated inflation. It is also assumed that the microtransit vehicles would continue to be fueled at the Town Public Works facility for \$0.84 per mile. The marginal operating cost estimates shown do not consider fixed monthly costs (i.e. profit, vehicle leases, administration, and overhead). All of the alternatives also assume the Truckee TART Connect continues to be fare-free except for the fare alternative considered as part of this analysis.

Reduce Service Hours

Reducing the Truckee TART Connect service hours would in turn reduce the service's marginal operating cost. While there are several options for reducing service hours, this analysis considers three possible scenarios to demonstrate the wide range of possible service, cost, and ridership impacts. These options are discussed further below.

Reduce TART Connect to Evenings Only Service (6:00 PM to 10:00 PM)

The Truckee TART Connect could be limited to the evening hours of 6:00 PM to 10:00 PM, from the current all-day hours of 6:30 AM to 10 PM, to provide a transit alternative after the fixed route and DAR operations are completed for the day. This alternative would cause the marginal operating cost to decrease significantly due to the sharp drop in service levels; service quantities would decline by 498,500 vehicle service miles and 27,600 vehicle service hours annually, which would in turn yield operating cost savings of \$1.5 million per year.

Assuming that service would continue to be provided with the same number of vehicles, converting the Truckee TART Connect to an evening-only service would cause ridership to decrease by about 75 percent, or 128,900 passenger-trips, annually. This equates to a loss of 300 to 430 passenger-trips per day depending on the season. These estimates are based on the typical ridership per hour observed during the various seasons in 2023 and 2024. It should be noted that these estimates are likely conservative; it is possible that ridership would decrease even further than expected, as it is likely that many passengers (those who live in the outlying neighborhoods) who currently ride to work or school or for medical trips on TART Connect, may be unable to use Truckee Local or DAR. Therefore, this option eliminates mobility options for a segment of the population, including low-income and otherwise transit dependent.

Reduce Peak Season Service to 6:30 AM to 10:00 PM on Monday through Wednesday

A more minor service reduction would be to end Truckee TART Connect service at 10:00 PM instead of 12:00 AM on Mondays, Tuesdays, and Wednesdays during peak seasons. This alternative was recommended for further analysis in the Truckee TART Connect Review (2024) to reduce costs and improve service efficiency.

It is expected that ending microtransit service at 10:00 PM on Monday through Wednesday during the peak seasons would have a limited effect on ridership. This assumption is based on hourly ridership patterns in 2023 and 2024. As such, this alternative would cause ridership to decline by only 2,400 passenger-trips per year. Vehicle service miles would decrease by 7,400 per year, based on the typical miles operated by hour and day of week during peak seasons, and vehicle service hours would decrease by 700 per year, based on the average number of drivers that typically work per service hour eliminated. These reductions to service levels would result in marginal operating cost savings of \$33,700 per year.

Reduce Year-round Service to 6:30 AM to 10:00 PM

A more middle-of-the-road option would be to eliminate service after 10 PM year-round, as ridership is lower in the later night hours. Overall, this option would save on the order of \$191,700 and cause ridership to decline by 10,900 passenger-trips annually.

Table 29: Truckee TART Connect Service and Fare Alternatives

FY 2024-25

Alternative	Change in Annual Service								Ridership (One-Way Trips)	
	Operating Days	Vehicles Required	Vehicle Miles	Vehicle Hours	Town Operating Cost	Contractor Operating Cost	Total Marginal Op. Cost	Daily	Annual	
Status Quo ¹										
Summer (July, August)	62	-	105,900	5,700	\$89,400	\$222,900	\$312,300	500	31,000	
Winter (December, January, February, March)	121	-	212,000	11,400	\$179,100	\$445,900	\$625,000	570	69,000	
Fall/Spring (September, October, November, April, May, June)	182	-	275,600	14,900	\$232,800	\$582,800	\$815,600	400	72,800	
<i>Year-Round</i>	365	9	593,500	32,000	\$501,300	\$1,251,600	\$1,752,900	-	172,800	
Microtransit Service Alternatives - Change from Status Quo ²										
Reduce Service to 6:00 PM - 10:00 PM, Mon - Sun										
Summer (July, August)	-	-	-87,100	-5,300	-\$73,600	-\$207,300	-\$280,900	-360	-22,300	
Winter (December, January, February, March)	-	-	-181,800	-10,800	-\$153,500	-\$422,400	-\$575,900	-430	-52,000	
Fall/Spring (September, October, November, April, May, June)	-	-	-229,600	-11,500	-\$193,900	-\$449,800	-\$643,700	-300	-54,600	
<i>Net Impact</i>	-	-	-498,500	-27,600	-\$421,000	-\$1,079,500	-\$1,500,500	-	-128,900	
Reduce Peak Season Service to 6:30 AM to 10:00 PM, Mon - Wed										
Summer (July, August)	-	-	-2,600	-200	-\$2,200	-\$7,800	-\$10,000	-	-800	
Winter (December, January, February, March)	-	-	-4,800	-500	-\$4,100	-\$19,600	-\$23,700	-	-1,600	
<i>Net Impact</i>	-	-	-7,400	-700	-\$6,300	-\$27,400	-\$33,700	-	-2,400	
Reduce Service to 6:30 AM - 10:00 PM, Mon - Sun										
<i>Net Impact</i>	365	-	-64,900	-3,500	-\$54,800	-\$136,900	-\$191,700	-30	-10,900	
Limit Service to Glenshire Zone to Specific Time Windows										
Summer (July, August)	-	-	-6,100	-400	-\$5,200	-\$15,600	-\$20,800	-15	-1,000	
Winter (December, January, February, March)	-	-	-2,800	-800	-\$2,400	-\$31,300	-\$33,700	-4	-500	
Fall/Spring (September, October, November, April, May, June)	-	-	-1,500	-600	-\$1,300	-\$23,500	-\$24,800	-10	-1,800	
<i>Net Impact</i>	-	-	-10,400	-1,800	-\$8,800	-\$70,400	-\$79,200	-	-3,300	
Establish Minimum Trip Length Requirement										
0.25 Miles	-	-	-40	-4	-\$40	-\$100	-\$140	-	-600	
0.50 Miles	-	-	-470	-40	-\$400	-\$1,400	-\$1,800	-	-2,300	
Limit service to Downtown, Hospital, and Sierra Meadows Zones										
Summer (July, August)	-	-4	-59,000	-3200	-\$49,800	-\$125,200	-\$175,000	-300	-18,600	
Winter (December, January, February, March)	-	-5	-134,500	-7300	-\$113,600	-\$285,500	-\$399,100	-330	-39,930	
Fall/Spring (September, October, November, April, May, June)	-	-3	-135,000	-7300	-\$114,000	-\$285,500	-\$399,500	-200	-36,400	
<i>Net Impact</i>	-	-	-328,500	-17,800	-\$277,500	-\$696,200	-\$973,600	-	-94,900	
Expand Truckee TART Connect Service Area										
Southern Portion of Ponderosa Palisades Neighborhood	-	-	7,600	500	\$6,400	\$19,600	\$26,000	5	1,900	
Hopkins Village and Meadow View Place	-	-	6,500	400	\$5,500	\$15,600	\$21,100	2	900	
Dedicate One Van to Downtown/Hospital Zone during Peak Seasons 6:30 AM to 10:00 PM										
Summer (July, August)	-	1	14,000	1,000	\$11,800	\$39,100	\$50,900	129	8,000	
Winter (December, January, February, March)	-	1	26,600	1,900	\$22,500	\$74,300	\$96,800	126	15,200	
<i>Net Impact</i>	-	-	40,600	2,900	\$34,300	\$113,400	\$147,700	127	23,200	
Implement \$5 Base Fare										
<i>Net Impact</i>	365	-	-181,759	-9,800	-\$153,500	-\$383,300	-\$1,066,450	-151	-55,100	

Note 1: Status quo service levels represent projections based on Truckee TART Connect performance data from July 2023 through January 2024.

Note 2: Parameters and costs represent change over existing services. Estimates represent marginal costs and do not include fixed costs.

Other Cost-Saving Alternatives

There are other ways to reduce the marginal operating cost of the Truckee TART Connect besides limiting the service hours. This section explores other cost-saving alternatives.

Limit Service to Glenshire to Top of the Hour

The Glenshire neighborhood is located in Eastern Truckee. To get to Glenshire from Downtown, vehicles travel along Glenshire Drive for approximately 5 miles in one direction, making a one-way trip take about 10 minutes absent inclement weather. Given the significant resources it takes to access the neighborhood, the “Truckee TART Connect Review” (2024) recommended evaluating the impacts of limiting microtransit service to Glenshire to the first 15 minutes of every hour. This limitation would result in a greater rate of shared trips and therefore improved productivity. An increased rate of shared trips would improve the cost efficiency of the Truckee TART Connect, as more people would be served per hour and mile operated.

To determine the impact of this alternative on ridership, origin-destination data was reviewed for a typical summer, winter, and off-season month. The proportion of trips that had one or both trip-ends in the Glenshire zone was then applied to the typical daily ridership by season to determine how many trips occur, on average, to and from the Glenshire zone each day throughout the year. Limiting service to the Glenshire zone to the first 15 minutes of the hour would likely cause some riders who are accustomed to quick response times to no longer want to use the service. Additionally, some riders who use the service to get to commitments with set start/end times, such as work or school, may no longer use the Truckee TART Connect if the service window does not line up well with their commitments. Based on the typical proportion of passengers served in 15 minutes or less and the proportion of microtransit passengers who reported in recent survey efforts that they ride to/from work or school; it is estimated that this alternative would cause ridership to decrease by 3,300 passenger-trips annually.

It is assumed that limiting Glenshire service to the first 15 minutes of the hour would eliminate any non-shared vehicle trips to the zone. Based on the proportion of shared trips to Glenshire that occurred per hour during a typical summer, winter, and off-season day, it is estimated that this alternative would eliminate 32 percent to 47 percent of vehicle trips to the Glenshire zone depending on the season. This would equate to an annual reduction of 10,400 vehicle service miles and 1,800 vehicle service hours, resulting in annual marginal cost savings of \$79,200 and a decrease of 3,300 passenger trips. In terms of equity considerations, limiting service to one portion of town and not another could also be viewed as not meeting Town equity goals and considerations.

Establish Minimum Trip Length Requirement

Currently, the Truckee TART Connect does not have a minimum trip length requirement. The “Truckee TART Connect Review” (2024) recommended evaluating the impacts of establishing a minimum trip length requirement for non-ADA passengers. This policy change could be effective in reducing the amount of vehicle miles traveled (VMT) generated by the Truckee TART Connect while also improving operational efficiency.

For example, if the Town were to adopt a minimum trip length standard of 0.25 miles for the Truckee TART Connect, the benefits would be minimal. An analysis of trip length data by month from January 2023 through January 2024, shown in Table 30, indicates that a very small proportion of microtransit trips are 0.25 miles or less; the proportion of trips shorter than 0.25 miles ranged from 0.3 percent during the offseason months to 0.4 percent during the winter months. Eliminating these trips would result in a loss

Table 30: Truckee TART Connect Passenger Trip Lengths by Month			% of Total Trips	
			0.0 - 0.25	0.0 - 0.50
2023				
January	0.8%	1.7%		
February	0.5%	1.4%		
March	0.8%	2.3%		
April	0.4%	1.9%		
May	0.4%	1.5%		
June	0.5%	1.2%		
July	0.4%	1.1%		
August	0.3%	1.1%		
September	0.1%	0.7%		
October	0.1%	0.8%		
November	0.2%	1.4%		
December	0.3%	1.3%		
2024				
January	0.1%	1.5%		
Average Percent of Monthly Trips	0.4%	1.4%		

Source: Downtowner.

of 2 passenger-trips per day during the peak seasons and 1 passenger-trip per day in the off-season, or about 600 passenger-trips per year. Service levels would decrease by only 40 vehicle service miles and 4 vehicle service hours per year, resulting in cost savings of only \$140.

If the Town were to adopt a minimum trip length standard of 0.5 miles, the benefits would be slightly more noticeable. From January 2023 through January 2024, the proportion of trips shorter than 0.5 miles ranged from around 0.7 percent during fall 2023 to 2.3 percent during winter 2023. A minimum trip length requirement of 0.5 miles would eliminate these trips, resulting in a daily ridership loss of 9 passenger-trips in the

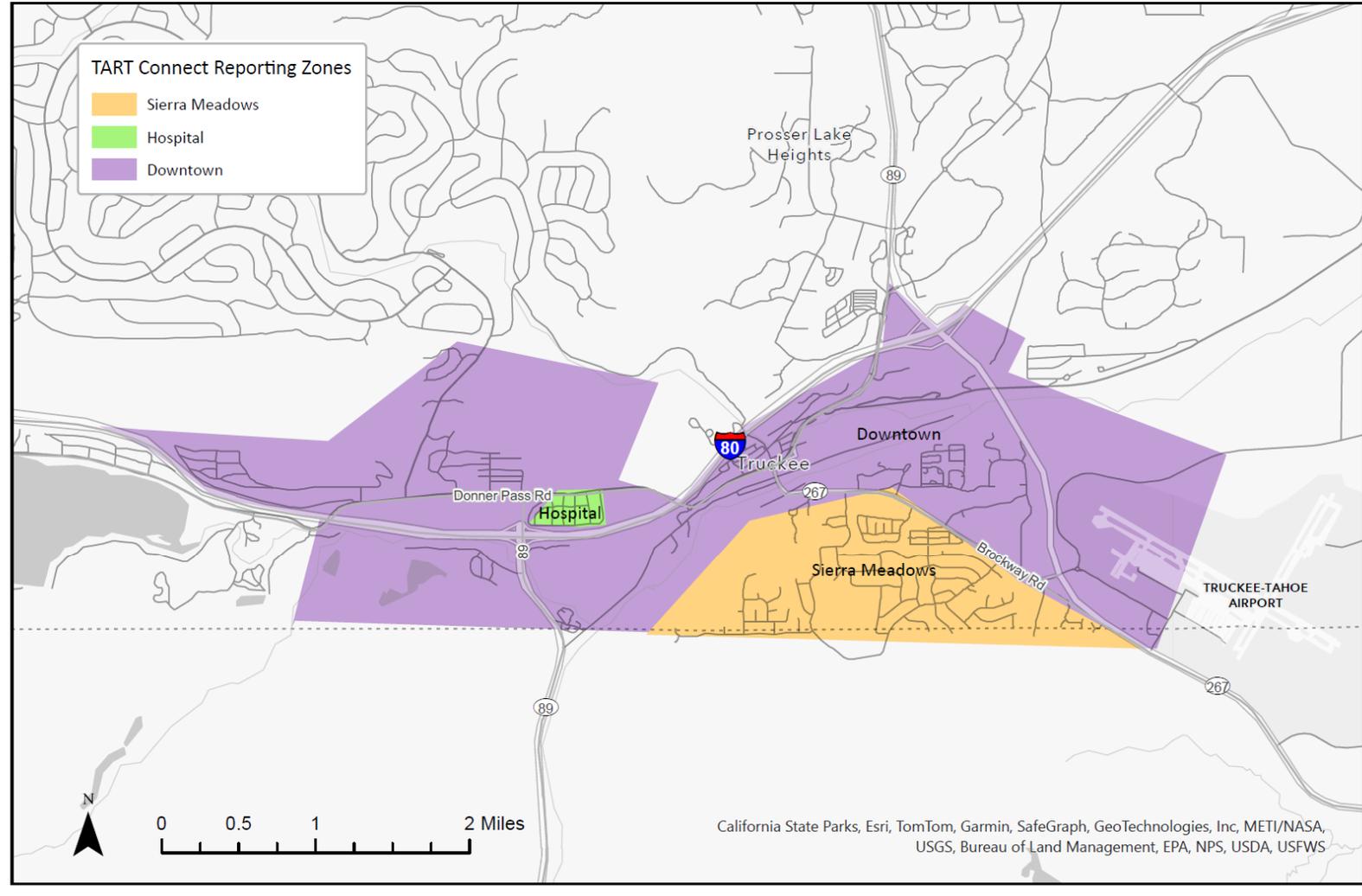
winter, 5 in the summer, and 5 in the off-peak seasons. In total, microtransit ridership would decrease by 2,300 passenger-trips annually. The new policy would result in savings of \$1,800 per year. In an effort to mitigate any loss in ridership, the BCycle program could be promoted as an alternative.

Limit Service to Downtown, Hospital, and Sierra Meadows Zones

Another method for reducing Truckee TART Connect service, and therefore the marginal operating cost, would be to limit the service areas. Rather than provide service to all Truckee Town limits, service could be limited to the Downtown, Hospital, and Sierra Meadows service zones, as shown in Figure 22. To determine how this service area reduction would impact ridership, origin-destination data was analyzed for typical summer, winter, and off-season months. Based on the origin-destination data and the assumption that the only trips that could continue to be served would be trips either between the three zones or entirely within one of the three zones, it is anticipated that this alternative would cause ridership to drop by 94,400 passenger-trips per year or 55 percent.



Figure 22
Truckee TART Connect Limited Service



Reducing the Truckee TART Connect service area to just the Downtown, Hospital, and Sierra Meadows zones would in turn reduce the number of drivers/vehicles needed for service. If the number of active drivers was reduced so that productivity remained consistent with current performance, despite the lower ridership, the number of drivers working per hour could be cut by about half. This would result in microtransit service levels decreasing by approximately 17,800 vehicle service hours and 328,500 vehicle service miles per year. The reduction in service levels would result in marginal cost savings of \$973,600. It would, however, raise issues regarding the equity of services provided by the Town.

Elevated levels of service to other areas with Special Service Areas or Community Facility Districts such as Tahoe Donner, Glenshire/Devonshire, and Gray's Crossing could be provided service using funds that are collected by and for use in those areas.

Service to Adjacent Placer County Neighborhoods

Due to the geopolitical boundaries of Placer County and Truckee Town limits, several neighborhoods are immediately adjacent to the Town of Truckee that fall outside the incorporated Town boundaries and within unincorporated Placer County. As other areas of Eastern Placer County are already served by microtransit service (through Placer TART Connect, the Mountaineer Olympic Valley/Alpine Meadows service, or the Northstar on-demand service), the following neighborhoods are the only areas in Eastern Placer County currently unserved by microtransit. The number of houses for each neighborhood was counted and potential ridership was projected.

Before the Town implements any service expansions, it would be valuable to discuss funding strategies with the County of Placer. It is possible that the County could either partially or fully subsidize the cost of providing Truckee TART Connect service to neighborhoods that technically lie within unincorporated Placer County. A funding agreement between the Town of Truckee and the County of Placer would relieve some of the Town's financial requirements while still allowing the Town to expand transit access within the greater community. Existing cost sharing agreements currently exist and could be amended to account for providing this service, thereby reducing the administrative burden of drafting and negotiating new agreements.

Ponderosa Palisades

The Ponderosa Palisades neighborhood south of Silver Fir Drive within the Sierra Meadows neighborhood is within the Placer County boundary. When considering the area between Silver Fir Drive and Thelin Drive, there are approximately 300 homes that are not currently being served by microtransit. Based on the per capita ridership rate observed within the current Truckee TART Connect service area, the typical household size within the census block group encompassing the neighborhood, and the lower rate of zero-vehicle households in the neighborhood compared to other areas of Truckee, it is estimated that expanding microtransit service to include the whole Ponderosa Palisades neighborhood would increase microtransit ridership by 1,900 passenger-trips per year.

Given this ridership increase and that it is approximately 2.5 miles from Downtown Truckee to the far end of the Ponderosa Palisades neighborhood, it is estimated that TART Connect vehicle service miles would increase by about 7,600 per year. As this expansion would increase ridership by 5 passenger-trips per day, and currently the Truckee TART Connect serves about 5 passenger-trips per hour, it is estimated that

expanding the service area would increase vehicle service hours by 1 or 2 hours per day, or by 500 hours per year. The annual marginal operating cost would increase by \$26,000. This alternative would also have the potential to increase wait times for other parts of the service area unless an additional vehicle is added to the fleet.

Hopkins Village and Meadow View Place

Two new workforce housing complexes were recently developed along Martis Valley Road within Placer County: Hopkins Village and Meadow View Place. Hopkins Village includes 40 townhomes and Meadow View Place consists of a 56-unit multi-family apartment complex. To estimate the potential ridership that would be generated by expanding microtransit to these neighborhoods, the same methodology that was used to estimate potential ridership in the Ponderosa Palisades neighborhood was applied. Calculations indicate that expanding Truckee TART Connect service to the Hopkins Village and Meadow View Place subdivisions would increase annual microtransit ridership by 900 passenger-trips.

The Hopkins Village and Meadow View Place neighborhoods are located about 4 miles from Downtown Truckee. Given the expected ridership and the typical roundtrip mileage to and from Downtown, it is estimated that expanding microtransit service to the two neighborhoods would increase the number of vehicle service miles operated by 6,500 per year. As there would be 2 to 3 passenger-trips served per day, it is expected that vehicle service hours would increase by 1 hour per day, or by about 400 hours per year. The increases in service levels would cause Truckee TART Connect's annual marginal operating cost to increase by \$26,400. There is the potential that serving these areas could result in increased wait times for the boarder system absent adding an additional vehicle.

Dedicate One Van to the Downtown/Hospital Microtransit Zone

The Town of Truckee has a paid parking program in the downtown core. Free 2-hour parking and employee permit parking is available roughly 0.25 miles from the Donner Pass Road/Bridge Street intersection downtown. Parking management strategies, including rates, may increase with time as a way to limit congestion, reduce vehicle miles traveled, and maximize existing parking inventory. To provide a convenient mode of transportation for employees and visitors wishing to move around downtown without a vehicle or without the need to move their vehicle during the day, Truckee TART Connect service could be increased in the downtown area by providing a dedicated vehicle to serve this zone. Currently, the Truckee TART contractor reports trips by zone (Figure 2). Microtransit origin and destination data indicate that the greatest proportion of trips occur within the Downtown zone (30 percent in both peak summer and winter). Another 2.5 percent of trips travel between the Downtown zone and the Hospital zone in both peak summer and winter. This is relevant, as available parking is also an issue for the Tahoe Forest Hospital campus and results in spill over parking into adjacent residential areas.

One option would be to add one microtransit van to serve only the Downtown and Hospital zones. This would provide a shorter wait time for employees parking at lots farther out and would increase mobility options within the downtown/central core. The cost of adding the additional van for the entire service day from 6:30 AM to 12:00 AM during peak seasons only would add \$147,700 in marginal operating costs. It is assumed that a Downtown/Hospital Truckee TART Connect vehicle would be more productive than the Truckee TART Connect system as a whole, as the average travel distance would be lower. Placer TART Connect sees productivity levels as high as 10 passenger-trips per vehicle hour in Incline Village.

Other peer microtransit systems with small service areas such as Southern Teton Area Rapid Transit (START) Jackson, Wyoming, carry anywhere from 7 to 11 trips per vehicle hour. These peer resort microtransit services with high productivity tend to serve more dense zones such as a downtown area. Therefore, it is reasonable to assume that a dedicated Downtown/Hospital Truckee TART Connect van could carry at least 8 trips per vehicle service hour, or 23,200 trips annually. This is a conservative estimate, as it is likely that more passengers would be served as the downtown area of Truckee is rather dense in retail, commercial, and residential land uses. However, the majority of homes in the Town of Truckee are located outside of the proposed Downtown microtransit zone. The additional van would reduce the wait time for trips within the Downtown zone. The disadvantage of this alternative is that an additional microtransit vehicle and drivers would need to be procured.

FARE ALTERNATIVES

Add a Fare to TART Connect

All the Truckee TART services are fare-free with the exception of general public DAR rides. The elimination of fares significantly increased ridership when implemented a few years ago. This fare-free structure also provides seamless transfers to Placer TART and provides a consistent customer experience and reduces confusion which is vital transit in resort communities. Given the high level of service and associated costs of the Truckee TART Connect, it is reasonable and prudent to consider charging a fare as a means of reducing operating costs. In this scenario, a \$5.00 general public fare could be required with a 50 percent discount for qualifying elderly and disabled passengers. Overall, this option has the potential to reduce trip requests and therefore reduce wait times, which would mitigate some of the negative impacts on ridership. Research on several peer transit agencies that have gone from a fare system to a fare-free system shows an average 45 percent increase in ridership due to the elimination of the fare. Reversing this percentage and considering the “sticker shock” of a \$5 fare, along with some latent demand that may benefit from reduced wait times, it is estimated that adding a microtransit fare would reduce ridership by 30 percent or by 55,100 trips annually. However, the service would generate roughly \$529,560 in fare revenue. Given this loss in ridership, fewer vehicle hours would be required annually to meet the lower demand (around 9,800 vehicle hours or roughly 2 to 3 peak vehicles.) Combined with the addition of passenger fare revenue, annual operating subsidy requirements would be reduced by \$1,018,300. When the total operating cost of the microtransit program is considered, this equates to around a 40% farebox ratio.

One issue with this option is that the fare may represent a barrier to lower-income residents whose only mobility option is TART Connect. Allowing a 50% discounted fare for residents who qualify for other existing social service programs, such as Supplemental Nutrition Assistance Program (SNAP), could be a method which limits the amount of administrative staff time determining who is eligible for the low-income discount. Given the proportion of low-income respondents to the Truckee TART Connect survey, it is estimated that annual fare revenues would be reduced to around \$485,000, if low-income riders were provided a discounted fare. In this scenario, farebox ratio would be reduced to around 36 percent.

Another version of this scenario is that Truckee could explore implementing a maximum fare-free cap on passengers daily. For example, each TART Connect account would be allowed four fare-free trips per day (one round-trip for work purposes and another for shopping). After the cap is reached, the passenger is

charged \$5 per ride. This may encourage residents and visitors to be more thoughtful in their trip planning and create more linked passenger trips between areas. In summary, implementing a relatively high fare (\$5 per trip) for TART Connect would allow the Town to reduce operating subsidy requirements of the full TART Connect program as operated today, fairly significantly, as much as 44 percent. However, the following element of the General Plan should be considered:

Town-Sponsored Transit Services

Continue to fund existing Town-sponsored fare-free transit services such as the seasonal Truckee shuttles, special events service, and low-cost dial-a-ride service. [Source: 2025 General Plan, Mobility Element, Action A11.1]

Eliminate Fares for non-ADA DAR Passengers

Another fare alternative which should be considered as part of this TDP is the question of whether or not to charge general public (non-ADA) DAR passengers. Minimal fare revenue is collected on an annual basis, around \$1,700. However, Town/contractor staff time must still be dedicated to account for the money. This is not an efficient use of Town/contractor staff resources and eliminating the fare for all DAR users would be reasonable.

Comparison of Service Alternatives

To provide data for refining the list of alternatives into draft recommendations, Table 31 compares the annual impacts of the various service alternatives to baseline performance (FY 2022-23). Alternatives that would improve the overall performance of the Truckee TART system are highlighted in green.

For the fixed route alternatives:

- Although half-hourly service on the Truckee Local Fixed Route would increase ridership by 11,400 trips, the productivity would be only 2.7 passenger-trips per vehicle hour, which is much lower than the baseline productivity of 6.1 trips per hour. Additionally, the marginal cost per trip (\$36.72) would be higher than the current average marginal cost per trip on the fixed route (\$13.90),
- Replacing the fixed route with Truckee TART Connect during the final hour of the service day would save on the order of \$14,300 annually. Although potentially beneficial, this is a relatively small proportion of the overall operating budget when both fixed route and microtransit services are considered (less than 1 percent). This option would also require the purchase of a new vehicle and may be confusing to the public.
- Replacing the Northstar evening fixed route with a hybrid microtransit service is the most cost-effective of the fixed route alternatives, as it would decrease operating costs by \$75.24 per new passenger-trip served. However, it would also require the addition of a new microtransit vehicle beyond the number of vehicles operated as part of the pilot. Absent an additional vehicle, wait times have the potential to increase within the Town limit service area. This option would address the lack of ADA paratransit service for Northstar night service.

For the Truckee TART Connect alternatives:

- The option to reduce TART Connect service to only evenings (6:00 PM to 10:00 PM), as opposed to all day, would not only have a significant negative impact on ridership (loss of 128,900 trips, 75 percent), but it would also eliminate daytime transit service, besides the DAR, to the Tahoe Donner, Prosser, and Glenshire neighborhoods. Although a general public DAR, priority is given to seniors and persons with disabilities. DAR service would need to be increased significantly to meet the additional demand of current Truckee TART Connect passengers. It is also likely that most TART Connect passengers would not want to make the 24-hour advance reservation for a DAR trip. Lastly the marginal operating cost per DAR trip is \$29.91, significantly more than the marginal operating cost per passenger-trip for TART Connect (\$8.23). Therefore, this option is not recommended, unless there is a need for a large cut to the Truckee TART Connect budget.
- Reducing service to 6:30 AM to 10:00 PM only Monday through Wednesday during peak seasons would cause ridership to decline by 2,400 passenger-trips per year or 1.4 percent. The microtransit marginal operating cost would also decrease by \$33,700, meaning there would be cost savings of \$14.04 per passenger-trip lost.
- Reducing service to 6:30 AM to 10:00 PM year-round would decrease marginal operating costs the most per passenger-trip lost (\$17.59). When considering how to reduce microtransit service to a manageable level financially, this option would have a moderately negative impact (annual loss of 10,900 trips per year or 6.3 percent) and save \$191,700 annually in operating costs, which is roughly 11 percent of the projected Truckee TART Connect marginal operating costs for FY 2024-25.
- The option to limit service to Glenshire to certain periods would have a minimal impact on ridership but would result in measurable cost savings. Ridership would decrease by only 1.8 passenger trips per hour, and the Town would save \$24.00 per passenger-trip eliminated by the alternative.
- Establishing a minimum trip length requirement would have minimal impact on operating costs and ridership. However, it would be reasonable to implement this option as a way to keep microtransit costs in check and reduce wait times.
- The option to limit Truckee TART Connect to Downtown, Sierra Meadows, and the Hospital Zones would also result in significant cost savings. However, this option does not save as much per passenger-trip lost as the other service reduction options. This option would also reduce public transit options for those living in other neighborhoods.
- For the Truckee TART Connect options which expand service, dedicating one van to the Downtown/Hospital Zone is the best-performing alternative of those considered and evaluated.
- Adding a \$5 fare to Truckee TART Connect would reduce the marginal operating subsidy by \$1,066,450. This represents a reduction in marginal operating cost of \$19.35 per passenger trip

lost. This option performs well above baseline; however, does not align with the Town's goals to have fare-free public transit.

Table 31: Comparison of Service Alternatives

FY 2024-25

Service Alternatives	Annual Impacts											
	Ridership	Vehicle Service Hours	Marginal Operating Cost ¹	Passenger- trips per Veh-Hour	Marginal Cost per Passenger-Trip							
Alternatives Improving Baseline Performance Shown in Green												
<u>Fixed Route Alternatives (Add or maintain service)</u>												
Truckee Local Route Half-Hourly Service	11,400	4,380	\$418,600	2.6	\$36.72							
Half-hourly service East/West Configuration	11,700	4,380	\$432,900	2.7	\$37.00							
Replace Fixed Route with Microtransit from 5:30 PM to 6:30 PM	0	0	-\$14,300	--	--							
Replace Local Services with Microtransit	0	87	-\$254,300	--	--							
Northstar Hybrid/Microtransit Service	525	0	-\$39,500	--	-\$75.24							
<u>Truckee TART Connect Alternatives (Reduce service)</u>												
Reduce Service to 6:00 PM - 10:00 PM, Mon - Sun	-128,900	-27,600	-\$1,500,500	4.7	\$11.64							
Reduce Peak Season Service to 6:30 AM to 10:00 PM, Mon - Wed	-2,400	-700	-\$33,700	3.4	\$14.04							
Reduce Service to 6:30 AM - 10:00 PM, Mon - Sun	-10,900	-3,500	-\$191,700	3.1	\$17.59							
Limit Service to Glenshire Zone to Specific Time Windows	-3,300	-1,800	-\$79,200	1.8	\$24.00							
Establish Minimum Trip Length Requirement - 0.5 mile	-2,300	-40	-\$1,800	57.5	\$0.78							
Limit service to Downtown, Hospital, and Sierra Meadows Zones	-94,900	-17,800	-\$973,600	5.3	\$10.26							
Establish \$5 Fare on Truckee TART Connect	-55,100	-9,800	-\$1,066,450	5.6	\$19.35							
<u>Truckee TART Connect Alternatives (Add or maintain service)</u>												
Expand Truckee TART Connect Service Area - Ponderosa Palisades	1,900	500	\$26,000	3.8	\$13.68							
Expand Truckee TART Connect Service Area - Martis Valley	900	400	\$21,100	2.3	\$23.44							
Add 1 Van to Downtown/Hospital Zone during Peak Seasons	23,200	2,900	\$147,700	8.0	\$6.37							
<table border="1" style="margin: auto;"> <tr> <td rowspan="2" style="text-align: center;">Baseline Performance FY 2022-23⁽¹⁾</td> <td style="text-align: center;">Truckee Local Fixed Routes</td> <td style="text-align: center;">6.1</td> <td style="text-align: center;">\$13.90</td> </tr> <tr> <td style="text-align: center;">Truckee TART Connect</td> <td style="text-align: center;">5.6</td> <td style="text-align: center;">\$8.23</td> </tr> </table>						Baseline Performance FY 2022-23 ⁽¹⁾	Truckee Local Fixed Routes	6.1	\$13.90	Truckee TART Connect	5.6	\$8.23
Baseline Performance FY 2022-23 ⁽¹⁾	Truckee Local Fixed Routes	6.1	\$13.90									
	Truckee TART Connect	5.6	\$8.23									
Note 1: Does not include fixed costs												

INSTITUTIONAL ALTERNATIVES

The institutional structure of public transit systems in the United States have been around for over 120 years and takes many forms. While there is not necessarily a steadfast “best” model to provide public transit, especially in resort communities, it is important to ensure that public transit is being provided most cost-effectively and productively while providing equitable service throughout a community. As a local municipality, Truckee provides public transit through its’ Public Works Department for residents and visitors within the Town limits as well as to nearby portions of unincorporated Eastern Nevada and Placer counties through the use of private contractors and in cooperation with regional jurisdictions and private entities. The contractor, Paratransit Services, is generally responsible for providing the day-to-day operation of the Truckee Local fixed route public transit service, as well as complementary Americans with Disability Act (ADA) paratransit service and general public DAR, while the Town provides marketing and outreach, vehicles, facilities, fuel, maintenance, and administrative oversight, including transit planning. Truckee TART Connect is operated by a separate contractor, Downtowner, as a turnkey operation; however, the Town provides fuel and facilities for storage and day-to-day administration.

There are particular advantages to hiring a private contractor to provide public transit operations rather than providing service “in-house” with Town staff. When considering economies of scale, a private contractor can potentially provide service at a lower cost than a smaller municipality. A private contractor can also offer greater depth in management and operations knowledge as well as resources that may not be available to the Town with significant investment and organizational change. One significant consideration is recruiting, hiring, training, and retaining drivers. This is particularly challenging in resort areas with a high cost of living and an abundance of service industry jobs from which to choose. In many cases, private contractors have greater flexibility in hiring than a municipality and can also pull drivers from other areas where they provide service. The following institutional options were considered as part of this study.

Operate Fixed Route, Paratransit, and Microtransit Using Single Contractor and Spare Labs Technology

As noted above, the Town currently contracts with Downtowner to operate the Truckee TART Connect. Downtowner is a “turnkey” microtransit operator; Downtowner provides the drivers, dispatch, and management staff, vehicles, vehicle maintenance services, and microtransit software necessary for microtransit operations. As TART Connect is a pilot program funded completely with Town of Truckee general funds, this contract was not written to make services eligible for federal or TDA funds. A new contract was recently entered into to operate the pilot program for one more year. Future potential contracts should be procured in a manner which makes TART Connect eligible for FTA and TDA revenue sources.

The other Truckee TART services are operated by a separate contractor, currently Paratransit Services. This contract will expire in June 2025; however, the Town has the option to renew for another two years

through June 2027. The fixed route and DAR are paid for using a combination of FTA, TDA, and local funds.

Something to consider if microtransit contractors are changed is the fact that the Town does not own the 9 vehicles currently used to operate TART Connect. However, the Town has already made headway toward procuring the necessary capital for current and future transit services, including TART Connect; the Town recently procured six zero-emission vehicles (ZEVs) and Spare Labs software for the DAR and microtransit programs. However, the Town would still need to procure three additional ZEV's to have a completely ZEV fleet which is owned by the Town of Truckee. Additionally, the Town may likely need to lease or procure additional vehicles beyond this to ensure enough vehicles are available for service given the limited ranges of ZEVs.

If the Town were to renegotiate its current contract with Paratransit Services to include microtransit operations without any accompanying change to microtransit service levels, the Truckee TART Connect marginal operating cost would increase by \$1 million per year. This increase would be due to the higher cost per hour (\$63.88 versus \$39.11), the increased cost per mile (\$1.80 versus \$0.84), and the cost of the microtransit software (\$4,500 per vehicle). Given the significant increase in costs, this option is not recommended for further consideration.

Procuring a single contractor to operate all local Truckee TART services (fixed route, DAR, and microtransit) could potentially generate cost savings for the Town by reducing both administrative requirements and the operating cost of the microtransit program. It would also allow for the possible comingling of DAR and microtransit passengers, an efficiency strategy discussed later in this chapter. A downside of pursuing a singular contractor to operate all local Truckee TART services, however, would be that the Town would have to assume additional capital costs to provide the vehicles, vehicle maintenance, and software required for microtransit.

If the Town were to renegotiate its contract with Downtowner to include DAR operations without any accompanying change to service levels, the Truckee DAR marginal operating cost would decrease by about \$77,300. While this switch would result in cost savings based on the current Downtowner and Paratransit Services contracts, it is possible that renegotiated contracts would result in the opposite effect, as monthly fixed costs may increase with a new contract. Additionally, DAR operations require specific training in assisting passengers with disabilities as well as a fleet of wheelchair vehicles. DAR drivers are subject to drug and alcohol testing, a requirement of the service receiving federal funds. These requirements may make it cost prohibitive for Downtowner to provide DAR services under a new contract.

Comingle Microtransit and DAR Services

Over the long-term, microtransit and DAR services could potentially be “comingled,” allowing both microtransit and DAR passengers to share rides in the same vehicles. A benefit of comingling is that drivers can serve additional people in periods when demand is low, helping to improve efficiency. For example, if there were no DAR reservations between noon and 2 PM, the DAR vehicle could serve microtransit passengers during that time. Or, if a microtransit vehicle was not busy, that vehicle could make a same-day reservation DAR trip. Comingling meets the requirements of the ADA as long as persons

with disabilities are prioritized and there are sufficient accessible vehicles available to serve those who need them.

To operate comingled microtransit and DAR services, the Town would either need to renegotiate its current operations contracts or release a Request for Proposals (RFP) to identify a contractor with the ability to operate the integrated services. With the recent procurement of Spare Labs software, the technology has been purchased to allow for the scheduling of both DAR and microtransit trips. The microtransit drivers and dispatchers would need to be trained in serving persons with disabilities per the Federal Transit Administration Circular C 4710.1, including training in driver responsibilities under the ADA and proper wheelchair handling and securement. Comingled microtransit vehicles would also need to be ADA-accessible.

A key difference between the Truckee TART Connect and Truckee DAR is that microtransit passengers book their rides as “on-demand” trips, meaning they book their trips when they need to travel, while DAR passengers must book 24 hours or more in advance. The on-demand nature of microtransit is great for people with flexible plans and for visitors, however, it is difficult for people with pre-scheduled commitments such as those for medical or reoccurring appointments. To ensure passenger needs continue to be met with comingled microtransit and DAR services, the Town should consider adopting a process to allow for “standing reservations” for recurring ADA trips. If technology allows, this could be done by programming the microtransit phone app to allow registered ADA riders to schedule trips in advance.

Comingling has the potential to improve the productivity and efficiency of both the Truckee TART Connect and the Truckee DAR. The switch to a comingled service model would require a strategically written Request for Proposals, which would require Caltrans and FTA approval, additional administrative effort, and capital resources at the onset, however, these investments would in the long run create a more efficient and streamlined transit program that can serve more passengers than currently possible with the two services being operated by separate contractors.

Vanpool Program Development and Operation

In the spring of 2024, The Town of Truckee was awarded a grant through the Carbon Reduction Program (CRP) to fund a Vanpool Pilot Program that would provide a transit alternative option for employees commuting from Washoe County (primarily from the Reno/Sparks region) to Truckee. As mentioned in earlier chapters of the TDP, the US Census states that approximately 14 percent of employees working in Truckee commute from Reno. As a Transportation Demand Management (TDM) strategy identified in the Town’s 2040 General Plan Mobility Element, this Vanpool Pilot Program would increase vehicle occupancy rates, reducing trip generation and demand for single occupancy vehicles and associated greenhouse gas emissions.

For a typical vanpool program, vans are leased from a third-party company. Commuters with similar commute patterns drive to work together with at least one of the commuters designated as the driver. The sponsoring entity of the program subsidizes the cost of the vehicle lease and fuel, with the commuters paying the remainder. The vehicle is usually kept at the driver’s home.

In Truckee, this project is in the final planning stage, with a scheduled launch in the summer/fall of 2024. Town staff has held initial meetings with representatives from Commute with Enterprise (CWE) to begin the project planning. The Truckee-North Tahoe Transportation Management Association (TNT-TMA), has initiated a similar program for Eastern Placer County, however, the Placer Vanpool program is being funded by Transient Occupancy Tax dollars collected by Placer County, therefore the Town is not eligible to be served by this program as it is funded by taxes collected by Placer County.

The proposed Truckee program would increase the vanpool subsidy available to commuters through the existing Regional Transportation Commission of Washoe County (RTC Washoe) Smart Trips program for up to 27 vanpools for 12 months each. Under this model and level of service, the program would serve up to 189 daily commuters and reduce Vehicle Miles Traveled (VMT) by an estimated 3,262,896 miles over the project's life. The proposed program would encourage increased participation in the existing Smart Trips program by significantly reducing costs for riders or employers and increasing program awareness.

The subsidy provided through the CRP, layered with the RTC subsidy, would cover all costs associated with the vanpools, except for fuel costs. Vanpool participants would be responsible only for their share of the fuel costs, providing the opportunity to save over an estimated \$9,000 in commute expenses annually. Based on an average fuel cost of \$5.50 per gallon, the 80-mile roundtrip distance, an average fuel economy of 16 miles per gallon, and 7 passengers per vanpool vehicle, the monthly fuel cost per person is estimated at approximately \$79.

CWE is a turnkey vanpool provider, offering marketing, an online platform, a mobile app, and data collection to evaluate program effectiveness in reducing GHG. Following expenditure authorization from Caltrans, Truckee will then enter into a contract with CWE. While it may require some additional Truckee staff time in managing the contract, it is expected to operate independently for the near future and will not require any additional Truckee personnel.

This chapter describes potential projects and alternatives related to the capital needs for the Town’s transit system. Capital includes vehicles and their associated technology, bus stops, and maintenance/storage facilities.

VEHICLE REPLACEMENT

A transit agency needs a vehicle fleet that is safe, attractive, reliable, and appropriate for the services it provides. In addition to vehicles required for new services, Truckee must continually replace aging transit vehicles when they reach the end of their useful life (as defined by the FTA and the manufacturer), to maintain a safe and reliable fleet that does not require excessive maintenance. Additionally, there are existing and evolving mandates from the State of California regarding conversion to EV’s that need to be considered in the life of this plan. This is discussed in more detail below.

Truckee currently has a fleet of seven vehicles. These vehicles range in size from smaller cutaway buses typically being used for DAR services (6 + 4 WC passenger capacity) to medium-size buses used for the Truckee Local Fixed Route (24 + 2 WC passenger capacity). Truckee TART will need to replace its entire fleet over the next several years as vehicles reach either their maximum age in years and/or mileage.

The State of California’s Innovative Clean Transit (ICT) Regulation will go into effect during the current 5-year planning period. Beginning in 2026, the ICT regulation will require 25 percent of small fleet (less than 65 vehicles in annual maximum service) bus purchases to be zero-emissions buses (ZEBs). Only buses with a gross vehicle weight rating (GVWR) over 14,000 pounds are included in this regulation. Smaller vehicles, such as passenger transit vans, are not currently subject to the ICT Regulation, however, they do count as a credit towards the agency’s ZEB purchases. By 2029, this small fleet requirement will increase to 100 percent.

Table 32 shows the estimated costs of replacing and expanding Truckee’s fleet of vehicles during the next five years. Based on Truckee’s Zero Emission Fleet Transition Plan (2022), Truckee will be replacing the current fleet with electric medium-duty shuttle buses and both electric- and gas-powered 8- to 10- 10-passenger vans. Until all-wheel drive (AWD) ZEV vans are readily available, the Town will require some gas-powered vans in their fleet. This is also prudent for resiliency purposes, specifically as it relates to having a diversified fleet for emergency evacuation. In addition to the vehicles shown in Table 32, the Town recently purchased six electric passenger vans in FY 2023-24 for their transit fleet. As demonstrated in the table, Truckee will need to spend \$3.25 million dollars in purchasing new vehicles over the 5-year planning period.

PASSENGER AMENITIES

Bus Stops and Shelters

Passenger amenities serve to increase visibility of the system as well as the comfort and safety of riders and encourage the overall use of a public transit system. Truckee has expended considerable resources over the last several years improving transit stop infrastructure, as well as accessibility, branding, and

wayfinding signage to enhance transit stops for passengers to use. In recent years, Truckee has retrofitted shelters with locking doors which are closed after hours in order to discourage sleeping and loitering of non-transit riders.

Typically, transit stops that see on average at least 5 boardings a day warrant a bench, while stops seeing upwards of 10 boardings per day warrant a shelter. For example, the northbound Brockway/Martis Valley Road stop at “The Rock” commercial area sees around 5 boardings a day and would warrant a bench under this criterion.

The West End Donner Beach stop was recently demolished by the town. If service were to be reinstated to this stop, a new shelter with a bench would be warranted due to relatively high year-round boardings, particularly during the winter season.

In alignment with the goals, policies, and action elements outlined in the Mobility Element of the General Plan, bicycle racks, fix-it-stations, bear-proof trash and recycling receptacles and intelligent transportation systems such as real-time transit arrival information should be considered in future improvements to bus shelter infrastructure. Opportunities for public art also exist at transit stop locations and should be considered where feasible and appropriate.

Railyard Mobility Hub

The Town has recently made a significant investment, including land purchase, design, and construction of a mobility hub at Railyard Master Plan Area. The new “Railyard Mobility Hub” will serve as a local place of origin and destination for Downtown travel as well as an intermodal transfer point for both Truckee and Placer TART routes serving the area. This project is a result of the Transit Center Relocation Feasibility Study which was completed in 2020.

Phase 1 of the Railyard = Mobility Hub Project began in late July 2023 and was completed in the summer of 2024. Phase 1 includes improved access and internal transit circulation, transit vehicle pull-outs, space for future public art and interpretive opportunities, passenger shelters, native landscaping, stormwater treatment, ADA-accessible sidewalks and restrooms, bike fix-it-stations and racks, shade structures, and benches, and space for Truckee's new E-bike Share stations. Phase 1 also included underground infrastructure to support the future electrification of both the Town and Placer County's transit fleets, as well as publicly accessible charging stations.

Phase 2 will be completed over multiple years and will include the construction of an enclosed climate-controlled Transit Center Building, additional streetscape enhancements, adjacent parking, and electric vehicle charging. The Town has been awarded a \$4.4 million grant through the Transit and Intercity Rail Capital Program (TIRCP), to complete this phase of the project. Real-time bus arrival information could also be available at this location.

Table 32: Truckee TART Vehicle Replacement Schedule		Plan Period (by Fiscal Year) ²					5-Year Plan Total	
		24/25	25/26	26/27	27/28	28/29		
Estimated Current Cost of Vehicles		<u>Fixed Route Buses</u>						
Medium Duty Shuttle Bus - Electric	\$350,000	Number of Buses (Shuttle Bus - Electric)	3	1	0	0	0	4
		Total Cost ¹	\$1,050,000	\$350,000	\$0	\$0	\$0	\$1,400,000
Estimated Current Cost of Vehicles		<u>Demand Response</u>						
8-10 Passenger Van - Electric	\$150,000	Number of Buses (Van - Electric)	0	3	4	2	0	9
8-10 Passenger Van - Gas	\$125,000	Number of Buses (Van - Gas)	2	2	0	0	0	4
		Total Number of Vehicles	2	5	4	2	0	13
		Total Cost ¹	\$250,000	\$700,000	\$600,000	\$300,000	\$0	\$1,850,000
		Total Vehicle Needs	\$1,300,000	\$1,050,000	\$600,000	\$300,000	\$0	\$3,250,000
Source: Town of Truckee ZEV Rollout Plan, 2022 and Town of Truckee Data, 2024								

Truckee Depot

Although no longer a primary transfer point with Placer TART, the Truckee Depot still serves as an important bus stop for the Truckee Local Fixed Route and interstate bus service. The Depot serves as an integral part of the interregional transportation network as it facilitates passengers visiting Truckee by either Greyhound or Amtrak bus and rail services. With its centralized location in town, it is also the location of Truckee’s “California - Welcome Center” serving 255,000 people annually.²

Maintenance Facilities

A major consideration in this transit plan analysis is that the existing transit vehicle maintenance and storage facility at Stevens Lane will need to be expanded in the coming years. As the microtransit fleet is converted to ZEVs, the overall fleet size will increase as ZEVs do not have the same range as gas-powered vehicles. Until there is an all-wheel drive (AWD) ZEV van available, some of the older gas-powered AWD vans must be kept in circulation for use during the winter months. Currently, Downtowner stores the vans used for Truckee TART Connect at the old Corp Yard on River View Drive. If the Town owned all the microtransit vehicles, the fleet would still need to be stored at the River View Drive facility as there would not be sufficient storage space at Stevens Lane.

Additionally, charging stations will be required as the fleet transitions to ZEVs. It is recommended that chargers be installed at the River View Drive facility (where Truckee TART Connect vehicles are stored) before the first ZEV microtransit vehicles are delivered. Charging stations will also be installed at the Railyard Mobility Hub. The primary charging location will be at the transit vehicle maintenance and storage facility on Stevens Lane. The Town is in the process of completing a Facility Needs Assessment to identify improvements to support a zero-emission fleet.

Bicycle Amenities

Bicycling has become an increasingly popular option for traveling in and around the Town, particularly with the advent of e-bikes. Bicycling is and will continue to be an area of focus for the Town as it strives to reduce dependency on the private automobile. For transit passengers, bicycling can be an excellent alternative for getting to and from transit stops and a means to overcome the “first mile/last mile” barrier, especially if the passengers’ destinations are far from the transit routes. Since its incorporation in 1993, the Town of Truckee has made a conscious effort to improve the bicycle transportation network to encourage bicycling as a viable year-round mode of travel.

To better accommodate bicyclists on public transit, and to encourage more bicyclists to ride transit, is to provide upgraded bicycle racks that fit fat tire bicycles and e-bikes, which have become more and more commonplace. Companies such as Sportworks and Byk-Rak are just two examples of businesses that offer bike racks that can adjust to accommodate both bikes with standard-sized tires as well as fat tire bikes. Each of these two companies also offers a bike rack that can hold up to 250 pounds of weight, meaning the bike racks can accommodate multiple e-bike models, as e-bikes typically weigh between 40 to 80 pounds.

²*Town of Truckee Welcome Center, <https://truckee.com/truckee-chamber/visitor-center/>*

Additional bike amenities that can be found at transit stops with passenger boardings are “Bike lockers.” Bike lockers are small boxes that fit up to two bicycles and can be locked. Not only do bike lockers keep a person’s bicycle and possessions safe, but the lockers also protect these items from the elements. Many public transit agencies have installed bike lockers at popular bus stops for passengers who don’t need to take their bikes along on the bus to their final destination. These lockers tend to be offered either for free or for a small charge depending on the agency. Companies that manufacture bike lockers include Madrax, CycleSafe, and Reliance Foundry, among others. Costs for bike lockers start at upwards of \$2,000 per locker, excluding shipping and labor costs. The Railyard Mobility Hub is a stop where installing bike lockers might encourage greater ridership and help passengers with their first/last mile connections as is the Truckee Depot.

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TRUCKEE TRANSIT DEVELOPMENT PLAN

INTRODUCTION

The following Truckee TDP presents service programs, capital improvements, management recommendations, and financial strategies to enhance Truckee transit services. All plan elements presented consider the constraints of realistic funding projections. This chapter presents the individual plan elements in brief; all elements are based on the substantial discussions included in previous chapters; therefore, the reader is encouraged to refer to previous chapters for additional background.

As an enterprise fund of the Town, the level of transit service in Truckee and Eastern Nevada County has reflected the amount of TDA (state sales tax) and Federal Transit Administration funding available along with partnership funding with local entities. This level of revenue is generally sufficient to fund the fixed route and DAR system at base case levels. The highly successful Truckee TART Connect Pilot Program has been funded separately through the Town of Truckee general funds and partner agency funds. The Town Council approved one more year of funding for the Truckee TART Connect Pilot Program for FY 2024-25. Beginning in FY 2025-26, new revenue sources were needed to continue Truckee TART Connect at current levels. To enhance local funding for essential services and maximize the portion of local sales tax funding that stays in Truckee, the Town proposed a measure for local voters to consider on the November 5th, 2024, ballot that would increase the local sales tax rate paid by residents, tourists, and second homeowners by ½%, generating approximately \$3.5 million annually to fund essential services, such as:

- Preparing for wildfires and other natural disasters.
- Providing transit service to all, including seniors and people with disabilities.
- Keeping pollution out of our local creeks, rivers, lakes, and waterways.
- Protecting the environment and keeping local parks, recreation, and community facilities safe, clean, and well maintained.
- Providing workforce housing to residents and essential professionals such as teachers, nurses, firefighters, paramedics, and deputies.

During the initial development of this transit plan two scenarios were developed, as a sales tax measure was uncertain.

- Scenario A – A new recurring funding source, such as Measure E, is secured for Truckee TART Connect;
- Scenario B – Only traditional transit operating funding sources such as TDA, FTA, and partnership funding are assumed. Possible smaller levels of funding available through other means such as parking revenues and Town general funds is discussed.

In either scenario, Truckee TART will adopt and adhere to the goals identified in the *Truckee General Plan Mobility Element*. This transit plan is consistent with the following Mobility Element Goals:

- Transit for Vulnerable, Underserved, and Underrepresented Groups
- Multi-Modal Transfer Facilities
- First-Last Mile Solutions
- Low/No Emission Microtransit and Fixed Route Vehicles
- Interregional Transit Services
- Transit use and Transfers (Maintaining a fare-free system)
- Funding for Transit Services

In terms of performance standards, Truckee TART should monitor the on-going performance of services and compare future performance to the 2022 -23 baseline performance measures identified in Table 31 (Comparison of Service Alternatives). Lastly, the Transit Development Plan is consistent with the goals of the *Climate Ready Truckee - A Climate Change Adaptation Plan, 2020*.

In both A and B scenarios, the Town and Truckee TART will implement the following strategies to improve services within the region:

- Continue to work with the TMA to monitor demand for increased airport shuttle service from the Reno/Tahoe Airport to parts of Truckee not currently served by North Lake Tahoe Express from Truckee. If warranted the Town of Truckee should increase its share of funding for the North Lake Tahoe Express in exchange for a larger service area.
- Reconsider reinstating the Palisades/Olympic Valley Evening Service: The previous Palisades evening service carried on average 4 passenger-trips per evening, making this service not cost-efficient. Given the recent implementation of the parking management program at Palisades, there may be an increase in demand for evening service between Truckee and Palisades. If demand for late Park and Ride shuttles grow, Truckee could consider reimplementing evening service. However, the Town should explore financial partnership options with Palisades at Tahoe to operate such a service.

SCENARIO A – NEW RECURRING FUNDING SOURCE: MEASURE E

More specifically Scenario A assumes the following:

- The Truckee Local Fixed Route and DAR service continue to operate at current levels.
- The Town should consider eliminating the general public fare for DAR services. This amounts to only \$1,500 per year and costs more in administrative time to account for that money.
- Special event shuttles (Truckee Thursdays and 4th of July) and funding for regional Placer TART services also continue at current levels.
- The Northstar night service is operated as a hybrid microtransit service by the TART Connect contractor in order to reduce operating costs and provide a more flexible type of transit

service. This will also bring the service into compliance with ADA law. It would be reasonable for the Town to work with Northstar to develop a cost-sharing arrangement to help subsidize this program.

- Truckee TART Connect will continue as a Town-wide microtransit service throughout the five-year planning period. A policy limiting the minimum trip length to one-half mile will be implemented, to focus resources on those which are not considered walkable for ambulatory folks. Providing services to adjacent Placer County areas may also be considered.

The benefit of Scenario A is that fare-free public transit service will continue to be available to the entire Town of Truckee. Traditional fixed route services will continue to serve the commercial core, downtown, and many affordable housing developments on a regular schedule with connections to Placer TART regional services. Although still open to the general public, DAR will continue to serve as the complementary paratransit service for Truckee residents needing additional assistance. As part of this TDP effort, alternatives were evaluated which increased fixed route service. These options did not perform better than status quo. On an operating cost-per-trip basis, Truckee TART Connect is more cost-effective than the Truckee Local fixed route services and has the ability to serve the outlying neighborhoods. Therefore, seeking a new recurring funding source for Truckee TART Connect is recommended.

Operating cost estimates for each plan element in Scenario A are displayed in Table 33. It is estimated that Scenario A will cost on the order of \$4,256,590 in FY 2024-25. Costs are inflated at the projected inflation rate of three percent annually.

Table 33: Truckee Transit Development Plan Operating Costs - Scenario A (New Revenue Sources)					
Plan Element	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29
Base Case Operating Cost ¹					
<i>Marginal Operating Costs (Truckee Local Fixed Route, DAR and Night Service)</i>					
<i>Fixed Costs</i>	\$722,690	\$744,400	\$766,700	\$789,700	\$813,400
<i>Special Event Shuttles</i>	\$843,900	\$869,200	\$895,300	\$922,200	\$949,900
<i>Regional Services</i>	\$40,000	\$41,200	\$42,436	\$43,709	\$45,020
<i>Total</i>	\$251,800	\$259,400	\$267,200	\$275,200	\$283,500
Total	\$1,858,390	\$1,914,200	\$1,971,636	\$2,030,809	\$2,091,820
Plan Costs					
Northstar as Hybrid Microtransit ⁽²⁾	--	-\$40,700	-\$41,900	-\$43,200	-\$44,500
Truckee TART Connect Townwide - Annual Program	\$2,400,000	\$2,472,000	\$2,546,160	\$2,622,545	\$2,701,221
Establish Minimum Trip Length Requirement	-\$1,800	-\$1,900	-\$2,000	-\$2,100	-\$2,200
Total Operating Cost	\$4,256,590	\$4,343,600	\$4,473,896	\$4,608,054	\$4,746,341
<p>Note 1: Base Case costs based upon FY 2024-25 Budget and FY 2023-24 status quo service levels, excluding capital. Assumes 3% annual inflation rate for the planning period.</p> <p>Note 2: This assumes Truckee TART Connect microtransit continues to be operated during the evening hours.</p> <p>Source: LSC Transportation Consultants, Inc.</p>					

Table 34 displays ridership projections over the next five years for Scenario A. Note that this does not include any ridership associated with Placer TART services. Ridership on Truckee TART Connect is

expected to increase slightly at the beginning of the planning period. This reflects a data trend for TART Connect which shows an increase in “grouping” of trips. However, it is assumed that after FY 2025-26, TART Connect ridership will eventually be constrained by the number of vehicles available for the service and associated response times. FY 2024-25 annual ridership for all services is estimated at 215,125.

Table 35 presents the financial plan for Scenario A. Operating and capital revenue sources are projected for the next five years. Assumptions and other notes are displayed in the table. With a new recurring funding source secured, Scenario A is funded for the five-year planning period. Transit capital projects will be the same for both Scenario A and B and are discussed below in a separate section.

In November 2024 Measure E passed with almost 61 percent in favor of the measure. This was certified by the Truckee Town Council on December 10, 2024, at the regular Truckee Town Council Meeting. With this, the state will begin collecting the tax on April 1, 2025. With a new funding source secured, Scenario A is recommended as it maintains existing transit levels of service within the community. However, it should be noted that this funding source is allocated at the discretion of the town council and not mandated for public transit use as some state and federal funding sources are.

Table 34: Truckee TDP Ridership Scenario A					
	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29
Annual Ridership Base Case					
Truckee Local Fixed Route	29,500	29,500	29,500	29,500	29,500
Northstar Night Service	2,100	2,100	2,100	2,100	2,100
Truckee DAR	5,600	5,600	5,600	5,600	5,600
Special Event Shuttles	6,900	6,900	6,900	6,900	6,900
Total Ridership	44,100	44,100	44,100	44,100	44,100
Service Plan Elements					
Northstar as Hybrid Microtransit ⁽²⁾	525	525	525	525	525
Truckee TART Connect Townwide - Annual Program	172,800	174,500	174,500	174,500	174,500
Establish Minimum Trip Length Requirement	-2,300	-2,300	-2,300	-2,300	-2,300
<i>Subtotal Impact of Plan Service Elements</i>	<i>171,025</i>	<i>172,725</i>	<i>172,725</i>	<i>172,725</i>	<i>172,725</i>
Total Ridership	215,125	216,825	216,825	216,825	216,825
Note: Does not include Placer TART ridership. Source: LSC Transportation Consultants, Inc.					

Table 35: Truckee TDP Financial Plan (Scenario A)

	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	5-Year Plan Costs	Notes
TOWN OF TRUCKEE OPERATING PLAN							
OPERATING REVENUE							
New Revenue Source	\$0	\$2,760,000	\$2,842,800	\$2,928,100	\$3,030,900	\$11,561,800	Successful sales tax initiative increased annually at the rate of inflation
Town General Funds	\$2,400,000	\$0	\$0	\$0	\$0	\$2,400,000	
FTA 5311 Grant Formulaic	\$137,150	\$140,800	\$147,500	\$158,500	\$170,300	\$754,250	Based on annual increase of total nationwide funding (BIL IIA)
Local Transportation Fund	\$542,560	\$558,800	\$575,600	\$592,900	\$610,700	\$2,880,560	Based on Town of Truckee Budget FY 24-25. Assumes increasing at rate of inflation.(3%)
NCTC - CTS Fund	\$27,110	\$27,110	\$27,110	\$27,110	\$27,700	\$136,140	Flat growth assumed
State Transit Assistance	\$376,500	\$376,500	\$376,500	\$376,500	\$376,500	\$1,882,500	Based on Town of Truckee Budget FY 24-25. Assumes flat growth in STA revenues.
FTA 5311 - Converted	\$210,000	\$0	\$0	\$0	\$0	\$210,000	
FTA Section 5310 Grant	\$187,500	\$187,500	\$187,500	\$187,500	\$187,500	\$937,500	Flat growth assumed
LCTOP Grant	\$130,380	\$133,000	\$135,700	\$138,400	\$141,200	\$678,680	2% annual growth assumed
Special Assess and Other Revenue	\$45,230	\$45,230	\$45,230	\$45,230	\$45,230	\$226,150	
Tahoe Truckee Airport District & Placer	\$16,000	\$0	\$0	\$0	\$0	\$16,000	
Other Partnership Funding	\$48,000	\$48,000	\$48,000	\$48,000	\$48,000	\$240,000	
Gray's Crossing Contribution	\$85,500	\$ 88,100	\$ 90,700	\$ 93,400	\$ 96,200	\$453,900	Increases by CPI each year
Air Quality Mitigation	\$50,000	\$0	\$0	\$0	\$0	\$50,000	Not a recurring funding source.
TOTAL REVENUE	\$4,255,930	\$4,365,040	\$4,498,080	\$4,619,824	\$4,746,000	\$22,427,480	
TOTAL OPERATING COSTS	\$4,256,590	\$4,343,600	\$4,473,896	\$4,608,054	\$4,746,341	\$22,428,482	
<i>Net Balance Operating</i>	-\$660	\$21,440	\$24,184	\$11,770	-\$341	-\$1,002	
TRUCKEE TDP CAPITAL PLAN							
CAPITAL REVENUE							
FTA 5339 (Low-No Bus/ Infrastructure)	\$1,000,000	\$640,000	\$480,000	\$240,000	\$0	\$2,360,000	Assumes competitive grant for 80% of fleet replacement purchases
State of Good Repair	\$172,000	\$177,200	\$182,500	\$188,000	\$193,600	\$913,300	Based on Town of Truckee Budget FY 24-25. Assumes increasing at rate of inflation (3%)
TIRCP	\$2,385,000	\$1,128,000	\$0	\$0	\$0	\$3,513,000	TIRCP Cycle 6, for Phase 2A Mobility Hub (\$1.416m) and replacement ZEVs (\$969,000), Phase 2B (\$1,128,000)
SB 125 for Capital	\$595,000	\$3,846,000	\$1,726,000			\$6,167,000	Per NCTC SB 125 Draft Allocation Plan
Town General Fund	\$25,000						
TOTAL with Competitive Funding						\$12,953,300	
Total with NO Competitive Funding						\$10,593,300	
CAPITAL PLAN COSTS							
Vehicle Replacement Costs (From Table 32)						\$2,950,000	
Transit Facility Expansion including Charging Infrastructure	\$595,000	\$3,846,000	\$2,610,500	\$2,610,500		\$9,662,000	Per NCTC SB 125 Draft Allocation Plan
Railyard Mobility Hub Phase 2A and 2B	\$1,978,000	\$839,000	\$565,000			\$3,382,000	Funded with TIRCP, General Fund, STA, State of Good Repair and LPP
Riverview Electric Charging Infrastructure	\$25,000						
TOTAL						\$15,994,000	
<i>Net Balance Capital with Competitive Funding</i>						-\$3,040,700	
<i>Net Balance Capital with NO Competitive Funding</i>						-\$5,400,700	

SCENARIO B – TRADITIONAL FUNDING SOURCES

Scenario B assumes the following:

- Truckee Local Fixed Route and DAR continue at current levels.
- Special event shuttles (Truckee Thursdays and 4th of July) and funding for regional Placer TART services also continue at current levels.
- Northstar Night Service continues as a fixed route service. It would be reasonable for the Town to work with Northstar to develop a cost sharing arrangement to help subsidize this program.
- The Truckee TART Connect program will end after FY 2024-25.

The benefit of Scenario B is that no new funding sources are required. The disadvantage of Scenario B is that public transit service will be limited to advance reservation DAR for a large part of the Truckee population (anyone outside of the fixed route service area).

Table 36 presents operating costs for Scenario B. Operating costs of the public transit program will decrease from \$4,258,390 to \$1.9 million after the end of the Truckee TART Connect Pilot Program.

Table 36: Truckee Transit Development Plan Operating Costs - Scenario B (Traditional Funding Sources)					
Plan Element	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29
Base Case Operating Cost ¹					
<i>Marginal Operating Costs (Truckee Local Fixed Route, DAR and Night Service)</i>					
<i>Fixed Route, DAR and Night Service</i>	\$722,690	\$744,400	\$766,700	\$789,700	\$813,400
<i>Fixed Costs</i>	\$843,900	\$869,200	\$895,300	\$922,200	\$949,900
<i>Special Event Shuttles</i>	\$40,000	\$41,200	\$42,436	\$43,709	\$45,020
<i>Regional Services</i>	\$251,800	\$259,400	\$267,200	\$275,200	\$283,500
Total	\$1,858,390	\$1,914,200	\$1,971,636	\$2,030,809	\$2,091,820
Plan Costs					
Truckee TART Connect Pilot Program	\$2,400,000	\$0	\$0	\$0	\$0
Total Operating Cost	\$4,258,390	\$1,914,200	\$1,971,636	\$2,030,809	\$2,091,820
<p>Note 1: Base Case costs based upon FY 2024-25 Budget and FY 2023-24 status quo service levels, excluding capital. Assumes 3% annual inflation rate for the planning period.</p> <p>Source: LSC Transportation Consultants, Inc.</p>					

Table 37: Truckee TDP Ridership Scenario B

	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29
Annual Ridership Base Case					
Truckee Local Fixed Route	29,500	29,500	29,500	29,500	29,500
Northstar Night Service	2,100	2,100	2,100	2,100	2,100
Truckee DAR	5,600	5,600	5,600	5,600	5,600
Special Event Shuttles	6,900	6,900	6,900	6,900	6,900
Total	44,100	44,100	44,100	44,100	44,100
<u>Service Plan Elements</u>					
Truckee TART Connect Pilot Program	172,800	0	0	0	0
Total Ridership	216,900	44,100	44,100	44,100	44,100
<i>Source: LSC Transportation Consultants, Inc.</i>					

Table 37 presents ridership estimates for the five-year planning period. Ridership will drop significantly after the end of the Truckee TART Connect Pilot Program by 172,500 one-way passenger-trips from 216,900 one-way passenger-trips annually to 44,400 trips annually.

Table 38 presents the financial plan for Scenario B. As shown, the transit program is funded in FY 2024-25; however, there is a budget deficit in the following years (\$98,000 to \$387,000), even with the TART Connect program discontinued. A subset of Scenario B is a reduced TART Connect program which is discussed below.

Table 38: Truckee TDP Financial Plan (Scenario B)

	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	5-Year Plan Costs	Notes
TOWN OF TRUCKEE OPERATING PLAN							
OPERATING REVENUE							
Town General Funds	\$2,400,000	\$0	\$0	\$0	\$0	\$2,400,000	
Fare Revenue	\$1,500						
FTA 5311 Grant Formulaic	\$137,150	\$140,800	\$147,500	\$158,500	\$170,300	\$754,250	Based on annual increase of total nationwide funding (BIL IIA)
Local Transportation Fund	\$542,560	\$558,800	\$575,600	\$592,900	\$610,700	\$2,880,560	Based on Town of Truckee Budget FY 24-25. Assumes increasing at rate of inflation.(3%)
NCTC - CTS Fund	\$27,110	\$27,110	\$27,110	\$27,110	\$27,700	\$136,140	Flat growth assumed
State Transit Assistance	\$376,500	\$376,500	\$376,500	\$376,500	\$376,500	\$1,882,500	Based on Town of Truckee Budget FY 24-25. Assume no growth in STA
FTA 5311 - Converted	\$210,000	\$210,000	\$0	\$0	\$0	\$420,000	
FTA Section 5310 Grant	\$187,500	\$187,500	\$187,500	\$187,500	\$187,500	\$937,500	Flat growth assumed
LCTOP Grant	\$130,380	\$133,000	\$135,700	\$138,400	\$141,200	\$678,680	2% annual growth assumed
Special Assess and Other Revenue	\$46,230	\$46,230	\$46,230	\$46,230	\$46,230	\$231,150	
Tahoe Truckee Airport District & Placer	\$16,000	\$0	\$0	\$0	\$0	\$16,000	
Other Partnership Funding	\$48,000	\$48,000	\$48,000	\$48,000	\$48,000	\$240,000	
Gray's Crossing Contribution	\$85,500	\$88,100	\$90,700	\$93,400	\$96,200	\$453,900	Increases by CPI each year
Air Quality Mitigation	\$50,000	\$0	\$0	\$0	\$0	\$50,000	Not a recurring funding source.
TOTAL REVENUE	\$4,258,430	\$1,816,040	\$1,634,840	\$1,668,540	\$1,704,330	\$11,080,680	
TOTAL OPERATING COSTS	\$4,258,390	\$1,914,200	\$1,971,636	\$2,030,809	\$2,091,820	\$12,266,856	
<i>Net Balance Operating</i>	\$40	-\$98,160	-\$336,796	-\$362,269	-\$387,490	-\$1,186,176	
TRUCKEE TDP CAPITAL PLAN							
CAPITAL REVENUE							
FTA 5339 (Low-No Bus/ Infrastructure)	\$1,000,000	\$640,000	\$480,000	\$240,000	\$0	\$2,360,000	Assumes competitive grant for 80% of fleet replacement purchases
State of Good Repair	\$172,000	\$177,200	\$182,500	\$188,000	\$193,600	\$913,300	Based on Town of Truckee Budget FY 24-25. Assumes increasing at rate of inflation (3%)
TIRCP	\$2,385,000	\$1,128,000	\$0	\$0	\$0	\$3,513,000	TIRCP Cycle 6, for Phase 2A Mobility Hub (\$1.416m) and replacement ZEVs (\$969,000), Phase 2B (\$1,128,000)
SB 125 for Capital	\$595,000	\$3,846,000	\$1,726,000			\$6,167,000	Per NCTC SB 125 Draft Allocation Plan
Town General Fund	\$25,000						
TOTAL with Competitive Funding						\$12,953,300	
Total with NO Competitive Funding						\$10,593,300	
CAPITAL PLAN COSTS							
Vehicle Replacement Costs (From Table 32)						\$2,950,000	
Transit Facility Expansion including Charging Infrastructure	\$595,000	\$3,846,000	\$2,610,500	\$2,610,500		\$9,662,000	Per NCTC SB 125 Draft Allocation Plan
Railyard Mobility Hub Phase 2A and 2B	\$1,978,000	\$839,000	\$564,000			\$3,381,000	Funded with TIRCP, General Fund, STA, State of Good Repair, and LPP
Riverview Electric Charging Infrastructure	\$25,000						
TOTAL						\$15,993,000	
<i>Net Balance Capital with Competitive Funding</i>						-\$3,039,700	
<i>Net Balance Capital with No Competitive Funding</i>						-\$5,399,700	

OTHER POTENTIAL FUNDING SOURCES

There are several potential funding sources which could be used to meet the projected budget deficit in Scenario B and/or fund a reduced Truckee TART Connect program: Town of Truckee funding through parking revenue or the general fund and an increase in State Transit Assistance (STA) funding resulting from the 2019 Transit Funding Equity Study. These funding sources and recommendations for a reduced TART Connect program are described below.

Town of Truckee Funds

Given the success of the Truckee TART Connect program and how the program has been able to bring public transit to outlying neighborhoods, the Town could consider directing a portion of parking revenues or general funds to fund TART Connect, but on a smaller scale.

Senate Bill (SB) 125

With the nationwide decrease in public transit ridership and resulting fare revenue loss combined with rising operating costs, many transit agencies (particularly those focused on commuters such as Bay Area Rapid Transit (BART)) are facing operating budget deficits. Transit agencies are also seeing increases in capital project costs as they transition their fleets to ZEV. Given the importance of public transit for greenhouse gas emission reduction goals, the state passed a stop-gap funding measure to provide financial support to public transit agencies as part of SB 125. Funds can be used for capital projects or to meet operating deficits if the public transit agencies would otherwise have to reduce service. SB 125 funds are allocated through NCTC. Nevada County as a whole is slated to receive around \$12 million from this funding source over the next three years. Roughly \$6.167 million in SB 125 funds have been allocated to the Truckee Public Service Center expansion project. There may be some funds available for operating purposes over the short term if determined appropriate by NCTC.

2019 Transit Funding Equity Study

Another potential increase in revenue could come from a recommendation in the 2019 Transit Funding Equity Study. This study was conducted to determine if there is a more “equitable” method of distributing TDA - LTF funds between unincorporated Nevada County, the Town of Truckee, and the cities of Nevada City and Grass Valley. TDA funds stem from a quarter-cent sales tax that is collected by the state and returned to the county of origin. However, LTF revenues are distributed to the various jurisdictions within the county based on population, not based on the amount of revenue actually collected in that jurisdiction specifically. For example, taxable sales for the Town of Truckee represent 25 percent of total taxable sales for Nevada County (CA Department of Tax and Fee Administration 2023). However, the Town of Truckee only represents roughly 17 percent of the Nevada County population. The 2019 Transit Funding Equity Study estimated that for FY 2019-20, if LTF revenue represented the proportion of taxable sales income for the Town of Truckee, the Town should receive on the order of \$426,000 more in funding. TDA law mandates that LTF funds are distributed based on population. STA funds are generally apportioned based on population (PUC 99313) and operator revenue (PUC 99314). Therefore, the Transit Equity Funding Study recommended allocating a larger portion of STA 99313 revenue to the Town of Truckee to help cover the \$426,000 difference.

In response to the Transit Equity Study, NCTC changed its policy in relation to STA 99313 funding. STA 99313 funds are no longer apportioned by population and instead, NCTC utilizes the discretion allowed in the TDA for the RTPA to administer the STA 99313 funding and allocates funding based on regional priorities for transit operators in Eastern and Western Nevada County: 1) Existing operations, 2) Capital needs for existing operations, and 3) New Service Expansion. For the latter, the claimant must be able to demonstrate that the new service is needed and financially sustainable long-term. Since the policy change, the Town of Truckee has received more STA 99313 than it would have received under the previous apportionment by population methodology. Total STA 99313 funds for FY 2022-23 have increased 60% since the Transit Equity Study to around \$1.3 million. However, STA funds are projected to decrease 55 percent to \$898,790 in FY 2023/24. STA funds are likely to slowly diminish as electric vehicles used for both personal and freight use become more common (STA funds are derived from diesel tax revenues). Also, to consider is the need for additional capital funding for ZEV infrastructure improvements and ZEV purchases. Historically, STA funds have been a good revenue source for capital grant local matches. In summary, there may be a small amount of additional STA revenue available for Truckee TART Connect for Scenario B, provided that the Town can demonstrate the service is sustainable. However, it is not likely sufficient to fund one of the reduced TART Connect alternatives suggested below.

Truckee TART Connect Program Reduction Recommendations

It is not likely that these additional revenue sources would add up to support the full Truckee TART Connect program as currently operated, particularly as there is a projected budget deficit in Scenario B. Therefore, reductions to Truckee TART Connect were considered. The following options performed well as part of the alternatives analysis and could be considered if additional revenue were available:

- Limiting Truckee TART Connect Service to Downtown, Hospital, and Sierra Meadows Zones – This option would cost on the order of \$1.4 million annually when fixed costs are included. Although still a large price tag, this represents a 40 percent reduction in operating costs from the current Truckee TART Connect service and brings the following benefits. This option helps to reduce trips and congestion within Central Truckee while continuing to provide mobility for portions of the Town which have a greater transit need, according to census data. This option is also consistent with Town equity and fare-free transit goals. Around 94,900 one-way passenger trips would be lost with the reduction in the TART Connect service area. The limited TART Connect program would carry around 77,900 trips annually, which is double the projected annual Truckee Local fixed route and DAR ridership.
- Establishing a \$5 fare on Truckee TART Connect would not have as large of a negative impact on ridership as only 55,100 trips would be lost. With the fare, the TART Connect program could serve the entire Town and still realize an annual operating cost savings of \$1,066,450 over the current program. The disadvantage of this option is that it is not consistent with Town goals, as a fare is charged. A \$5 per one-way trip fare could also be cost-prohibitive for low-income riders needing the service on a regular basis. To address these challenges, the Town could provide discounted fares to low-income riders.

CAPITAL PLAN

Vehicle Replacement

The Town of Truckee is in the middle of transitioning the Truckee Local and TART Connect fleet to zero-emission vehicles, as mandated by CARB. For reference, the TART Connect fleet is currently owned by the contractor and 9 vehicles are required for peak service. The Truckee Local fleet is owned by the Town and a maximum of 3 vehicles are needed for fixed route service and 2 for DAR service including spares. Due to the reduced range of electric vehicles, it is estimated that the Town will need 4 fixed route vehicles available for peak service once the fleet has transitioned to battery electric vehicles. Currently, there are no all-wheel drive electric vans available for purchase. As a mountain town with significant snowfall, all-wheel drive vehicles must be used for much of the winter months. Therefore, the Town will need to use a combination of electric and gas-powered vehicles to operate DAR and TART Connect until all-wheel drive EV technology progresses. The Town is in the process of acquiring microtransit vehicles so as to not be dependent on the contractor's fleet.

In 2023 the Town purchased 6 zero-emission vans, which are expected to be in service by late summer 2024. In 2025 the Town plans to purchase 3 more battery electric vans and 2 AWD (gas-powered, unless EV is available) vans. With the exception of the AWD vehicles required in winter, this will bring the microtransit fleet to a full fleet of ZEVs owned by the Town.

In FY 2024/25, the Town plans to purchase two renewable diesel light-duty cutaways to replace similar vehicles that have reached their useful life. These will be primarily used for the DAR service. The Town will need to purchase replacement vehicles for fixed routes in the next few years, however, there is currently a lack of light-duty, mid-sized electric buses available. Full-sized electric buses are available, but due to the current and expected ridership on fixed routes, these buses are not realistic for the Town's transit services. Passenger vans are similarly not realistic for the fixed route, as they do not have the capacity to meet the current and expected ridership demand. Until there is an electric mid-sized cutaway bus available on the market, the Town will need to consider purchasing diesel-engine buses, which would be fueled with renewable diesel.

As zero-emission vans have a useful life of around 4 years, the Town will need to replace the initial 6 battery electric vans (purchased in 2023) in FY 2027/28. In summary, this will cost around \$2.9 million over the five-year planning period. It is assumed that 80 percent of these vehicle purchases will be funded with FTA 5339 grant funds and a 20 percent local match will be required.

Facilities and ZEV Infrastructure

In addition to replacing vehicles, improvements to the transit center and maintenance and storage facility will be required over the next five years, such as charging infrastructure and increased vehicle storage space.

Railyard Mobility Hub Phase 2

Construction of Phase 2A of the Railyard Mobility hub is planned for 2024. This will include Level 3 DC fast chargers and Level 2 AC slow chargers. Charging will be available for transit buses as well as the public at a market rate. This project will be funded with a Transit and Intercity Rail Capital Program grant.

Additionally, the Mobility Hub has been designed and constructed to accommodate future overhead charging for full size Placer TART buses, however, those upgrades would not be funded by the Town.

Town Public Service Center – Transit Maintenance and Storage Facility

Town-owned transit vehicles are stored at the Truckee Public Service Center located on Stevens Lane northeast of downtown. The expansion of this facility will be needed to house all fixed route, paratransit, and microtransit vehicles due to an expansion of the fleet from EV transition and Town ownership of microtransit vehicles. Currently, Truckee TART Connect vehicles, which are owned by the contractor, are stored at an old facility on River View Drive. The Transit Maintenance and Storage Facility will also need to be outfitted with overnight charging infrastructure for the fleet. This project is in the design phase now and it is anticipated that it will cost around \$8.9 million. SB 125 funds have been allocated to fund a portion of this project to the tune of approximately \$6 million.

REVIEW OF RECENT TRANSPORTATION PLANNING STUDIES

INTRODUCTION

There have been numerous studies developed for either Nevada County or the Town of Truckee in recent years related to transit and transportation. It is important that the Truckee TDP both aligns with and furthers the goals and strategies presented in these other studies. This Appendix summarizes these recent transportation plans, focusing specifically on the plan components related to public transit.

RECENT STUDIES

Nevada County 2045 Regional Transportation Plan (Expected 2024)

The Nevada County Transportation Commission (NCTC) is expected to complete the *Nevada County 2045 Regional Transportation Plan (RTP)* update in March 2024. The RTP is a long-range, multimodal plan that will serve as a guide for transportation investments through 2045. The goals for the Nevada County transportation system, as stated in the RTP, are listed below. Objectives specific to transit services are listed under the associated goal.

- Goal 1.0 – Provide for the safe and efficient movement of all people, goods, and services on the roadway network.
- Goal 2.0 – Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County.
 - Objective 2.A – Reduce dependence on the automobile by emphasizing transit, ridesharing, working from home, and pedestrian and bicycle travel.
- Goal 3.0 – Reduce adverse impacts [of the transportation system] on the natural, social, cultural, and historical environment and the quality of life.
 - Objective 3.B – Reduce regional emissions of criteria pollutants and greenhouse gases.
- Goal 4.0 – Develop an economically sustainable transportation system.
 - Objective 4.A – Minimize the capital and operating costs of all travel modes.
 - Objective 4.B – Balance farebox recovery needs with providing quality transit service.
- Goal 5.0 – Develop a future-ready transportation system that incorporates innovative approaches such as electromobility, micromobility, autonomous vehicles, etc.
- Goal 6.0 – Ensure infrastructure resiliency and disaster preparedness.
- Goal 7.0 – Ensure that the transportation planning participation process includes underrepresented and underserved groups.

The Final RTP will outline specific projects to advance the above goals and objectives. Example projects may include roadway and intersection improvements, installing and improving sidewalks, creating and enhancing bike paths, improving traffic flows, improving local transit services, and repairing bridges.

Truckee TART Connect Review (Expected 2024)

In the summer of 2022, the Town of Truckee implemented the Truckee TART Connect microtransit program as a pilot service, which has since been extended through June 30, 2024. LSC Transportation Consultants, Inc. (LSC) is currently preparing a review of Truckee TART Connect operations and performance from the initial pilot phase through August 31, 2023. LSC is also synthesizing public input received during the first 18 months of the program. The *Truckee TART Connect Review* recommends the following alternatives be analyzed in the Truckee TDP:

- Establish a minimum trip requirement for the Truckee TART Connect.
- Reduce Truckee TART Connect service hours to end at 10:00 PM on Monday through Wednesday during the summer and winter seasons.
- Eliminate fixed route service around Donner Lake (west of Coldstream) and instead serve the area solely with microtransit.
- Operate a second fixed route bus to provide half-hourly service during some, or all, of the current service day to better facilitate transfers from microtransit to the fixed route.
- Administration and management alternatives for operating a comprehensive fixed route/paratransit/microtransit service starting in July 2024.
- Assess ridership on the Truckee Thursday shuttles compared to the capacity of Truckee TART Connect service to identify if there are shuttles that can be replaced with microtransit vans without impacting overall Truckee TART Connect service quality.



- Provide paratransit service as part of the microtransit program, also referred to as “co-mingled” service model.
 - “Standing reservations” will need to be established for recurring ADA program trips.
 - Microtransit drivers and dispatchers will need to be trained in serving persons with disabilities, in accordance with the Federal Transit Administration Circular C 4710.1. This should include training on driver responsibilities under the ADA, proper wheelchair handling and securement, and working with persons with disabilities.
 - Additional tracking and reporting will be needed specifically for ADA trips.

Town of Truckee 2040 General Plan (2023)

The *Town of Truckee 2040 General Plan* was adopted in 2023 per the requirements of California state law, which states that each city and county must adopt a general plan “for the physical development of the county or city, and any land outside of its boundaries...which bears relation to its planning.” The General Plan includes multiple goals and policy statements applicable to Truckee TART services:

- Goal M-1 – Reduce auto dependency.
 - Policies relevant to the Truckee TDP:
 - Policy M-1.2: Implement transportation demand management measures that divert automobile commute trips to transit, walking, bicycling, etc.
 - Policy M-1.3: Reduce vehicle miles traveled (VMTs) per community standards.
 - Policy M-1.4: Promote transportation innovation including improved technology, curb space management, and micromobility alternatives.
 - Actions relevant to the Truckee TDP:
 - Action M-1.A: Develop a Transportation Demand Management Program. This program can include measures for subsidized transit passes.
- Goal M-3 - Promote a safe, attractive, equitable, and efficient local and regional transit system, including bus, van, shuttle/microtransit, and rail...Integrate bicycle and pedestrian access into the system, including for the mobility impaired.
 - Policies relevant to the Truckee TDP:
 - Policy M-3.1: Require new development to incorporate features that accommodate and maximize transit access and use.
 - Policy M-3.2: Engage and incorporate the transit needs of vulnerable and transit-dependent persons in making decisions regarding transit services.
 - Policy M-3.3: Encourage the development of multimodal transfer facilities.
 - Policy M-3.4: Prioritize capital improvements, transit services, and land use decisions that integrate first-last mile solutions.
 - Policy M-3.5: Install intelligent transportation system infrastructure, such as real-time transit arrival technology, travel time information, and wayfinding.
 - Policy M-3.6: Increase ridership by maintaining a free fare system, reducing headways, increasing service area coverage, and expanding route connections,

including to other regional services.

- Policy M-3.8: Design new ADA-accessible bus stops and shelters. Include bicycle racks, bicycle maintenance stations, lighting, and animal-resistant trash and recycling stations at bus stops as much as possible. Incorporate rider information and real-time transit vehicle information at bus stops whenever possible.
- Policy M-3.9: Work with local and regional districts, agencies, community partners, and businesses with large vehicle fleets to support the conversion to zero-emissions vehicles.
- Policy M-3.10: Expand microtransit service options to augment existing fixed route system, with preference for service options which utilize zero-emissions vehicles.
- Policy M-3.11: Collaborate with regional partners to expand the provision of interregional transit services to and from the Lake Tahoe Basin, summer and winter recreation destinations, public lands, and Reno, as funding allows.
- Actions relevant to the Truckee TDP:
 - Action M-3.A: Prepare an update to the Truckee TDP (in progress).
 - Action M-3.B: Prepare an update to the Truckee Long Range Transit Plan.
 - Action M-3.C: Develop new funding mechanisms for transit capital and operations.
 - Action M-3.D: Pursue grant funding.
 - Action M-3.F: Work with community partners to develop a marketing campaign focused on increasing transit ridership and promoting the benefits of transit.
 - Action M-3.G: Continue to fund Town-sponsored fare-free services. Transition to become a 100 percent fare-free system if funding allows.
 - Action M-3.H: Continue existing transit services and implement expansions. Continue to improve efficiencies, reduce costs, and increase ridership on Truckee TART Connect.
 - Action M-3.J: Work with TART to provide real-time arrival technologies.
 - Action M-3.K: Work with active transportation organizations and other stakeholders to conduct a first-last mile gap analysis for the town's transit system and identify key strategies to remove first-last mile issues for transit riders. Strategies could include increasing bike share, microtransit, and bike parking at transit stations; increasing vehicle parking at transit stops and neighborhood nodes; increasing signage and wayfinding; and increasing infrastructure for walking and biking (e.g., bike lanes, bike parking, sidewalks, crosswalks).
 - Action M-3.M: Establish a transportation working group comprised of representatives knowledgeable about the needs of senior, disabled, low-income, and transit-dependent persons who can make suggestions for updates to the transit system.
 - Action M-3.O: Develop a low/no-emission transit fleet transition plan (completed).

- Goal M-6 – Provide adequate funding for transportation.
 - Policies relevant to the Truckee TDP:
 - Policy M-6.2: Pursue federal, state, and local funding sources for transportation improvements.
 - Actions relevant to the Truckee TDP:
 - Action M-6.C: Work with regional partners and the business community to evaluate the feasibility of establishing a “self-help” local funding mechanism to fund both transit capital and operations.
- Goal M-8 – Encourage regional coordination.
 - Policies relevant to the Truckee TDP:
 - Policy M-8.2: Coordinate with regional partners on transportation planning and analyses.
 - Actions relevant to the Truckee TDP:
 - Action M-8.B: Work with adjacent jurisdictions to further coordinate transit services. Evaluate models to share resources and improve efficiencies including administration, maintenance, fueling infrastructure, and software.

Truckee Microtransit Study (2023)

The Town of Truckee retained LSC to assist in the design of the initial Truckee TART Connect pilot service as well as to conduct a broader study to assess the potential for year-round microtransit throughout a larger expanse of the community. The *Truckee Microtransit Study* also evaluated how the Town could operate a combined transit program incorporating microtransit. Near-term recommendations of the study are listed below. Recommendations that have since been implemented are indicated.

- Implement a town-wide microtransit service beginning spring 2023 (completed).
- Expand the hours of service to 6:30 AM to 10:00 PM in the spring and fall and 6:30 AM to 12:00 AM in the summer and winter (completed).
- Operate the year-round microtransit program through June 2024 using the same contractor (completed).
- Conduct a general public survey, preferably in the fall of 2023 (completed as a part of the *Truckee TART Connect Review* study).

Longer-term recommendations that are either ongoing or have yet to be implemented include:

- Continue to monitor services.
- Provide two vans from the Town-owned fleet to the contractor for microtransit operations.
- Enhance marketing of the Truckee TART Connect.
- Discuss with Placer County a service agreement for providing microtransit service to areas immediately adjacent to the Town of Truckee but within Placer County.
- Administer a Request for Proposals for a contractor to operate a comprehensive fixed route/paratransit/microtransit service starting in July 2024.

- Procure microtransit vehicles, with the ultimate goal being for the Town to fully own the microtransit fleet.

Innovative Clean Transit Zero-Emission Bus Rollout Plan – Town of Truckee (2023)

The California Air Resources Board’s (CARB) Innovative Clean Transit (ICT) rule requires that transit fleets be 100 percent zero-emission buses (ZEBs) by 2040. For small transit agencies, such as Truckee TART, the first stage of the ICT rule will come into effect in 2026, at which point 25 percent of buses purchased will have to be ZEBs. By 2029, this requirement will increase to 100 percent. To prepare for the ICT rule, transit agencies were required to prepare ZEB Rollout Plans by 2023 outlining future vehicle purchases by year and type.

The Town of Truckee completed the *Innovative Clean Transit Zero-Emission Bus Rollout Plan* for the Truckee TART service in June 2023. The Town’s ZEB Rollout Plan states the Town’s intention to only procure battery-electric buses (BEBs) as of 2023. The Town anticipates needing four battery-electric cutaways to meet service needs, two of which will be procured in 2024, and the other two in 2025. Currently, the Town does not have the necessary charging infrastructure for BEBs; however, the Town plans to install charging infrastructure at the future Railyard Transit Center and the Public Service Center Transit Maintenance and Storage Facility. Both of these projects will be completed by the fall of 2026.



Town of Truckee Triennial Performance Audit (FY 2018-19 – FY 2020-21) (2022)

The California Public Utilities Code requires all transit operators that receive funding from the Transportation Development Act (TDA) to undergo a triennial performance audit (TPA). The most recent TPA for Truckee TART was completed in 2022 and covered Fiscal Years (FY) 2018-19 through 2020-21. The TPA made two recommendations for Truckee TART:

- Establish a uniform definition for contractor and Town staff as well as a method of tracking full-time equivalent employee hours for purposes of reporting to the state controller.
- Consider procuring tablets for Truckee TART fixed route and DAR drivers to record passenger-trips and other operating data.

Coordinated Public Transit – Human Services Transportation Plan (2021)

The most recent *Coordinated Public Transit-Human Services Transportation Plan* (Coordinated Plan) for Nevada County was completed in 2021. The primary goal of the Coordinated Plan is to enhance mobility for senior adults and disabled residents in the County by increasing the number of services available and improving coordination between existing services. The Coordinated Plan recommended building upon existing transit services in the County, with the below transit strategies recommended specifically for Eastern Nevada County.

- Maintain existing service on the Truckee TART local fixed route, eventually extending the span of service and increasing frequency to every half hour.
- Introduce community shuttles that connect different areas of Truckee to Downtown.
- Introduce a service that provides customers with the option to travel to destinations in Placer and Sacramento Counties, as well as Reno, Nevada.
- Maintain existing service on the Truckee Dial-a-Ride (DAR), eventually expanding the service by increasing the number of vehicles operating.
- Explore microtransit programs in different areas of Truckee that work in coordination with the DAR service.
- Maintain free fares.
- Introduce Neighborhood Electric Vehicle (NEV) service areas to enhance first/last mile connectivity.
- Develop a volunteer driver program to be operated by a social service agency.
- Improve travel training programs.
- Various capital improvements – procure new scheduling and dispatch software, ride-hailing equipment, passenger counters, onboard cameras, and mobile payment technology.
- Procure ZEBs and install the necessary infrastructure for charging.
- Relocate and build the Truckee Transit Center.
- Implement bus stop improvements.

Truckee Transit Center Relocation Feasibility Study (2020)

The current Truckee Transit Center, or the Truckee Depot, is served by five operators, including Truckee TART, Placer TART, Greyhound, Amtrak, and other ski shuttles. The Truckee Depot has limited space, causing traffic and safety concerns. The Town of Truckee developed the *Truckee Transit Center Relocation Feasibility Study* (Transit Center Study) to identify alternate locations within the Town that could host a transit center. Ultimately, the study recommended the northern balloon track area of the Truckee Railyard (10250 Church Street) as the new location of the Truckee Transit Center. In regard to amenities, the study recommended the facility include covered waiting areas, covered bike racks, areas for connecting services, ADA accessible features, restrooms, and ticket kiosks.

Nevada County Active Transportation Plan (2019)

The *Nevada County Active Transportation Plan* (ATP) was completed in 2019, and outlines projects which will increase rates of bicycling and walking within the County. The ATP identifies four goals:

- Enable all to move safely on the bicycle and pedestrian networks.
- Increase walking and biking.
- Improve bicycle and walking mobility for residents and visitors by connecting destinations to the bicycling and pedestrian networks.
- Keep bicycle and pedestrian networks well-maintained.

A specific objective included in the ATP and related to Truckee TART is to “connect all transit stops to nearby destinations by bicycle and pedestrian facilities.”

Eastern Nevada County Transit Development Plan (2018)

The previous update to the Eastern Nevada County TDP provided recommendations for FYs 2018-19 through 2022-23. The TDP recommended the following service elements depending on funding, many of which have since been implemented:

- Sunday Dial-a-Ride service during the non-winter months.
- Holiday and Truckee Thursday Shuttles.
- Fund the North Tahoe Truckee Transport Senior Shuttle.
- Eliminate the Crossroads stop from the Truckee Local Route.
- Match Placer TART’s fixed route fares and allow passes purchased on either system to be accepted by the other; if possible, eliminate fares altogether.
- Expand hours of non-winter services.
- Support the vanpool subsidy program.
- Contribute funding to Placer TART to extend winter evening service to Truckee from 5:30 PM to 11:00 PM.
- Contribute funding to Placer TART to operate earlier southbound departures from Truckee on SR 89 and SR 267.
- Operate a neighborhood shuttle during the evenings in the peak winter season.
- Operate Sunday fixed route service in the non-winter season.
- Continue the Truckee Local Route service from 6:00 PM to 11:00 PM.

Truckee Long Range Transit Plan (2017)

The current “vision” for long-range public transit services in Truckee is documented in the *Truckee Long-Range Transit Plan* (LRTP), prepared by LSC 2017. This Truckee LRTP called for the following:

- Implement a series of “Neighborhood Routes” that would operate along a route and also deviate to a network of “On Demand” stops that would be served when requested through an

app, phone call, or directly requesting the driver at scheduled stops. Four Neighborhood Routes would serve Glenshire, Prosser/Lakeview, Sierra Meadows, and Tahoe Donner.

- Continue operation of the single local fixed route, with service frequency increasing from hourly to half-hourly during the daytime hours.
- Extend transit service to 9:30 PM in the spring and fall and to approximately 2:00 AM in summer and winter. Extension of service to start at approximately 7:00 AM (rather than 9:00 AM) year-round.
- Provision of Sunday service in the non-winter months.
- Increase service frequency to Donner Summit to hourly.
- Eliminate transit fares.
- Extend the winter season service hours from mid-March to early April.

Since the preparation of the Truckee LRTP, many elements have been implemented, specifically, the provision of Sunday service year-round, starting the service day earlier, extending the winter season, and eliminating transit fares. Changes in employee housing patterns have led to the elimination of Donner Summit service. A substantive change not considered in the LRTP has been the emergence of microtransit. Based on the success of the program, the Truckee TART Connect could likely replace the Neighborhood Routes recommended in the LRTP.

Truckee Railyard Master Plan (2017)

The Railyard Master Plan described the Town of Truckee’s vision for the Railyard Area by guiding its future development. Consistent with the Town’s General Plan and Redevelopment Plan, the Railyard Master Plan envisions a mixed-use development that complements and supports historic Downtown Truckee through a diversity of uses and intensity of activities. The 75-acre Master Plan area encompassed 3 development districts with distinct character and neighborhood pattern guidelines, various mixed-use residential and commercial spaces, as well as open park space.

OTHER REGIONAL STUDIES

Placer County Unmet Transportation Needs Report FY 2023-24 (2023)

The California Transportation Development Act (TDA) requires regional transportation planning agencies (RTPAs) to hold an annual hearing to determine unmet transit needs across the region. TDA funding must be spent on any unmet transit needs deemed at the hearing to be reasonable to meet before the RTPA can allocate any TDA funding to projects not directly related to public transportation and pedestrian facilities. The Placer County Transportation Planning Agency (PCTPA) defines unmet transit needs as “a request for transit service that is not currently offered, inclusive of requests that are required to comply with the Americans with Disabilities Act.”

In the FY 2023-24 Unmet Transit Needs Hearing, the PCTPA received comments related to unmet transit needs in Eastern Nevada County. While none of the requests were determined reasonable to meet, these comments have been summarized below:

- Need for new or better transit services to connect Colfax, Auburn, and Nevada County.

- More frequent connections between Truckee and Reno.
- Better connections across counties beyond Placer County. Transit needs to work regionally.
- Need service between Roseville/Rocklin and Truckee, four times a year at 10 a.m. for leisure travel.
- Truckee to Olympic Valley, arriving at 8:20 a.m. at Creekside Charter School, and departing at 2:50 p.m., four days a week, for school. More transportation options from Prosser Lakeview.
- Truckee to Olympic Valley, leaving Truckee before 8 a.m. for drop-off at Creekside Charter School, and pickup at Olympic Valley at 2:50 p.m. for return to Truckee, Mondays -Thursdays during Creekside Charter School academic year. The morning TART schedule isn't well aligned for the school time, and the afternoon pickup time also requires kids to leave school 10 minutes early (resulting in lost learning time).

Palisades Specific Plan/EIR (2022)

The Specific Plan proposes a mixed-use development that includes resort residential, commercial, and recreation uses, as well as parking and other visitor amenities, and employee housing. The plan area encompasses a total of approximately 94 acres. The approximately 85-acre main Village area is located on the west side of the valley at the base of the Palisades Tahoe Ski Resort; the approximately 8.8-acre area referred to as the East Parcel is located approximately 1.3 miles east of the main Village area and 0.3 mile west of the intersection of SR 89 and Olympic Valley Road.

The 85-acre main Village area proposes up to 1,493 bedrooms in up to 850 units, including a mixture of hotel, condo hotel, fractional ownership, and timeshare units. Approximately 297,733 square feet (206,211 square feet net new commercial) of commercial space is proposed for the entire plan area. The 8.8-acre East Parcel proposes employee housing for a maximum of 300 employees, off-site parking, shipping and receiving, and a small retail market. A conservation corridor is proposed for the length of Washeshu (formerly, Squaw) Creek through the plan area to support improvement of terrestrial and aquatic habitat conditions, improved water quality and sediment management, and increased flood conveyance capacity. Other improvements include circulation improvements, bicycle facilities, a transit center, new/extended utility infrastructure, new/improvements to existing recreational facilities and amenities, and a Village open space network. A revised Environmental Impact Report (EIR) was completed in 2023.

- Improved connectivity between regional services, including Placer and Truckee TART.
- Service options to travel from Western Placer County (i.e. Rocklin, Roseville) to destinations in Eastern Placer and Nevada Counties, including Truckee.
- Service options from Truckee to Reno International Airport.
- Schedule conflicts with the existing SR 89 TART Route and local schools.

None of the above comments were found to meet the definition of an unmet transit need, however, they are relevant issues that will be addressed through the final service plan proposed in the Truckee TDP.

Western Nevada County Transit Development Plan (2021)

The NCTC prepared an update to the *Western Nevada County Transit Development Plan (TDP)* in 2021. The Western Nevada County TDP primarily discusses the Nevada County Connects transit system. The need for transit connections between Western and Eastern Nevada County was identified during public outreach conducted for the TDP. Ultimately, however, the TDP did not recommend any services to Eastern Nevada County at this time based on financial constraints.

Resort Triangle Transportation Plan (2020)

The Resort Triangle is defined as the area shaped by State Route (SR) 89, SR 267, and SR 28 in the northern Tahoe Basin. The Resort Transit Transportation Plan (RTTP) recommends transportation-related projects with the potential to decrease congestion within the Resort Triangle. Projects recommended include implementing transit signal priority modifications, transit queue jump lanes, reversible bus-only lanes, and bus/truck climbing lanes. In addition to traffic engineering projects, the RTTP also recommends managing parking in commercial centers and recreational areas through a parking payment system and implementing microtransit service in the communities along North Lake Tahoe.

Linking Tahoe: Lake Tahoe Basin Transit Master Plan (2017)

The *Linking Tahoe: Lake Tahoe Basin Transit Master Plan* (Linking Tahoe) was developed to advance the region's transit vision: "*Transit is the vehicle for change in the Tahoe Region.*" Short-term routing recommendations made in the Linking Tahoe study that would impact the relative amount of transit service in Truckee are described below:

- Operate frequent service from Truckee to Incline Village via SR 89 and Highway 28.
- Operate local service from Truckee to Incline Village via SR 267.
- Develop a new multimodal facility in Truckee.
- Provide coach bus service from Sacramento to Truckee prior to increasing rail service.

Systems Plan Update for the Tahoe Truckee Area Regional Transit in Eastern Placer County (2016)

The *Systems Plan Update for Tahoe Truckee Area Regional Transit in Eastern Placer County* (TART Systems Plan) provides short-range service, capital, management, and financial plans for the Placer County TART program, with priority given to recommendations that further the region's transit vision.

The TART Systems Plan presents two possible service plans, one financially constrained and the other financially unconstrained. The financially constrained service plan consists of the following elements relevant to Truckee:

- Increase service frequency on the SR 89 Route, SR 267 Route, and West Shore Route to be half-hourly during the peak summer and winter seasons.
- Increase service frequency from Palisades and Northstar resorts to Truckee to be half-hourly during the peak summer and winter seasons.
- Begin service on SR 267 Route at 6:00 AM during the winter season.

The financially unconstrained plan included the below elements relevant to Truckee:

- Eliminate fares throughout the TART system, including Truckee TART.
- Improved evening service options on the SR 89 and SR 267 Routes to Truckee.



REVIEW OF REGIONAL CONNECTIONS

INTRODUCTION

To determine how to best improve connections between the Truckee and Placer TART fixed route services, three potential trip patterns between Truckee and Tahoe City via Hwy 89 were considered:

PLACER COUNTY TART / HWY 89

Residents traveling from northeast Truckee to Hwy 89 southbound (Palisades/Tahoe City)

The Truckee Local Fixed Route westbound service arrives at the Railyard Mobility Hub (after serving Henness Road, Truckee Way at Rue Ivy, and Coburn Crossing Apartments) at 35 minutes past the hour, while the Placer TART Hwy 89 Route Southbound departs the Railyard Mobility Hub at 30 minutes past the hour. This results in a missed connection by 5 minutes, so passengers have to wait nearly a full hour to board Hwy 89 Route southbound services to Palisades or Tahoe City. Note that the Henness Road, Rue Ivy, and Coburn Crossing Apartments include a high concentration of the Town's affordable housing, and many residents may work at Palisades/Alpine ski areas or Tahoe City.

However, for the return trip, the Placer TART Hwy 89 Route northbound bus arrives at the Railyard Mobility Hub at 13 minutes past the hour while the Truckee Local Fixed Route eastbound arrives only minutes later, enabling a direct connection back to Henness Flats. This makes it relatively easy for return travel from North Lake Tahoe/Palisades to the northeast area of Truckee on public transit.

If the Truckee Local Fixed Route schedule were shifted five minutes earlier to make a more direct connection from Henness Flat to Palisades/Tahoe City, then the connection from Palisades to northeast Truckee would be missed. This scenario would not improve connections between Truckee and North Lake Tahoe, specifically Tahoe City.

Residents traveling from Southeast Truckee (Brockway Road) Connections

The Truckee Local Fixed Route does not currently serve the Railyard Mobility Hub in the westbound direction immediately after serving stops along Brockway Road. These passengers instead have the opportunity to transfer to Placer TART at the Safeway/Gateway stop, but the transfer requires passengers to wait 45 minutes. Deviating from the current route to serve the Railyard Mobility Hub before the Truckee Depot (if time was in the schedule) would still make passengers traveling from Brockway Road wait 43 minutes before the Placer TART Hwy 89 southbound bus leaves for Palisades. Alternatively, residents along Brockway Road can take the Placer TART Hwy 267 Route to the Railyard Mobility Hub. The Placer TART Hwy 267 bus arrives at the Railyard Mobility Hub ten minutes before the hour, which equates to a 40-minute layover before the Placer TART Hwy 89 bus departs in the southbound direction. For the return trip, a passenger traveling from the North Lake Tahoe/Palisades area back to the Sierra Meadows neighborhood (Brockway Road) must wait 22 minutes at the Railyard Mobility Hub to catch the Local Truckee Route westbound. As there is only one Truckee Local Fixed Route bus, this connection time could not be changed

without negatively affecting the good connection between the Placer TART Hwy 89 route and Truckee Local to Henness Flat.

Residents traveling from West Truckee (Coldstream Commons) to Hwy 89 Southbound

Those traveling from the southwest end of Truckee wishing to connect to Hwy 89 Southbound arrive at the Crossroads Center at 8 minutes after the hour. These passengers must wait another 37 minutes to connect to the Hwy 89 southbound service. For the return trip, there is only a wait time of around 8 minutes between the Hwy 89 northbound bus and the Truckee Local Fixed Route at Sierra College (across from Crossroads). Similar to the analysis above, shifting the Truckee Local Fixed Route schedule to improve the connection from Coldstream to Hwy 89 Southbound would negatively impact the return trip in this scenario.

PLACER COUNTY TART / HWY 267

A similar analysis was conducted for transfer opportunities between the Truckee Local Fixed Route and Placer TART Hwy 267 Route. The primary trip pattern in this scenario is between Truckee, Northstar, and Kings Beach. The Truckee Railyard Mobility Hub is the primary connection point between the Truckee Local and Placer TART Hwy 267 Routes. However, both routes serve many of the same stops including Donner Pass Road at Truckee Way, Raleys O-N-E, and Brockway Rd at Martis Valley Road (Fifty-Fifty).

Henness Flat to Northstar/Kings Beach

Currently there is a 25-minute layover time at the Railyard Mobility Hub for Truckee Local Fixed Route passengers traveling from northeast Truckee wishing to connect with the Placer TART Hwy 267 Route to Northstar. Similar to the discussion above, the layover time at the Railyard Mobility Hub for the return trip (Northstar to Henness Flat) is only 15 minutes.

Coldstream to Northstar/Kings Beach

Residents of central and west Truckee wishing to travel to Northstar or Kings Beach on public transit must wait at the Railyard Mobility Hub for 45 minutes. For the return trip, there is a layover time of only 4 minutes, however, passengers must transfer at Fifty-Fifty on Brockway Road instead of the Railyard Mobility Hub, as the Truckee Local Fixed Route does not serve the Railyard Mobility Hub between Brockway Road and Cold Stream.

Brockway Road

People looking to travel to and from Brockway Road neighborhoods are served directly by Placer TART 267 Route.

CONCLUSION

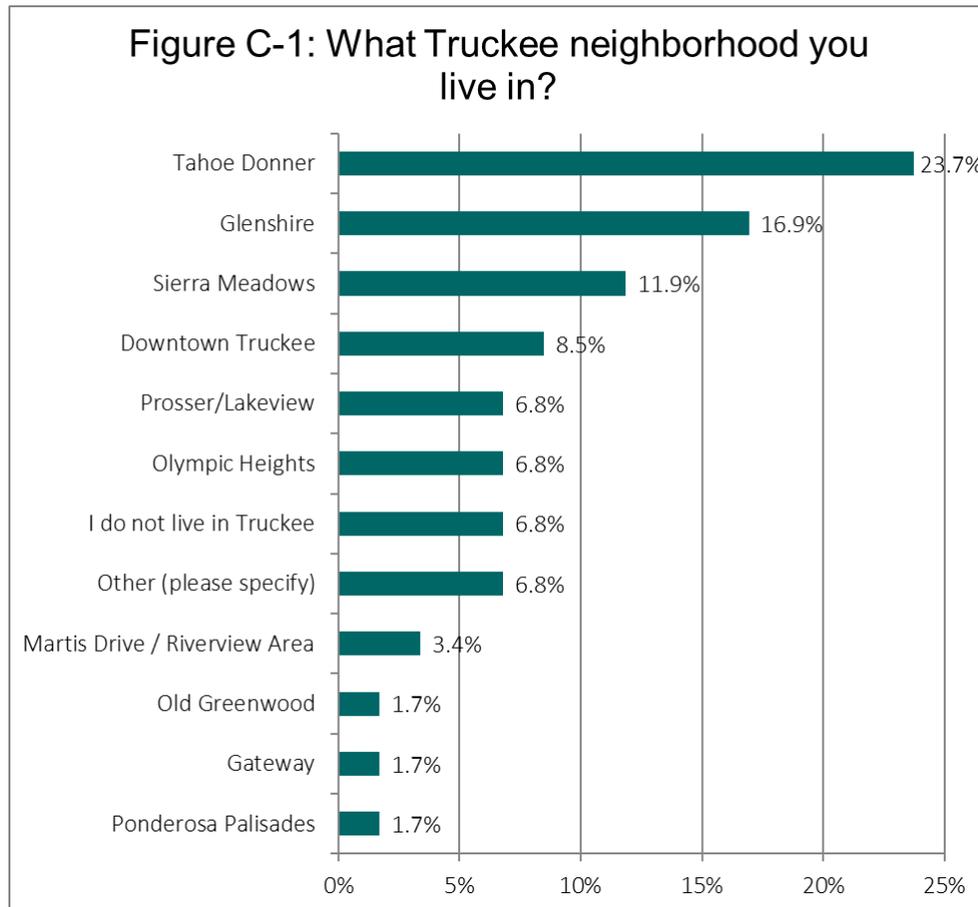
In summary, with Truckee TART's current headways of hourly service, it is difficult to improve the timed connections between all of the Town (1) and Placer (2) TART services in both directions. While closely timed connections occur in one travel direction, they are generally long in the opposite direction. Connecting to Placer TART services has been made easier with the addition of Truckee TART Connect, which can be used for "first-mile/last-mile connections" within Truckee to stops serving regional Placer TART routes

ONLINE COMMUNITY SURVEY

During April, May, and June of 2024, an online community survey was distributed via email listservs. The links were also sent to several local news media outlets and posted to the Town’s website and social media accounts. The survey collected 59 responses (51 in English and 8 in Spanish). The following is a summary of the survey results.

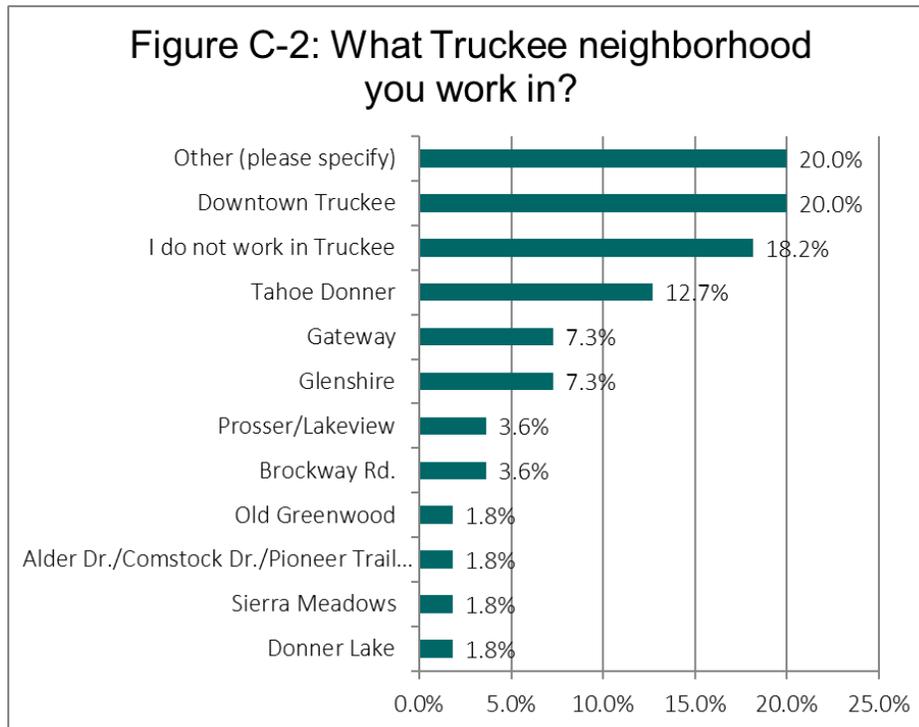
What Truckee neighborhood do you live in?

Of the 59 responses, 23.7 percent (14 people) reside in Tahoe Donner, followed by 16.9 percent (10 people) living in Glenshire Figure B-1. Another 11.9 percent are currently living in Sierra Meadows. Of the 6.8 percent (4 people) who responded “Other”, these respondents currently live in Floriston, Tahoe City, and Incline Village.



What Truckee Neighborhood do you work in?

20 percent of participants (11 people) responded “Other” when asked to provide their work location with another 20 percent of participants indicating that they work in Downtown Truckee. Of those who responded “Other” common answers included the Truckee Airport area, working from home, or being retired. 18.2 percent of survey respondents indicated that they do not work in Truckee, and instead worked in places like Northstar, Alpine Meadows, Kings Beach, and Tahoe City.



How do you feel about the following Microtransit Service Alternatives?

Six different possible microtransit alternatives were presented to respondents to indicate whether they support, are neutral, or do not support the alternative. Table C-1 illustrates these responses at a high level. Reasons for not supporting a particular alternative are also described below.

- *Service Reduction to 6:00 PM – 10:00 PM* was not very popular amongst respondents with 70.6 percent (12 people) saying they did not support this change. Reasons for their lack of support included the sentiment of not being inclusive of residents needing to get around during the day. The major fear is that this sort of service would cater to tourists going out in the evenings.
- *Reduce Peak Season Service to 6:30 AM to 10:00 PM (no longer operate until midnight) Monday through Wednesday only while continuing to operate until midnight Thursday through Sunday.* This alternative was supported by 47.1 percent of participants (8 people) followed by 35.3 percent who do not support this alternative, reasons included not adequately addressing issues of drunk driving in the area.

Table C-1: Possible Microtransit Alternatives

Reduce Service to only 6:00 PM to 10:00 PM 7 days per week, year-round. (No daytime service)

Answer Choices	Responses	
Support	5.9%	1
Neutral	23.5%	4
Do Not Support (Please Explain)	70.6%	12

Reduce Peak Season Service to 6:30 AM to 10:00 PM (no longer operate until midnight) Monday through Wednesday only. This alternative includes continuing to operate until midnight Thursday through Sunday.

Answer Choices	Responses	
Support	47.1%	8
Neutral	17.7%	3
Do Not Support (Please Explain)	35.3%	6

Limit Service to Glenshire to the Top of the Hour. This alternative suggests all pickups and dropoffs would be restricted to a 15- or 30-minute window each hour, reducing the number of vehicles required to travel back and forth to Glenshire.

Answer Choices	Responses	
Support	43.8%	7
Neutral	18.8%	3
Do Not Support (Please Explain)	37.5%	6

Establish a Minimum Trip Length of ½ mile.

Answer Choices	Responses	
Support	52.9%	9
Neutral	17.7%	3
Do Not Support (Please Explain)	29.4%	5

Limit Service to Downtown, Hospital and Sierra Meadows Zones.

Answer Choices	Responses	
Support	0.0%	0
Neutral	6.3%	1
Do Not Support (Please Explain)	93.8%	15

There are portions of “Truckee” neighborhoods which lie within the County of Placer, and are therefore not currently served by Truckee TART Connect. This includes part of Ponderosa Palisades, Martis Valley, and South Shore of Donner Lake. Do you feel it is important to expand the Truckee TART Connect service area to serve these communities?

Answer Choices	Responses	
Support	29.4%	5
Neutral	29.4%	5
Do Not Support (Please Explain)	41.2%	7

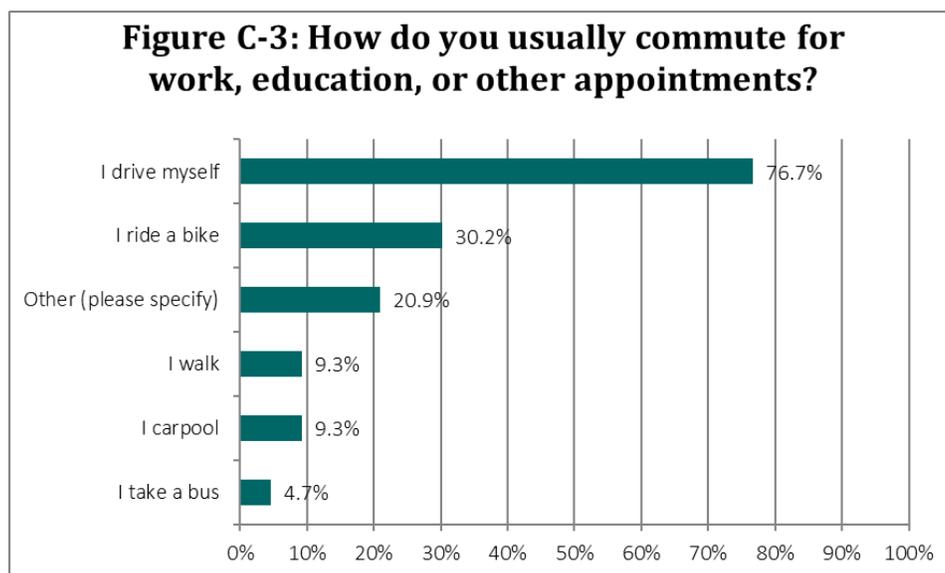
- *Limiting Service to Glenshire to the Top of the Hour* was supported by 43.8 percent of survey participants (7 people). Of the 37.5 percent that did not support this change, feelings that reducing service would not improve reliability were raised.
- *Establishing a Minimum Trip Length of ½ mile* was agreeable with over half (52.9 percent) of participants supporting the suggested alternative. Of the 29.4 percent (5 people) who did not support it, there was a mix of respondents who misunderstood the alternative, thinking that the alternative suggested a maximum trip length of ½ mile, not minimum. Of those who understood the alternative as it was written, issues of inclusion and equity for those who are disabled or traveling with young children were raised.
- *Limiting service to Downtown, Hospital, and Sierra Meadows Zones of Truckee* was not a popular alternative amongst survey participants with 93.8 percent (15 people) showing a lack of support. Using taxpayer dollars to serve a limited area of town was viewed as non-inclusive of outlying neighborhoods who expressed benefiting from the service the most.
- *Serving Placer County areas just outside of Truckee (Ponderosa Palisades, Martis Valley, and South Shore of Donner Lake)* had a mix of responses from participants. While 41.2 percent (7 respondents) did not support it, 29.4 percent (5 respondents) supported it. Another 29.4 percent were neutral to the alternative. Of those stating that they did not support the alternative, many suggested they would be more supportive if Placer County paid for this portion of the service.

Do you have a vehicle available?

A large majority of participants have vehicles available for their daily use (91.2 percent).

How do you usually commute for work, education, or other appointments?

76.7 percent of respondents (33 people) drive themselves to work, education, or appointments, followed by 30.2 percent indicating that they ride their bike. Of the 20.9 percent (9 respondents) who said “other” the answers included working from home or taking Tart Connect.



Do you or someone you know take Placer TART between Truckee and North Lake Tahoe regularly? Where do you or they go? What times do you or they travel?

77.1 percent of participants do not personally or know anyone who commutes regularly between Truckee and North Lake Tahoe. However, of the 22.9 percent (11 participants) who do, they listed Kings Beach, Tahoe City, and Incline Village as destinations in North Lake Tahoe, and Truckee Forest Hospital and Downtown Truckee as destinations within Truckee. Times varied between early morning (before 8 AM) and mid-afternoon (2:30 PM).

Why do you or someone you know not take Placer TART to and from North Lake Tahoe?

Of those who responded to this question, the following explanations were made:

- Time and frequency don't align with their schedules.
- Inconvenient bus stop locations.
- Olympic Valley detour discourages use between Truckee and Tahoe City.
- Not enough information on scheduling to commit to using the service.
- No real-time information at bus stops.

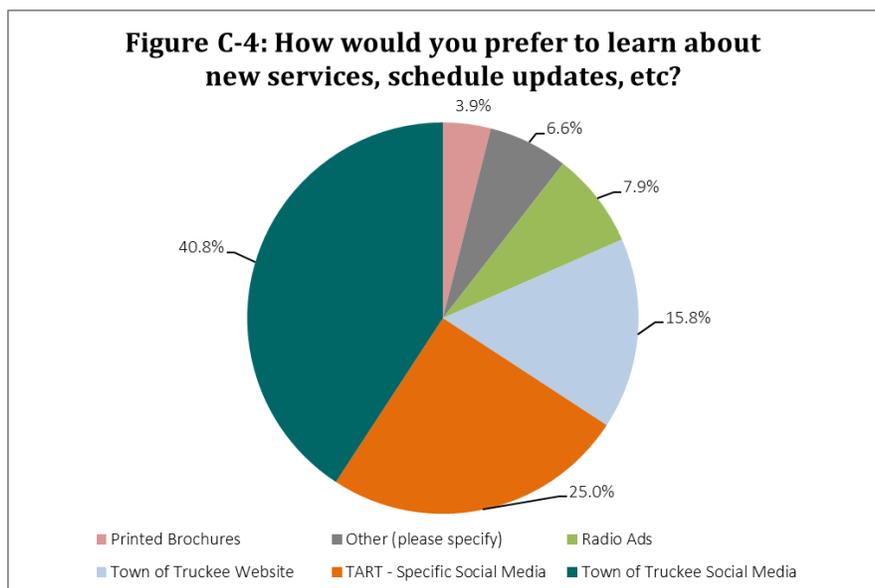
Truckee Local Fixed Route Alternatives

Survey participants were first asked how they felt about ending fixed route service at 5:30 PM and instead adding another van to the TART Connect service between 5:30 PM and 6:30 PM. Over half (56.1 percent or 23 respondents) were in support of this concept, followed by 24.4 percent (10 respondents) who were not in support. Of those indicating no support cited issues relating to inclusion and reliability for local resident workers.

The second fixed route alternative suggests the implementation of 30 min headways along Truckee Local Fixed Route. 45.2 percent (19 respondents) were in support of this alternative with 33.3 percent (14 participants) remaining neutral on the topic. Of the 21.4 percent (9 respondents) indicating no support, many expressed concerns over cost not being worth the added value it might provide.

How would you prefer to learn about new services, schedule updates, etc?

More than half of the participants (65.8 percent) would prefer to receive information through the Town's social media (40.8 percent or 31 responses) and TART social media channels (25 percent or 19 responses). The Town of Truckee website was only preferred by 15.8



percent (12 responses). Printed brochures were the least popular method of receiving information (3.9 percent or 3 responses). Of the 6.6 percent who said other, some suggested email and text messages as a form of outreach and communication.

Additional Comments

When survey participants were asked to share additional thoughts and comments, the following major themes were discussed. A complete transcript of these comments is shown in Table C-2 below.

- **Need to improve real-time schedule information.** Many described waiting at a bus stop and not knowing when the bus would arrive. It was requested that more technology be available for people to be able to look up when the bus will actually arrive.
- **Concerns around funding.** Many indicated concerns about where continued funding will come from for the TART Connect service. One comment mentioned that perhaps TART Connect needs to charge a small fare to increase revenue and decrease the costs of operation.
- **General support for continuing to improve services.** Several respondents mentioned their support and excitement that TART is looking to improve transportation in Truckee.
- **Shorter wait times for TART Connect.** Many survey participants expressed that they would like shorter wait times and more reliability around TART Connect.

Conclusions

The survey as a whole revealed that many participants have been happy with Truckee TART Connect and appreciate the Town's effort in making transportation available. Most survey participants lived in either Tahoe Donner (23.7 percent), Glenshire (16.9 percent), and Sierra Meadows (11.9 percent). 20 percent of respondents indicated that they work in Downtown Truckee, followed by 18.2 percent that commute to Alpine, Palisades, Northstar, Kings Beach, and Tahoe City for work.

When it came to expressing support for various types of TART Connect alternatives, limiting services to the Downtown, Sierra Meadow, and Hospital area of Truckee was the least popular with 93.8 percent of participants expressing that they do not support that service change. Reducing service to between 6:00 PM and 10:00 PM was the second least popular alternative with 70.6 percent of participants stating they did not support that change to service.

When considering possible changes to the fixed route services, adding another van to TART Connect while reducing Truckee TART Local Fixed Route service to end at 5:30 PM was supported by more than half of respondents (56.1 percent). However, those who did not support this alternative were very adamant in this service not feeling equitable to people not wanting to rely on a phone app/microtransit for their trips home after work. Running services half-hourly received fairly mixed opinions with 45.2 percent indicating support while 33.3 percent remained neutral, and 21.4 percent expressed no support for this change in service. Those who didn't support this alternative explained that they thought the costs would outweigh the benefits.

Table C-2: Do you have any additional comments on how to improve public transit in Truckee?

Add more Alfred and Danielle!
add to the mix a downtown area high frequency, hop on-hop off revolving shuttle (truckee trolley)
Bus stops on major roads in every neighborhood. For example, stops on Northwoods in Tahoe Donner every hour to take you into town and connect to a bus/van that has a route around Truckee which connects to other neighborhoods. Like they have in Europe.
Buses are a catch 22 limited users without available schedules but schedules are based on current users
Does Tart connect rider information provide indication of a fixed route on Northwoods makes sense
For those that can afford to pay charge a nominal amount
Great to see the Town looking at all this! TART Connect is great and would love to see improved regional service as well
I believe tart connect should replace the fixed route.
I love tart connect. When requesting rides for work, it would be helpful to know if my 5 minute work ride will be extended and for how long due to other possible passengers. Knowing ahead of time when my drop off will be will help me determine if I can use the service at that time.
I think you are doing great, but it is complex. Have you ever considered it to be a paid service? Less than uber but to supplement the lack of funding.
I would take TART connect everyday if the wait time was 30 min or less
Increase funding. Why does the town have Teslas when budgeting public services is so hard? It's a bad look that the funding buckets can be so skewed. The whole of the budget should be reviewed for excessive spending a la teslas.
Just that tart connect is an awesome resource!
Minimal fee for tart connect - either per ride or a monthly pass for those who use it regularly.
More public transit and connect Sierra meadows to Raley's bike path
More service to Glenshire. I heard a rumor that TART connect would be limited to the first 15 minutes of each hour. Bad idea. My family and I need service to and from Glenshire.
More space for recreational gear on buses and TART connect vans -- racks for bikes, kayaks, and skis. (current TART buses can only fit 3 bikes, I believe)
People aren't willing to use the fixed route. We need to change the community's perspective on this before investing more in fixed route. More availability may not help. Re-brand or make it cooler/acceptable for people to use this service.
service is too unreliable and wait times are too long, need to be able to track bus so know when it's coming - basic communication from Tart
Tart could connect in Tahoe Donner or Tahoe Donner could coordinate with the town to run their shuttles to get people down to tart
The tart connect provides a great benefit to the community, I sincerely hope the town can find a way to continue to fund it without drastically reducing service!
They need to be consistent with their arrival times. Each time I've tried to use the system, the wait is 30 minutes because the bus didn't come when it was scheduled to. The lack of reliability leaves me unable to depend on it.
Tons of service workers get off work post the last service time for tart. Also, living in a Tahoe Donner I rarely use it because it takes 2 hours to get someone. More shuttles to and from the ski resorts.
Wait times are too long and unpredictable for TART connect. So I would support more funding info that program to address those issues/get more vans on the road. And then if it was more predictable and fast I would use it much more!
While folks find the FREE local on demand service to be helpful I find it disturbing that so many extra trips are required to take someone somewhere. Meanwhile empty buses are still on the roads. Who's going to pay for the vans when the grant funding runs out?
Why is the latest bus from Tahoe City to Truckee before 5pm? There needs to be an option to connect riders but Truckee at later times.
You guys are asking the right questions and moving in the right direction. TART Connect is the best form of public transit I've seen anywhere. Continue making this easier and easier to use, with more drivers/vehicles. I realize funding is always the issue but I personally would be willing to come on board and help brainstorm solutions, speak to my personal testimony etc. I am a disabled (visually impaired) mother of two, business owner (Drink Coffee Do Stuff) and homeowner.