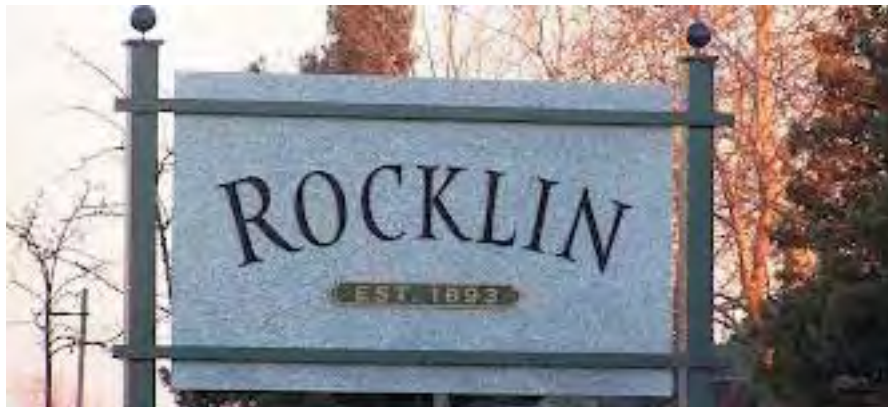

ROCKLIN COMMUNITY TRANSIT STUDY

Final Plan



Prepared for the

Placer County Transportation Planning Agency

Prepared by



LSC Transportation Consultants, Inc.

Placer County Transportation Planning Agency Rocklin Community Transit Study

Final Plan

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Transportation considerations play a key role in the quality of life provided by any community. Access to social and medical services, employment opportunities, educational resources and basic necessities are issues of universal concern, as they have a strong impact on the economy, ease of movement, and quality of life for residents of an area. In addition to providing mobility to residents without easy access to a private automobile, transit services can provide a wide range of economic development and environmental benefits.

The Placer County Transportation Planning Agency (PCTPA) is undertaking a study regarding potential improvements in public transit services in Rocklin, California. Rocklin has grown in recent years and prior public input has indicated a need to serve more residential areas and some new commercial centers. The ultimate objective of this study is to determine if there is a need to modify existing transit services or to establish new routes or services to better serve Rocklin residents. Additionally, the most recent Short Range Transit Plan for Placer County recommended a more detailed study of transit needs in the City of Rocklin and therefore did not identify specific recommendations for new service.

Using the services of LSC Transportation Consultants, Inc., this study includes a review of the existing transit services, the needs for transit services in Rocklin, and the community's interest in changes to the service, and will assess the feasibility of various strategies to expand services. This final plan is the compilation of several interim study documents, describing existing transit services available, analyzing demand for public transit services and developing potential alternative solutions to meet transit needs.

STUDY GOALS AND OBJECTIVES

The following are the primary goals and objectives of the Rocklin Community Transit Planning Study, based on the Request for Proposals and input from the Project Team:

- ◆ Ensure that stakeholders identified by the Project Team and other residents of the City of Rocklin have ample opportunity to comment and provide input for the plan.
- ◆ Through public workshops and community meetings, provide stakeholders and Rocklin residents with the opportunity to better understand what public transit services are available, which entities are responsible for operating the services, and how public transit services are funded.
- ◆ Provide a thorough overview and analysis of demographic and economic existing and future conditions in the City of Rocklin as they relate to public transit so that an accurate picture of unmet transit needs is presented. Particular attention will be paid to the transit needs of the two colleges located in Rocklin: Sierra College and William Jessup University.
- ◆ Analyze the efficiency of existing public transit services (both fixed route and demand response) to assess strengths and weaknesses.
- ◆ Review different service options which may better serve Rocklin residents.
- ◆ Review and analyze new public transit services within the City of Rocklin which meet identified needs and which can be funded with existing or other available funding sources.
- ◆ Produce a Community Transit Plan for a five year and a ten year planning period which is acceptable to the Project Team and can be included as an amendment to the Placer County SRTP.

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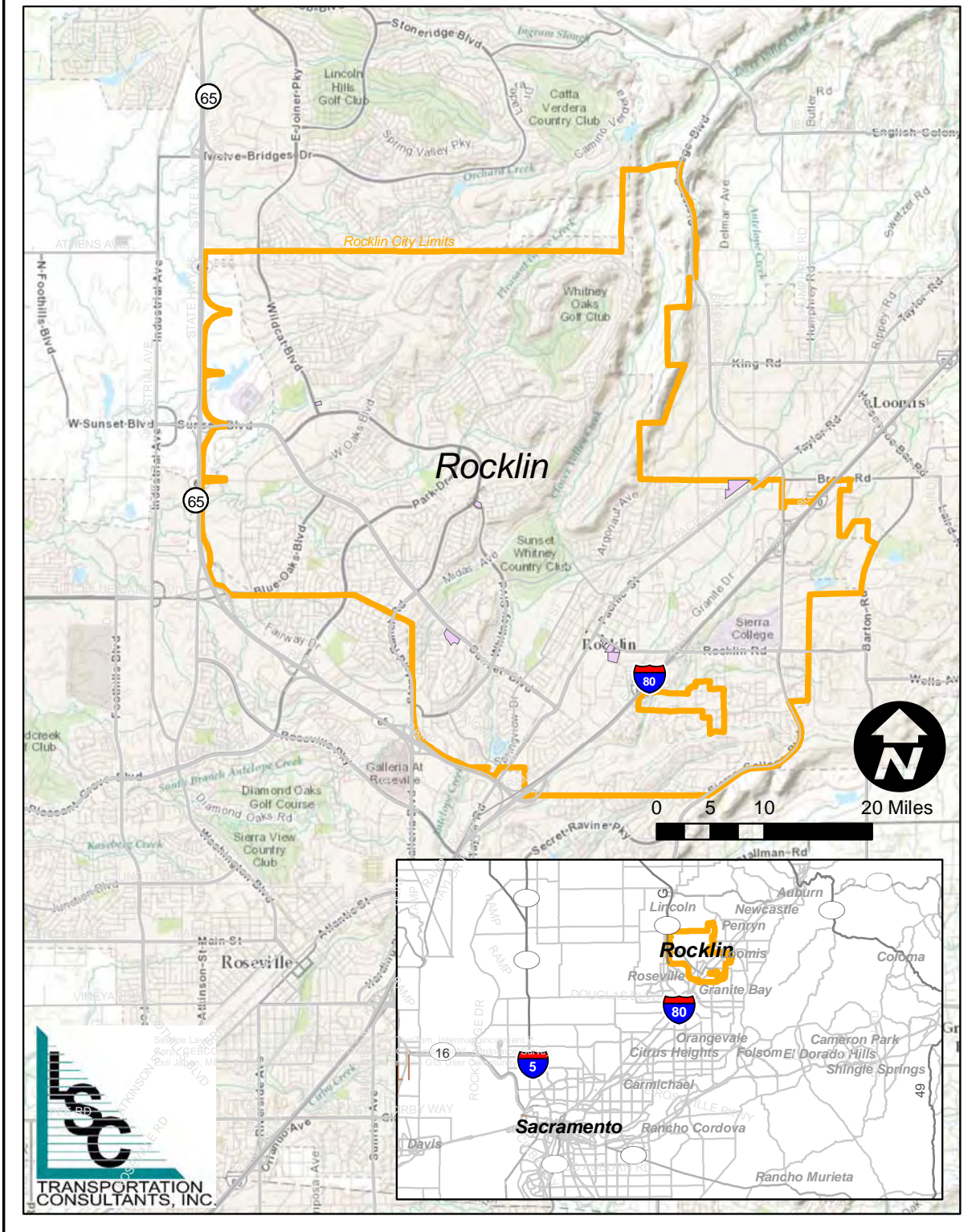
The City of Rocklin is located in southern Placer County near the junction of Interstate 80 and State Highway 65. Rocklin covers about 20 square miles and is located 25 miles northeast of Sacramento. The study area is shown in Figure 1. Originally a prominent center for ranching, granite mining and railroad activity, over the last several decades it has grown into a mixed, largely suburban area, with several institutional and commercial centers.

POPULATION

The 2013 population of Rocklin is estimated by the California Department of Finance to be 58,484. Nationwide, transit system ridership is drawn largely from various groups of persons who make up what is often called the “transit dependent” population. This category includes older adults, persons with disabilities, low-income persons, and members of households with no available vehicles. Reviewing population data by census tract provides a good indication of where potentially transit dependent Rocklin residents live. Table 1 presents the transit dependent population by census tract within the City of Rocklin, from the 2010 U.S. Census, which includes older adults, people too young to obtain a driver’s license, persons with disabilities and low income persons, as well as households without access to a vehicle. There are 15 census tracts wholly or partially within the city limits. Note some census tracts do not follow city limits; in these cases data is presented only for the portion within the city limits. As presented in the table, the City of Rocklin population in 2010 was 57,013 persons. Nearly a quarter (23 percent) of this population is either under 17 years old or over 65 years old. Additionally, for the city as a whole 7 percent live below the poverty line and 5 percent are person with disabilities. In about 1 percent of the households there are no vehicles available. Note there is overlap among these groups and not everyone in these categories is transit dependent. More specifically:

- ◆ Within Rocklin there are an estimated 6,094 persons aged 65 or over (or 11 percent of the total study area population). The older adults are not distributed evenly throughout the city with high number in Clover Valley, Whitney Oaks, Southeast Rocklin, South Stanford Ranch, and Central Rocklin. The Rocklin population over 65 is presented graphically in Figure 2.
- ◆ The number of low-income persons, another likely market for transit services, is measured by the number of persons living below the Federally-defined poverty level. An estimated 4,209 people live below the poverty level in Rocklin, representing 7 percent of the total population (compared with 14.5 percent statewide). The percentage of those persons living below poverty status is highest in Stanford Ranch (19 percent). In terms of number of people living below the poverty level, Sunset West and Stanford Ranch each have over 500 people. This is presented graphically in Figure 3.
- ◆ The number of households in the study area without access to a vehicle is estimated at 273, as presented in the Table 1. This represents about 1 percent of the total households in the area (compared with 7.8 percent statewide). The greatest numbers of households with zero vehicles are located in the Central Rocklin and Northwest of Sunset Boulevard neighborhoods. This is presented graphically in Figure 4.
- ◆ As shown in Table 1, roughly 5 percent or 2,599 adults with disabilities live in the study area. Both the Clover Valley/Whitney Oaks and Northwest Rocklin/Stanford Ranch area house over 400 adults with disabilities. This is presented graphically in Figure 5
- ◆ Youths aged 10 to 17 years old comprise about 12 percent of the population of Rocklin. As shown in Figure 6, the highest numbers of youths are located in northwest Rocklin and the Clover Valley/Whitney Oaks areas.

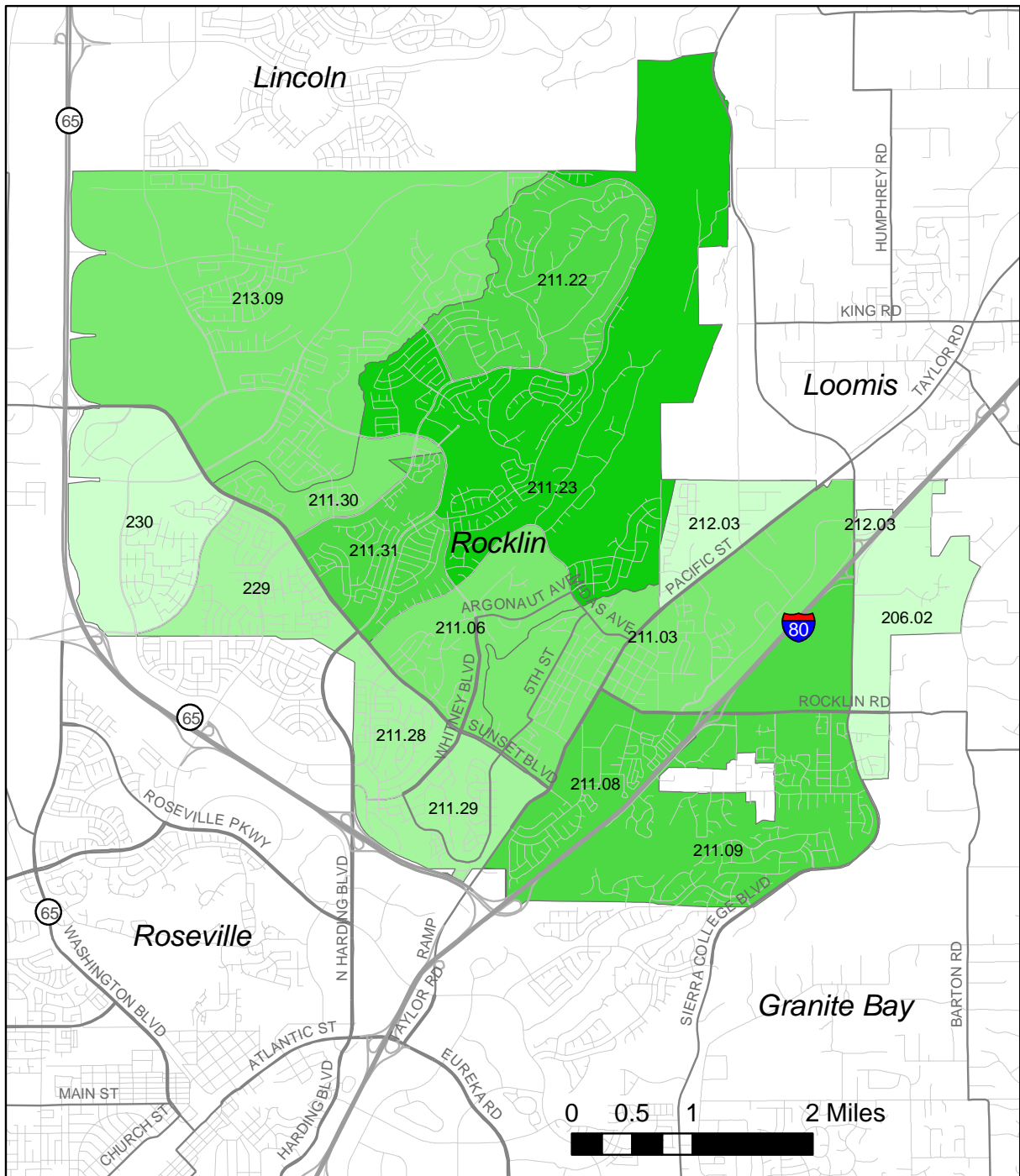
Figure 1
Site and Location Map



Census Tract Number	Census Tract Area Name	Total Population	Households	Area (square miles)	Population Density (persons/square mile)	Age			Persons Living Below Poverty Status		Households by Number of Vehicles			Persons with Disabilities			
						10-17 years		65+ years		Total	Percent of Population	Number	Percent of Households	Age 16 to 64	Percent of Population		
						Number	Percent of Population	Number	Percent of Population	Number	Percent of Population	Number	Percent of Households	Number	Percent of Population		
206.02 (part)	Southeast Rocklin	528	281	0.826	639	15	3%	20	4%	90	17%	0	0%	68	13%	62	12%
211.03 (part)	Central Rocklin/ North of Sunset Boulevard	3,725	1,431	1.852	2,011	398	11%	408	11%	231	6%	75	5%	315	1,489	196	5%
211.06	North of Sunset Boulevard	2,027	847	0.830	2,442	240	12%	419	21%	74	4%	64	8%	76	764	73	4%
211.08	Central Rocklin	2,502	1,138	0.687	3,642	200	8%	524	21%	221	9%	10	1%	229	864	160	6%
211.09 (part)	Southeast Rocklin/ Sierra College	4,558	1,670	2.125	2,145	480	11%	552	12%	481	11%	15	1%	303	1,646	121	3%
211.22	Whitney Oaks Area	3,413	1,260	1.204	2,835	423	12%	722	21%	75	2%	24	2%	99	1,381	74	2%
211.23 (part)	Clover Valley Road/ Whitney Oaks	7,857	2,784	3.317	2,369	963	12%	1,194	15%	246	3%	0	0%	472	3,213	428	5%
211.28	South of Sunset Boulevard	2,654	1,039	0.448	5,924	265	10%	267	10%	291	11%	0	0%	209	1,136	57	2%
211.29 (part)	South of Sunset Boulevard	3,322	1,472	0.615	5,402	279	8%	225	7%	315	9%	8	1%	299	1,419	292	9%
211.30	Stanford Ranch	2,709	1,311	0.367	7,381	295	11%	457	17%	517	19%	55	4%	355	818	138	5%
211.31	Stanford Ranch South	5,005	1,982	0.692	7,233	573	11%	534	11%	400	8%	0	0%	371	2,212	218	4%
212.03 (part)	Small Section East of Rail Tracks Near Loomis	404	123	0.416	971	93	23%	12	3%	16	4%	0	0%	0	215	2	0%
213.09	Northwest Rocklin/ Stanford Ranch	9,934	2,899	4.301	2,310	1,912	19%	371	4%	473	5%	14	0%	323	3,872	515	5%
229	Sunset West	5,223	1,815	0.681	7,670	595	11%	258	5%	571	11%	0	0%	553	1,867	195	4%
230 (part)	Sunset West	3,152	941	1.169	2,696	336	11%	131	4%	208	7%	8	1%	123	1,259	68	2%
Total		57,013	20,993	19.53		7,067	12%	6,084	11%	4,209	7%	273	1%	3,795	22,290	2,599	5%

(part) = Only the portion of the census tract within the City of Rocklin was included.

Figure 2
City of Rocklin Elderly Population by Census Tract

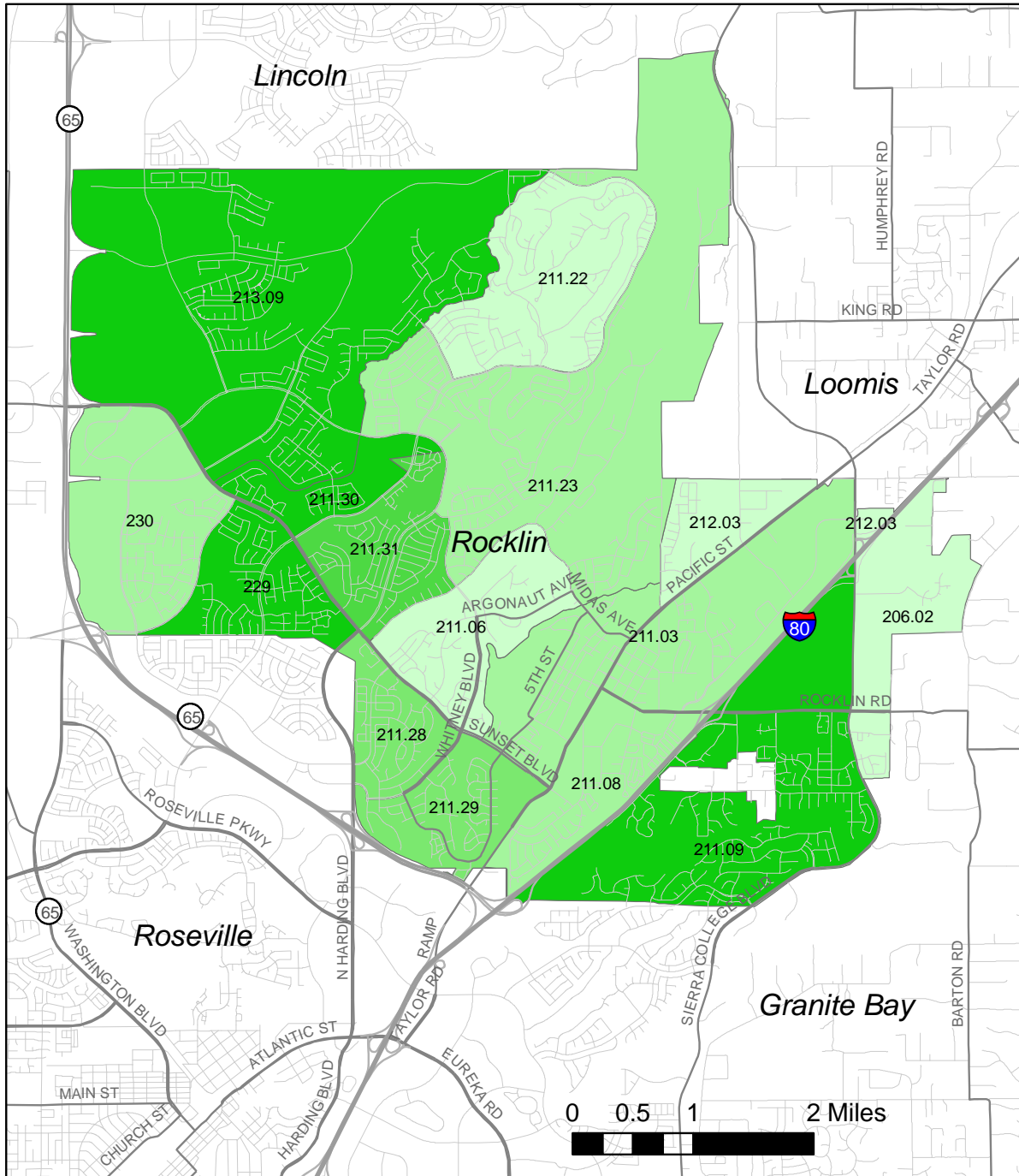


Elderly Population by Census Tract

	12 - 131		268 - 457		723 - 1194
	132 - 267		458 - 722		



Figure 3
City of Rocklin Low-Income by Census Tract



Low-Income Population by Census Tract

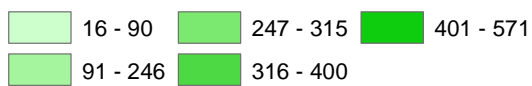
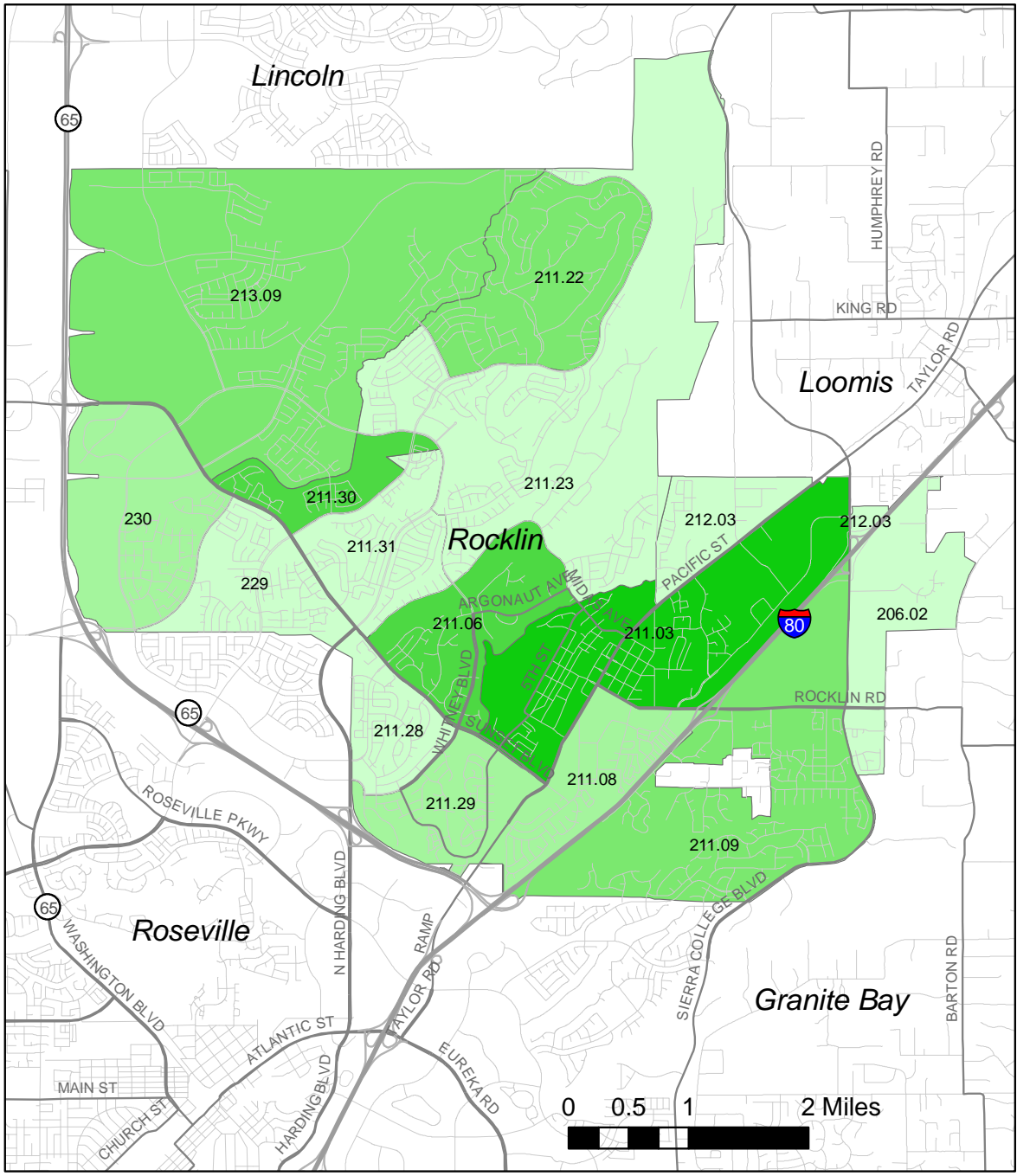


Figure 4
 City of Rocklin Zero-Vehicle Households by Census Tract

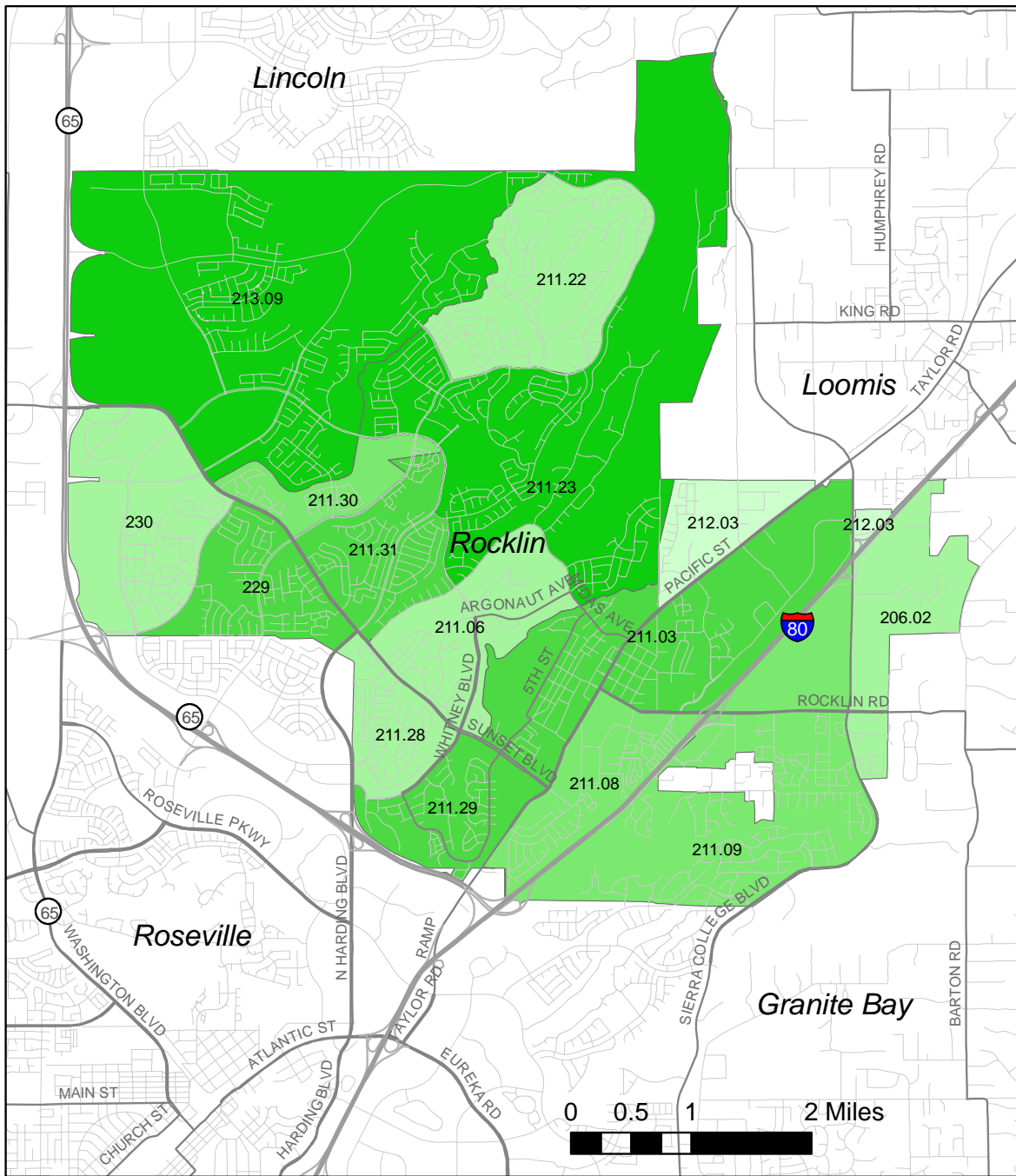


Zero-Vehicle Households by Census Tract

0	11 - 24	65 - 75
1 - 10	25 - 64	



Figure 5
 City of Rocklin Disabled Population by Census Tract

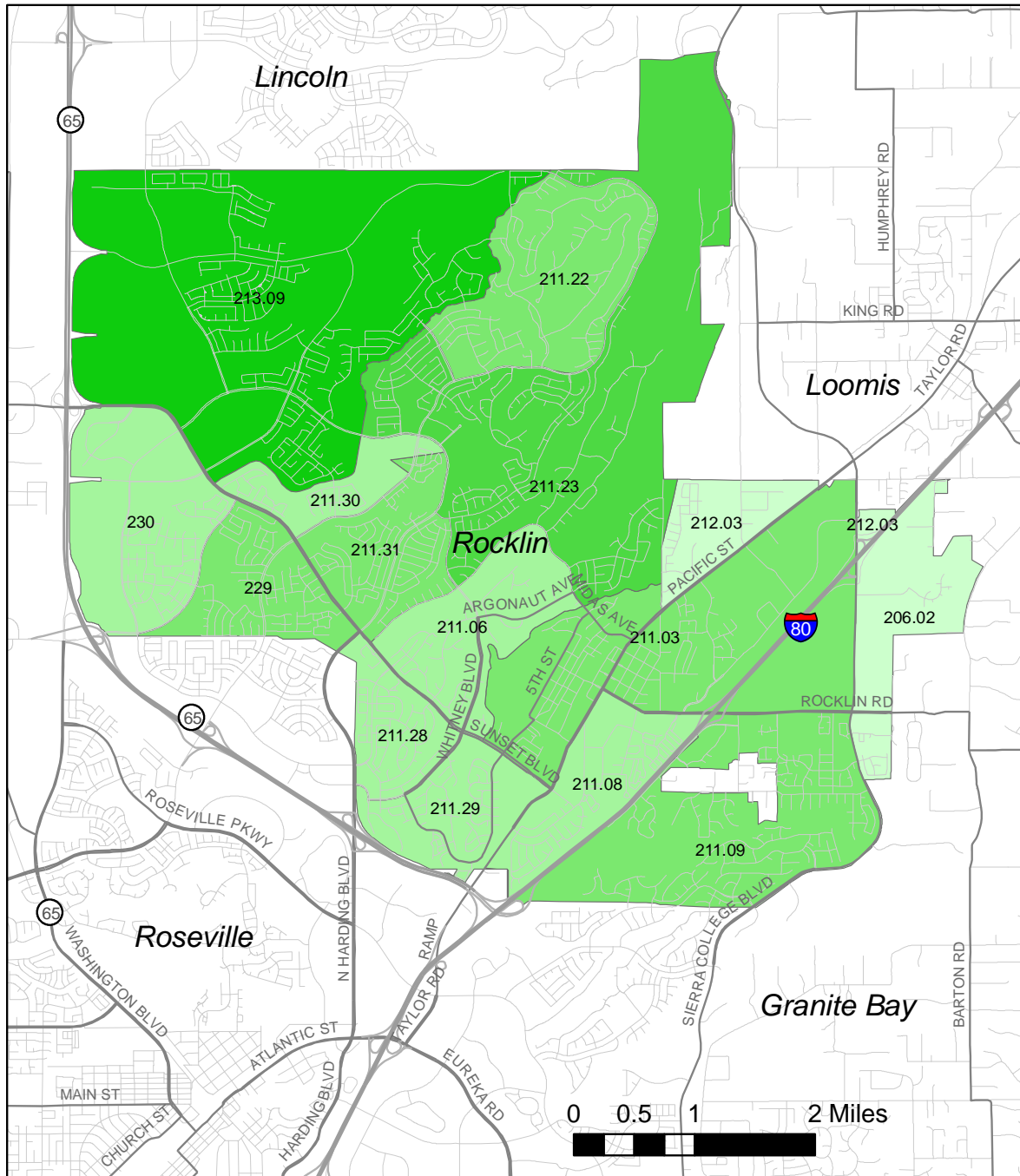


Disabled Population by Census Tract

2	75 - 160	293 - 515
3 - 74	161 - 292	



Figure 6
City of Rocklin Youth Population by Census Tract



Youth Population by Census Tract

- | | | | | | |
|--|----------|--|-----------|--|------------|
| | 15 - 93 | | 337 - 595 | | 964 - 1912 |
| | 94 - 336 | | 596 - 963 | | |



Population Trends

Table 2 shows the historical and future estimates for population in Rocklin. As recently as 1980 the population was only 7,344 people. Since then, there has been almost an eight-fold increase to the 2013 estimate of 58,484 people. This rapid growth has slowed in recent years. Future population estimates were made as part of the Rocklin General Plan Environmental Impact Report in 2011. A mid-range growth scenario was used with an estimated 400 dwelling units added annually. This growth predicted a 2030 population of 76,136 people. While representing a declining annual growth rate, it still constitutes a 30 percent increase over the current population.

Year	Population	Annual Percent Change	Source
1980	7,344	-	US Census
1990	19,033	15.9%	US Census
2000	36,330	9.1%	US Census
2010	57,013	5.7%	US Census
2013	58,484	0.3%	California Department of Finance
2020	73,414	2.6%	General Plan Update DEIR
2030	76,136	0.4%	General Plan Update DEIR

Based on the California Demographic Research Unit, Report P-1 the population of Placer County in general will increase by about 25% by 2030 while the population aged 65+ will almost double. This higher increase in older adults could increase the need for transit in Rocklin. Looking in detail at the 65+ population young retirees (65-74) are expected to increase 86%, mature retirees (75-84) an increase of 112%, and seniors (85+) and increase of 95%. Mature retirees and seniors are particularly important when determining the growth in demand for dial-a-ride services.

Language

Census data provides information about what languages are spoken for a given population. For the residents of Rocklin, 86.6 percent speak English exclusively with an additional 9.6 percent who are bilingual with proficient English for a total of 96.2 percent of the population which has proficient English speaking skills. As shown in Table 3, the remaining 3.8 percent of Rocklin residents is not proficient in English with a majority speaking an Asian or Pacific Islander language.

	#	%
Proficient in English	51,372	96.2%
English Only	46,230	86.6%
Bilingual with Proficient English	5,142	9.6%
Not Proficient in English	2,015	3.8%
Spanish Only	436	0.8%
Indo-European Only	516	1.0%
Asian/Pacific Islander Only	1,040	1.9%
Other Language Only	23	0.1%
Total Population of Rocklin	53,387	100%
<i>Source: US Census</i>		

ROCKLIN COMMUTING PATTERNS

Where Rocklin residents work and where persons working in Rocklin live both impact the need for transit services for commuters. The US Census' Longitudinal Employer-Household Dynamics (LEHD) data set provides useful estimates of commuting patterns. The LEHD data for Rocklin indicates that overall only 2,599 people both live and work in Rocklin, while the majority of people either commute into or out of Rocklin for work. Specifically 18,680 people live in Rocklin and commute elsewhere for work while another 11,866 people commute into Rocklin for work. Table 4 and Figures 7 and 8 show where Rocklin residents are commuting to and where Rocklin worker are commuting from, respectively. Overall, this data indicates that while Rocklin is a "bedroom community" for other portions of the Sacramento Region (notably Sacramento and Roseville) it also is an important employment center.

Table 4: Rocklin Commute Patterns

Where Rocklin Workers Live			Where Rocklin Residents Work		
Census Place	# of Jobs	% of Total	Census Place	# of Jobs	% of Total
Rocklin city, CA	2,599	18.0%	Sacramento city, CA	3,584	16.8%
Roseville city, CA	1,859	12.9%	Roseville city, CA	3,242	15.2%
Sacramento city, CA	674	4.7%	Rocklin city, CA	2,599	12.2%
Lincoln city, CA	669	4.6%	Arden-Arcade CDP, CA	757	3.6%
Citrus Heights city, CA	631	4.4%	Rancho Cordova city, CA	689	3.2%
Antelope CDP, CA	325	2.2%	Folsom city, CA	660	3.1%
Granite Bay CDP, CA	294	2.0%	Auburn city, CA	610	2.9%
Folsom city, CA	289	2.0%	Citrus Heights city, CA	361	1.7%
Carmichael CDP, CA	246	1.7%	San Francisco city, CA	327	1.5%
Orangevale CDP, CA	225	1.6%	North Highlands CDP, CA	314	1.5%
All Other Locations	6,654	46.0%	All Other Locations	8,136	38.2%
Total	14,465	100%	Total	21,279	100%

Note: LEHD figures represent estimates of commute patterns, synthesized from several sources of US Census residential location, business location, and commute data. These figures exclude Federal, railroad and self-employed employees, and include trips that are not made each workday. As such, this data should be considered to only provide a general commuting pattern.

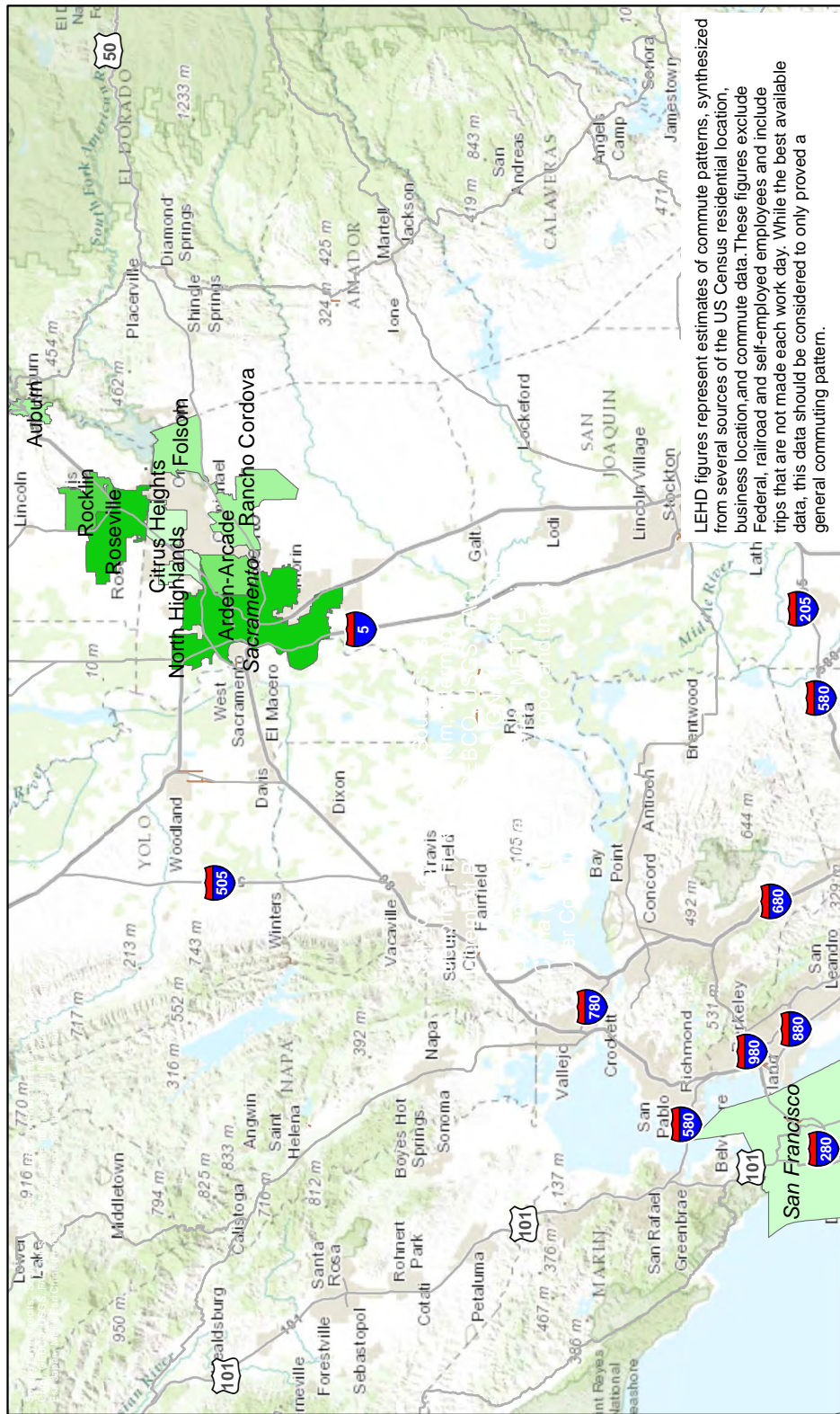
Source: US Census LEHD OntheMap application, 2011 data.

Means of Transportation to Work

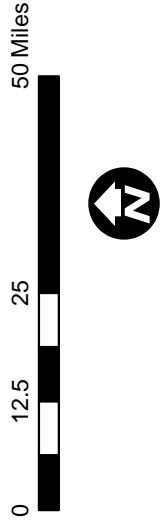
The means of transportation to work for employed Placer County residents according to the 2010 U.S. Census are as follows:

- ◆ 82 percent of employed residents drove alone
- ◆ 8 percent carpooled
- ◆ 6 percent worked at home
- ◆ 1.5 percent used other means of transportation including bicycles
- ◆ 1.3 percent used public transportation
- ◆ 0.8 percent walked

**Figure 7
Where Rocklin Residents Work**



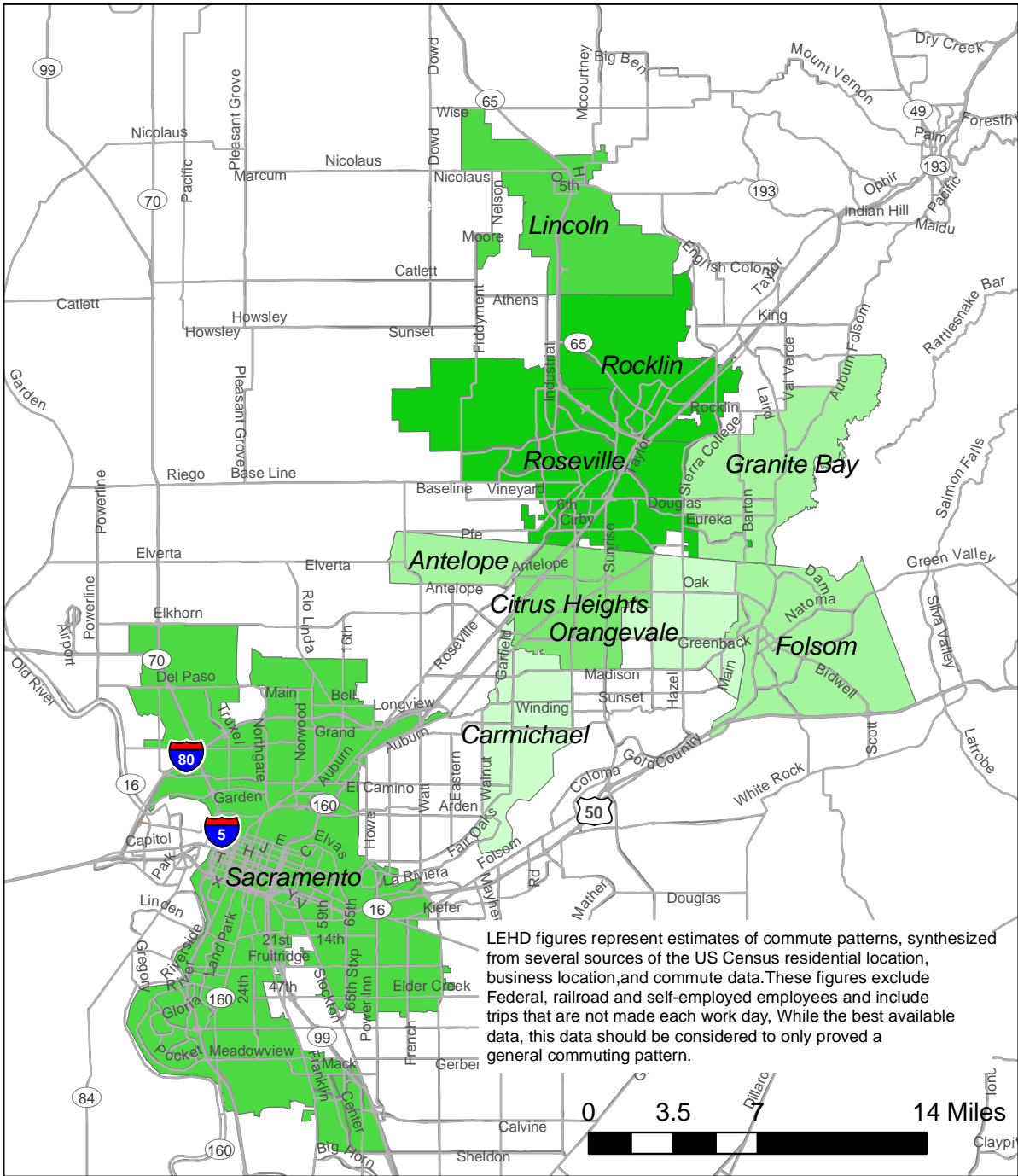
LEHD figures represent estimates of commute patterns, synthesized from several sources of the US Census residential location, business location, and commute data. These figures exclude Federal, railroad and self-employed employees and include trips that are not made each work day. While the best available data, this data should be considered to only provide a general commuting pattern.



- 314 - 361 people
- 362 - 689 people
- 690 - 757 people
- 758 - 2599 people
- 2600 - 3584 people



Figure 8
Where Rocklin Workers Live



LEHD figures represent estimates of commute patterns, synthesized from several sources of the US Census residential location, business location, and commute data. These figures exclude Federal, railroad and self-employed employees and include trips that are not made each work day. While the best available data, this data should be considered to only provide a general commuting pattern.



- | | | | |
|---|------------------|---|-------------------|
|  | 225 - 246 people |  | 632 - 674 people |
|  | 247 - 325 people |  | 675 - 2599 people |
|  | 326 - 631 people | | |



COLLEGES/UNIVERSITIES

William Jessup University is a private Christian college offering liberal arts degrees which is located in the northeast corner of Sunset Boulevard and Highway 65. The current enrolment is about 1,100 students of which about 78% are enrolled full time.

Sierra College's Rocklin campus is located south of Interstate 80, in the Northwest corner of Rocklin Road and Sierra College Boulevard. Approximately 14,000 students attend Rocklin campus which offers community college (2 year), associate, and certificate programs. A majority, 76 percent, of classes are held during the day at the Rocklin campus with the remaining 24 occurring on night and weekends. Based on zip code data provided by Sierra College Staff, the number of students that live within the City of Rocklin is about 2,200 or 16 percent of the student population of the Rocklin Campus.

The Sierra College Five-Year Construction Plan was presented to the College Board of Trustees meeting on June 11, 2013. The two large projects proposed for the Rocklin campus are as follows:

- ◆ A Science Replacement Facility which will consist of a new building about 120,000 GSF which is scheduled for occupancy in 2017/2018.
- ◆ A Child Development Center on the north side of campus with possible construction starting in 2015.

Currently bus service is available through Placer County Transit (PCT) to the Rocklin Campus at the cost of \$1.25 each way (lower fares available with multi-ride ticket books). There is no discount for students at this time. PCT offers direct trips from Auburn, Loomis, Lincoln, Rocklin and Roseville to a bus stop located on campus behind the Dietrich Theatre.

MAJOR PLANNED DEVELOPMENTS

Commercial and Residential Projects

Major developments, such as commercial or residential projects, can affect the transit demand of Rocklin. The two major current commercial developments in Rocklin are Rocklin Commons and Rocklin Crossing, located at the northwest and southeast corners of I-80 and Sierra College Boulevard, respectfully. Rocklin Crossing currently contains a Super Walmart with other retail uses planning to open soon. Rocklin Commons is still under construction with tenants such as Target and other large retail uses.

As shown in Table 5 and Figure 9, many residential developments are planned in Rocklin as well. Approximately, 3,550 units are likely to be built in the near term. As multifamily and senior residential projects generate a substantially higher per-unit demand for transit service, it is worthwhile reviewing these projects in particular:

- ◆ Whitney Ranch Assisted Living project has recently been approved and is beginning construction of 111 assisted living units in the northwest corner of West Ranch View Drive and East Joiner Parkway. This location not near an existing bus stop.
- ◆ Bella Vida Senior Independent Living Facility project has approved entitlements that will provide 140 assisted living units on Pacific Street near the Rocklin/Loomis boarder. This location is about one third of a mile from the Taylor Road Shuttle Route.
- ◆ Sierra College Apartments project which has design review entitlements in process, has approved zoning that will provide for up to 200 multi-family units on the southeast corner of Rocklin Road and Sierra College Boulevard. This location is near the bus stop at Sierra College.

Table 5: Rocklin Potential Future Residential Projects

Project Name	Single Family Units	Multi-Family Units	Senior/ Assisted Living Units	Status
Garnet Creek (Cressleigh)	150	150		Being processed for Planning Entitlements
Sunset Hills Townhomes	148			Being processed for Planning Entitlements
Parklands Subdivision	142			Approved Entitlements
Granite Terrace Subdivision	38			Approved Entitlements
Brighton Subdivision	75			Approved Entitlements
Garnet Drive and Dominguez Subdivision	71			Approved Entitlements
Stanford Terraces	125			Approved Entitlements
Rocklin Meadows Subdivision	26			Being processed for Planning Entitlements
Los Ceros Subdivision	115			Being processed for Planning Entitlements
Spring Valley Subdivision	370			Approved Entitlements
Wildcat Subdivision	126			Being processed for Planning Entitlements
Granite Bluffs Subdivision	79			Being processed for Planning Entitlements
Stanford Ranch Parcel 69	92			Under Construction
West Oaks Subdivision (aka Twin Oaks)	281			Under Construction
Whitney Ranch Units 45A, 46ABCDE, 47AB	329			Recently Approved, Beginning Construction
Crowne Pointe (aka Croftwood) Phase 1	51			Under Construction
Highlands Units 3 and 4 Subdivision	73			Under Construction
Avalon Subdivision	76			Recently Approved, Beginning Construction
Whitney Ranch Assisted Living			111	Under Construction
Bella Vida Senior Independent Living Facility			140	Approved Entitlements
Whitney Ranch Unit 22	48			Approved Entitlements
Sierra College Apartments		200		Being processed for Planning Entitlements
Rocklin Park Senior Living - China Garden Road			67	Approved Entitlements
Sunset West Lot 2A apartments		186		Approved Entitlements
Rocklin 60	178			Approved Entitlements
Granite Lakes Estates Phase I	48			Under Construction
Granite Lakes Estates Phase 2 - 4	55			Approved Entitlements
Total Approximate Number of Units	2,641	536	318	

Source: City of Rocklin Planning Department

- ◆ Rocklin Park Senior Living project on China Garden Road has approved entitlements that will convert the existing Rocklin Park Hotel and former restaurant to an assisted and independent living with 67 senior living units. This location is not near an existing bus stop.
- ◆ Sunset West Lot 2A Apartments has approved entitlements that will provide 186 multi-family units on the southwest corner of Lonetree Boulevard and West Oaks Boulevard. This location is about a half mile from the nearest existing bus stop.
- ◆ Garnet Creek Project (Cressleigh) is being processed for planning entitlements to build approximately 300 units, combination of single family and multi-family. Garnet Creek would be located on Granite Drive across from the new Target. This location is not near an existing active bus stop.

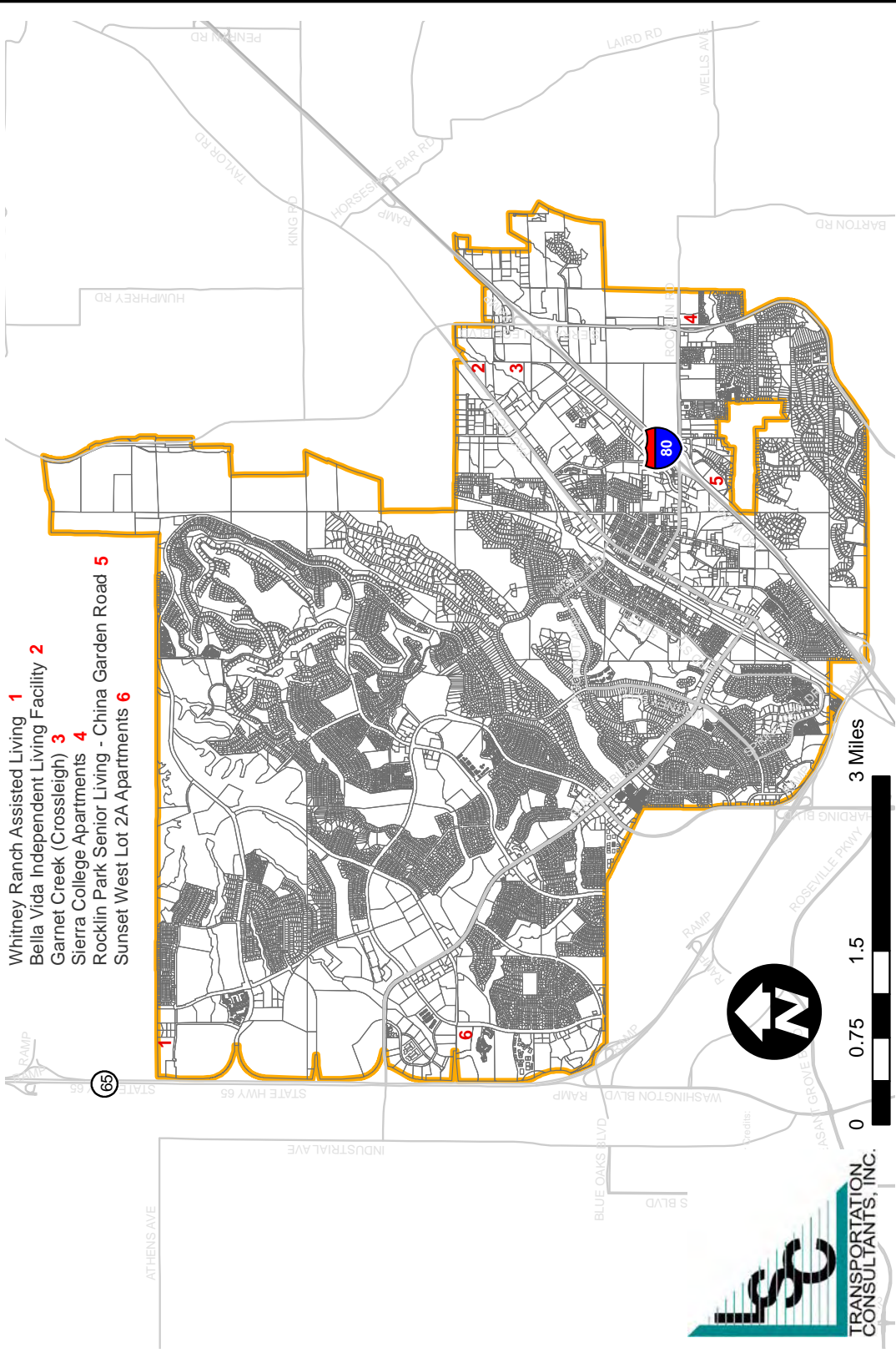
Major Planned Roadway Improvements

The University Avenue project will provide a two lane roadway between William Jessup University Sunset Boulevard and Whitney Ranch Parkway in northwest Rocklin. It will have a shared use 8' bike and pedestrian walkway separated from the roadway. The east portion of this new roadway began construction in 2014.

In conjunction with the University Avenue project, the Whitney Ranch Parkway/Highway 65 Interchange project will provide an additional connection to Highway 65 in Rocklin. This project consists of extending Whitney Ranch Parkway to Highway 65 and adding an interchange. Phase 1 of the Interchange project is scheduled to begin construction in the Spring of 2015.

Figure 9
Rocklin Active Residential Projects

- Whitney Ranch Assisted Living **1**
- Bella Vida Independent Living Facility **2**
- Garnet Creek (Crossleigh) **3**
- Sierra College Apartments **4**
- Rocklin Park Senior Living - China Garden Road **5**
- Sunset West Lot 2A Apartments **6**



KEY PLANNING DOCUMENTS

This section presents a review of recent and concurrent planning studies, and considers how each impacts the potential for future transit services.

Rocklin General Plan

The Rocklin General Plan was most recently updated in October 2012. Policies contained in the Land Use, Circulation, and Open Space, Conservation and Recreation Element articulate the City's intent to implement the Complete Streets concept, by focusing on activities and efforts, including, but not limited to: Continuing to provide for fixed route transit and dial-a-ride services within the community through contracts with Placer County Transit (PCT) or other providers. The key transit-related goals and policies in the Rocklin General Plan Circulation Element are as follows:

Goal C-2: Coordinate land use and transportation planning to support transit services, NEV facilities and non-motorized transportation.

Goal C-5: Coordinate with public transit providers to meet residents' needs.

Goal C-50: Work with transit providers to plan, fund and implement additional transit services that are cost-effective and responsive to existing and future transit demand.

Goal C-51: Promote the use of public transit through development conditions such as requiring park-and-ride lots, bus turnouts and passenger shelters along major streets.

Western Placer Consolidated Transportation Services Agency (WPCTSA) Short Range Transit Plan (SRTP)

This plan begins by reviewing WPCTSA Existing Purposes and Programs. Its varied activities include: a non-emergency medical transportation program; two volunteer-based programs, one with drivers in their personal autos and a second assisting travelers on fixed-route; a taxi based last-resort trip project; a retired vehicle program provided to non-profit agencies; and support for the emerging transportation call center. This plan reviews identified unmet and under-met transportation needs and a seven year service plan was proposed.

Existing Transportation Services

Multiple forms of passenger transportation services are available in Rocklin. The majority of service is contracted with Placer County Transit (PCT) operated by the Placer County Department of Public Works (Figure 10). Regional fixed route service connects Rocklin residents to Roseville, Lincoln, Auburn and Sacramento. Local fixed route service is available along some of the major commercial corridors in Rocklin. General Public Dial-A-Ride provides demand response service throughout the Rocklin area. Lastly, commuter service into downtown Sacramento is available. In addition, Amtrak rail and bus service is available, along with Health Express and limited Roseville Transit service.

PLACER COUNTY TRANSIT

Lincoln/Rocklin/Sierra College Route

This route runs hourly between Sierra College and Lincoln through the City of Rocklin. The service provides access to mostly commercial and institutional centers, and some residential areas. It also serves the Galleria Transfer Point in Roseville, where transfer opportunities to Roseville Transit routes and PCT Auburn to Light Rail Route are provided. Transfers are also available to Lincoln Transit on the north, as well as to the Auburn to Light Rail Route and Taylor Road Shuttle at Sierra College. The first run starts at 6:00 AM and the last run ends at 8:00 PM, Monday through Saturday. No service is provided on Sunday. One way fares for this route (and the following two additional services) are \$1.25 for the general public and \$0.60 for disabled persons, seniors, or youths. Day, 14-day, 30-day and 10-ride passes are also available.

Taylor Road Shuttle

This shuttle runs from Auburn to Sierra College every other hour, mostly along Taylor Road. This shuttle connects with the Auburn/Light Rail Route at Sierra College. Deviations of up to 3/4 of a mile from Taylor Road can be made with a reservation. Placer County Transit operates this shuttle Monday through Saturday.

Auburn to Light Rail Route

This is an express service between Auburn and the Sacramento RT Watt/I-80 light rail station with only three stops along the way: Rocklin Road at Sierra College, Roseville Galleria, and Louis/Orlando in Roseville. This hourly service operates hourly Monday through Friday from 5:00 AM to 9:00 PM with reduced Saturday service hours from 8:00 AM to 7:00 PM. No Sunday service is provided.

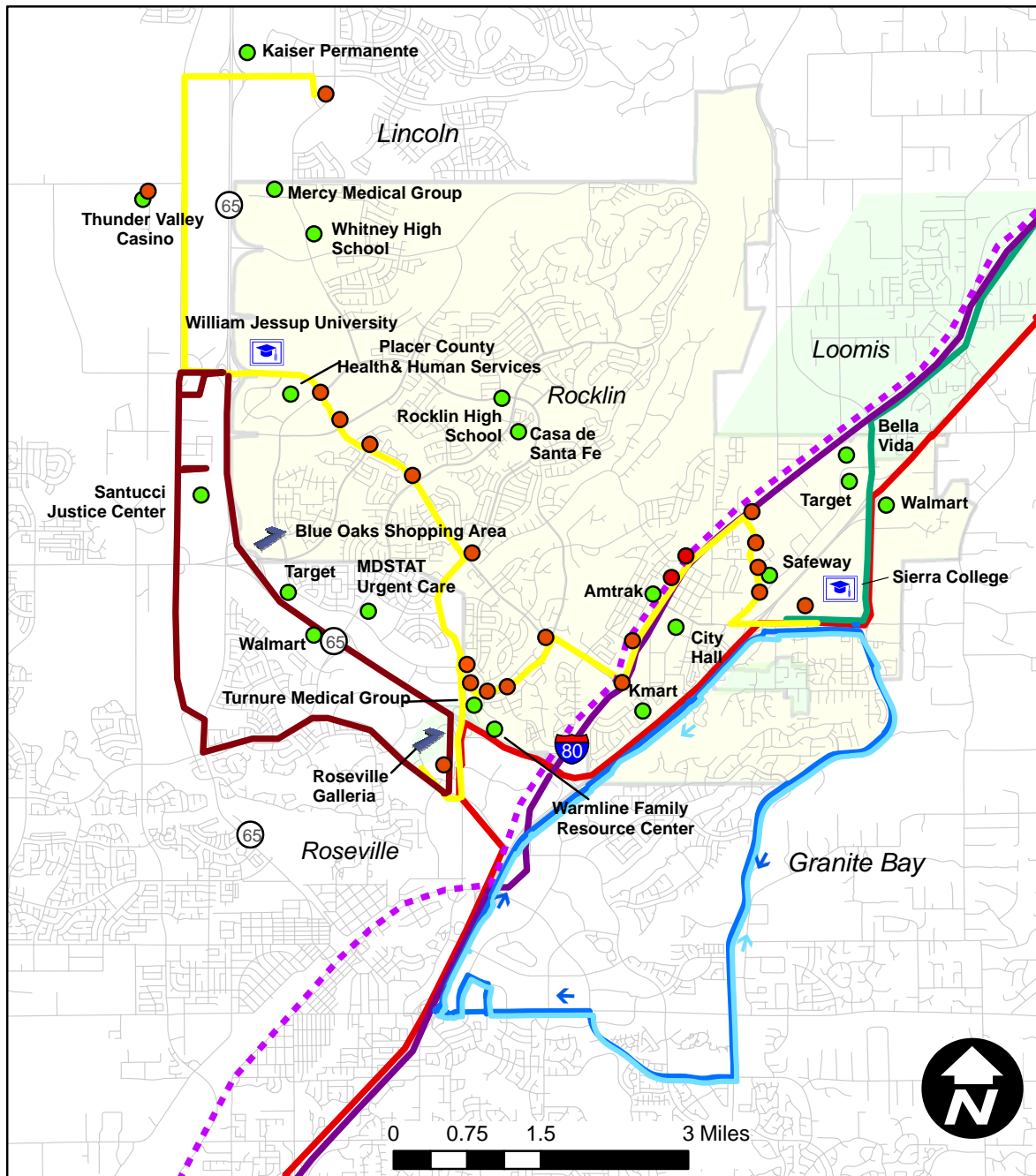
Placer Commuter Express (PCE)

This commuter bus travels from Placer County (starting in Colfax) to downtown Sacramento in the morning and returns in the evening. Through the City of Rocklin, the bus travels along Pacific Street stopping at the Rocklin Amtrak Station. Westbound runs stop at the Rocklin Station at 6:06 AM, 6:26 AM and 7:00 AM, while eastbound arrivals are provided at 5:17 PM, 5:35 PM and 6:18 PM.

Rocklin/Loomis Dial-A-Ride

Placer County Transit operates three Dial-A-Ride services, one of which serves the Rocklin/Loomis area. Trips on the Dial-A-Ride within Rocklin and Loomis (and to/from the Roseville Galleria) are \$1.25 for seniors or disabled persons and \$2.50 for the general public. Multiple ride passes are available at a slight discount. Trips into parts of Roseville and north on Highway 65 are provided for \$1.75 for senior or

Figure 10
Existing Public Transit Routes Serving Rocklin



- - - Capital Corridor Train
- Roseville Route G
- RosevilleTransit - Route S
- Lincoln/Sierra College Route
- Dial-A-Ride Service Area
- Roseville Route E
- Placer Commuter Express
- Taylor Shuttle
- Auburn to Light Rail
- Point of Interest
- Bus Stop



disabled persons and \$3.50 for the general public. The Dial-A-Ride is offered Monday through Friday from 6:00 AM to 7:55 PM and Saturdays from 9:00 AM to 3:55 PM. No service on Sundays. In addition there is a Rocklin High School drop off at 6:45 AM and 7:45 AM and a pick up at 3:00 PM. To reserve a trip one day advanced notice is requested but same day trips request are served based on availability.

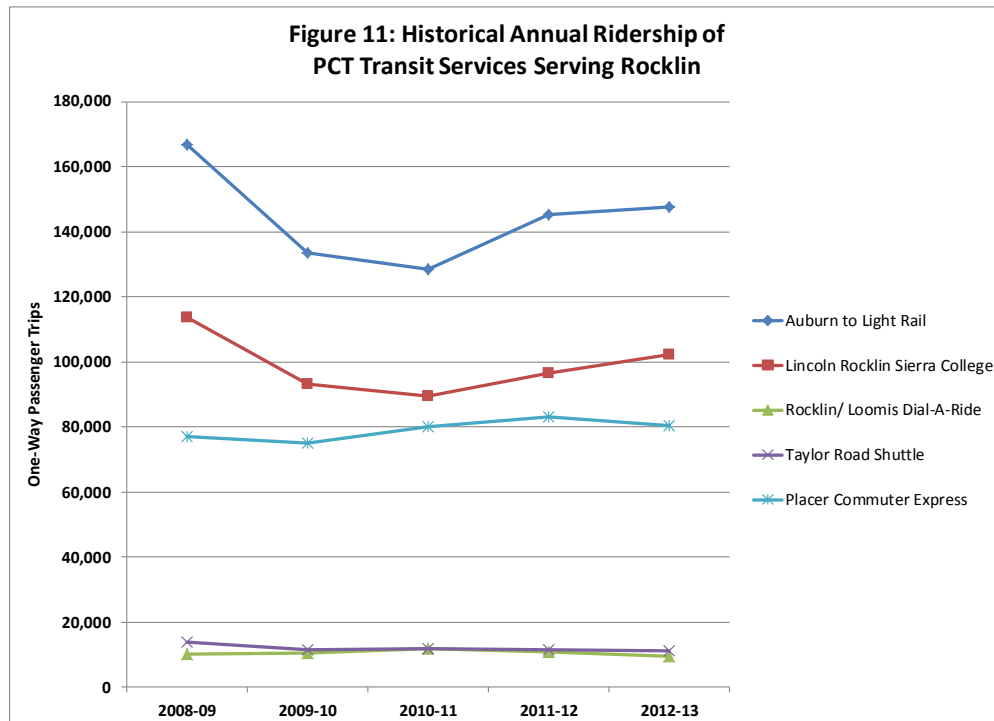
Ridership on PCT Operated Services in Rocklin

Historical Ridership

Table 6 and Figure 11 present annual ridership on PCT operated services in Rocklin over the last six years. Of the services reviewed, the Auburn to Light Rail Route carries the greatest number of one-way passenger trips (144,487), followed by the Lincoln – Sierra College Route (103,588). The Rocklin/Loomis DAR carries the least number of one-way passenger trips (9,465).

TABLE 6: Historical Annual Ridership of Transit Services Serving Rocklin

Fiscal Year	Lincoln Rocklin Sierra College	Auburn to Light Rail	Rocklin/Loomis Dial-A-Ride	Placer Commuter Express	Taylor Road Shuttle
2008-09	113,809	166,629	10,061	77,120	13,818
2009-10	93,162	133,462	10,516	75,098	11,582
2010-11	89,474	128,438	11,700	80,093	11,816
2011-12	96,641	145,159	10,730	83,114	11,507
2012-13	102,306	147,490	9,509	80,336	11,090
2013-14	103,588	144,487	9,465	81,782	10,446
Total Change	-9.0%	-13.3%	-5.9%	6.0%	-24.4%
Average Annual Change	-1.9%	-2.8%	-1.2%	1.2%	-5.4%



With the exception of the commuter service (where ridership increased by 6.0 percent), all public transit services operated in Rocklin had an overall decline in ridership between FY 2008-09 to FY 2013-14. It is important to note that FY 2008-09 PCT ridership was at its peak, due to high gas prices. Ridership on the Taylor Road Shuttle decreased as much as 24.4 percent over the six year period. Auburn to Light Rail ridership decreased 13.3 percent, Lincoln – Sierra College ridership decreased 9.0 percent and DAR ridership decreased by 5.9 percent. The greatest drop in ridership occurred between FY 2008-09 and FY 2010-11. Over the last three years, ridership rebounded on the Lincoln/Rocklin/Sierra College and Auburn to Light Rail Routes, was relatively flat or declined on the Placer Commuter Express and Taylor Road Shuttle, and the Rocklin/Loomis DAR.

Monthly Ridership

Table 7 and Figure 12 display seasonal trends in ridership on services serving Rocklin, as measured in one-way passenger-trips per month and route. As shown, ridership is highest in October (35,782 trips), and lowest in December (26,102). The Lincoln/Rocklin/Sierra College and Auburn/Light Rail routes show strong seasonal variations, with ridership highest during the school year (with the exception of December), and lowest in the summer. The other services have relatively consistent ridership over the year. Note all of these bus routes have stops outside of Rocklin.

	Auburn/ Light Rail	Lincoln Rocklin Sierra College	Taylor Rd Shuttle	Rocklin/ Loomis DAR	Placer Commuter Express	Total
January	11,076	7,963	838	828	7,040	27,745
February	12,689	9,181	964	805	6,197	29,836
March	13,058	9,207	989	761	6,749	30,764
April	13,898	9,715	1,036	810	6,846	32,305
May	13,304	9,229	929	811	7,014	31,287
June	10,364	6,858	746	620	7,269	25,857
July	10,747	7,250	701	747	7,269	26,714
August	12,139	8,224	768	835	6,971	28,937
September	14,114	9,820	1,089	941	6,586	32,550
October	15,422	10,646	1,089	941	7,684	35,782
November	12,158	8,473	914	782	5,951	28,278
December	11,063	7,553	949	682	5,855	26,102
Total	150,032	104,119	11,012	9,563	81,431	356,157

Ridership by Day of Week

Ridership on public transit services serving Rocklin by day of week is presented in Table 8. Based on a sample of boarding and alighting data from October 14, 2013 to October 19, 2013 and March 18, 2013 to March 23, 2013, weekday ridership is less on Fridays than the other weekdays, particularly for the Lincoln – Sierra College Route. This is largely a result of most college classes occurring on Monday – Thursday. Friday commuter ridership is also below average weekday ridership, reflecting employees working four days per week. Considering all services combined, Wednesday sees that greatest ridership. On an average weekday, the Lincoln Sierra College Route carries 405 one-way passenger trips and DAR carries 30 one-way passenger-trips. Saturday ridership is 51 percent of average weekday ridership on the Taylor Road Shuttle, 37 percent on the Lincoln Rocklin Sierra College route, 32 percent on the Auburn Light Rail Route, and only 23 percent on the DAR.

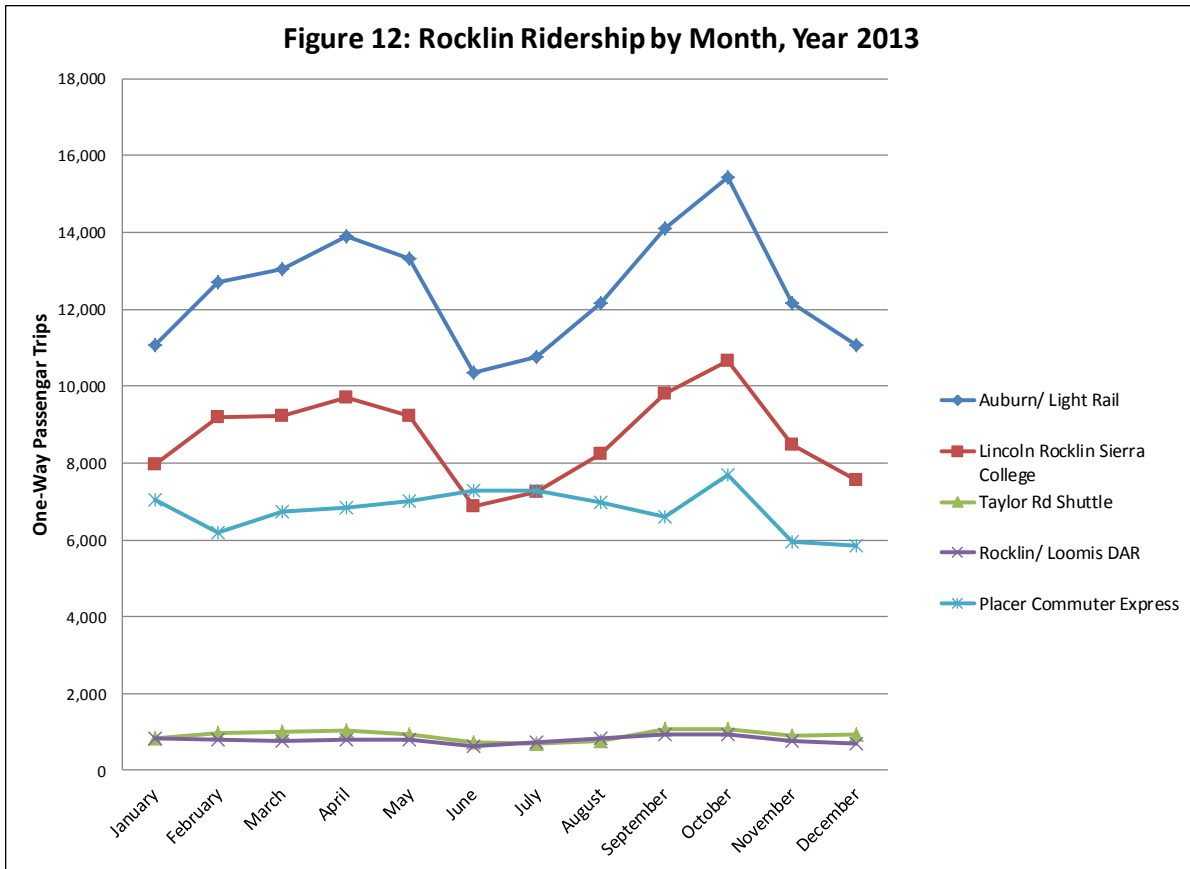


TABLE 8: Rocklin - Ridership by Day of Week

	Monday	Tuesday	Wednesday	Thursday	Friday	Average Weekday	Saturday
Auburn/Light Rail	587	647	618	661	503	603	192
Lincoln Rocklin Sierra College	406	433	427	423	334	405	151
Taylor Rd Shuttle	31	38	39	36	41	37	19
Rocklin/Loomis DAR	30	37	32	27	26	30	7
Placer Commuter Express	321	314	389	347	268	328	0
TOTAL	1,375	1,469	1,505	1,494	1,172	1,403	369

Source: Average boarding and alighting data for October 14, 2013 to October 19, 2013 and March 18, 2013 to March 23, 2013.

Boardings by Run/Hour

Lincoln Sierra College Route

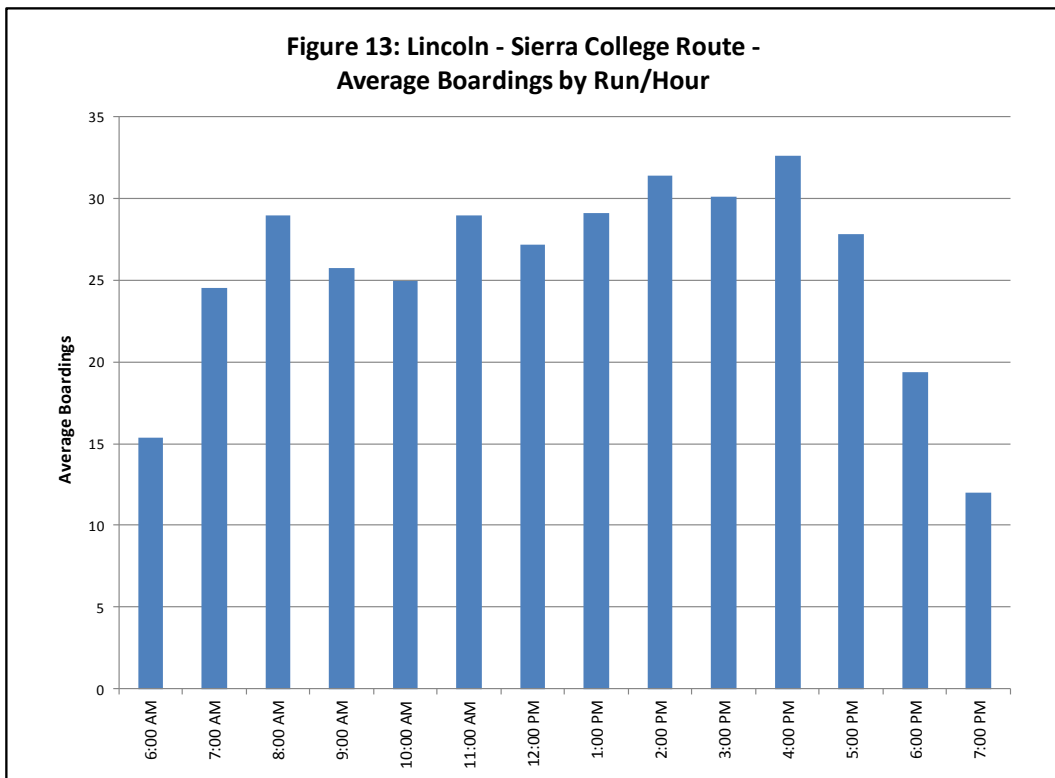
Table 9 and Figure 13 present average boardings by run/hour on the Lincoln Sierra College Route for the time period between January 1, 2013 and February 26, 2014. The majority of boardings occur between 8:00 AM and 4:00 PM. The greatest number of boardings occurred during the 2:00 PM hour traveling to Sierra College and during the 4:00 PM hour when travelling to Lincoln. Ridership is significantly less during the early morning and evening hours.

TABLE 9: Lincoln - Sierra College Ridership by Run/Hour

January 1, 2013 - February 26, 2014

To Sierra College		To Lincoln		Total
Run	Average Boardings per Run	Run	Average Boardings per Run	Average Boardings per Round Trip
6:00 AM	7.67	6:00 AM	7.67	15.34
7:00 AM	10.18	7:00 AM	14.34	24.52
8:00 AM	13.53	8:00 AM	15.46	28.99
9:00 AM	11.87	9:00 AM	13.86	25.73
10:00 AM	12.83	10:00 AM	12.12	24.95
11:00 AM	16.18	11:00 AM	12.81	28.99
12:00 PM	14.65	12:00 PM	12.52	27.17
1:00 PM	16.87	1:00 PM	12.21	29.08
2:00 PM	19.16	2:00 PM	12.21	31.37
3:00 PM	15.61	3:00 PM	14.46	30.07
4:00 PM	16.59	4:00 PM	16.02	32.61
5:00 PM	16.14	5:00 PM	11.69	27.83
6:00 PM	9.67	6:00 PM	9.71	19.38
7:00 PM	6.36	7:00 PM	5.66	12.02

Figure 13: Lincoln - Sierra College Route - Average Boardings by Run/Hour



Auburn to Light Rail Route

Average boardings by hour for the same time period for the Auburn to Light Rail Route is displayed in Table 10 and Figure 14. Ridership on the Auburn to Light Rail Route shows more definitive peak times in the morning and afternoon. This reflects relatively high usage by commuters. On average, the greatest number of boardings on a round trip occurs during the 7:00 AM hour (50.9 boardings). Similar to the Lincoln – Sierra College Route the earliest and latest runs have the lowest ridership.

Weekday Boardings by Stop

Lincoln – Sierra College Route

A sample of 14 runs from Sierra College to Lincoln and 8 runs from Lincoln to Sierra College was reviewed to determine high activity bus stops along the Lincoln Sierra College Route. As shown in Table 11, the Roseville Galleria has the highest average weekday boardings/alightings (94 boardings, 115 alightings). This represents roughly 26 percent of average weekday boardings and 33 percent of average weekday alightings. The next greatest activity stop along the route is Sierra College with 55 boardings and 38.5 alightings on average or roughly 16 percent of total average weekday boardings and 11 percent of total average weekday alightings. The third most popular stop is the Thunder Valley Casino (50.8, 14 percent boardings/ 22.5, 6 percent alightings). The Sierra College stop is the only of these three stops located within the City of Rocklin. During the period reviewed, no boardings or alightings occurred at AMF Rocklin Lanes and less than five boardings or alightings occurred at Pacific/Farren, S. Whitney/Lincoln, Sunset/W. Stanford Ranch. In total, approximately 45 percent of passenger boardings on the Lincoln – Rocklin – Sierra College Route occur at stops within the City of Lincoln.

Auburn to Light Rail Route

For the Auburn to Light Rail Route, a similar sample of 14 northbound runs and 8 southbound runs were reviewed in Table 12. Over 100 average weekday boardings occur at Light Rail, Galleria and Auburn Station. Sierra College recorded the lowest amount of boardings on the route (52.1 or 11.3 percent of total).

Rocklin – Loomis DAR Trip Patterns

DAR run sheets were reviewed for a two week period in November 2013. Common DAR origins and destinations include:

- Sierra College
- Apartments on Whitney Ranch Parkway/Wildcat
- Quarry Oaks Apartments
- Twin Oaks Elementary
- Roseville Galleria
- Rocklin High School
- Rocklin Mobile Home Park
- Villa Serena Senior Apartments
- Rolling Oaks Apartments

The Roseville Galleria is the most common DAR destination with a daily average of nine trips beginning or ending there over a 12 day period.

Transit Service Performance

Ridership and financial data can be used to conduct a “route performance analysis” to gain further insight into the efficiency and effectiveness of existing transit service. Ridership and operating statistics for FY 2012 - 2013 were reviewed to identify average passenger activity, fares and operating quantities. A cost model was developed by PCT which assigns each cost line item to that service variable – vehicle-hour or vehicle-mile – that most closely determines the associated cost. For instance, fuel costs are

TABLE 10: Auburn to Light Rail Ridership by Run

January 1, 2013 - February 26, 2014

To Light Rail		To Auburn		Total
Run	Average Boardings per Run	Run	Average Boardings per Run	Average Boardings per Round Trip
5:00 AM	4.6	5:00 AM	--	4.6
6:00 AM	17.8	6:00 AM	19.3	37.1
7:00 AM	22.1	7:00 AM	28.8	50.9
8:00 AM	14.9	8:00 AM	26.5	41.4
9:00 AM	19.3	9:00 AM	16.8	36.2
10:00 AM	18.4	10:00 AM	15.6	34.0
11:00 AM	14.9	11:00 AM	16.8	31.7
12:00 PM	15.2	12:00 PM	19.9	35.1
1:00 PM	15.4	1:00 PM	16.0	31.4
2:00 PM	18.8	2:00 PM	19.7	38.4
3:00 PM	18.4	3:00 PM	18.4	36.8
4:00 PM	25.6	4:00 PM	18.5	44.1
5:00 PM	25.2	5:00 PM	19.5	44.6
6:00 PM	16.1	6:00 PM	15.7	31.8
7:00 PM	9.2	7:00 PM	8.4	17.6
8:00 PM	--	8:00 PM	5.6	5.6

Source: Placer County Transit

Figure 14: Auburn to Light Rail Route - Average Boardings by Hour

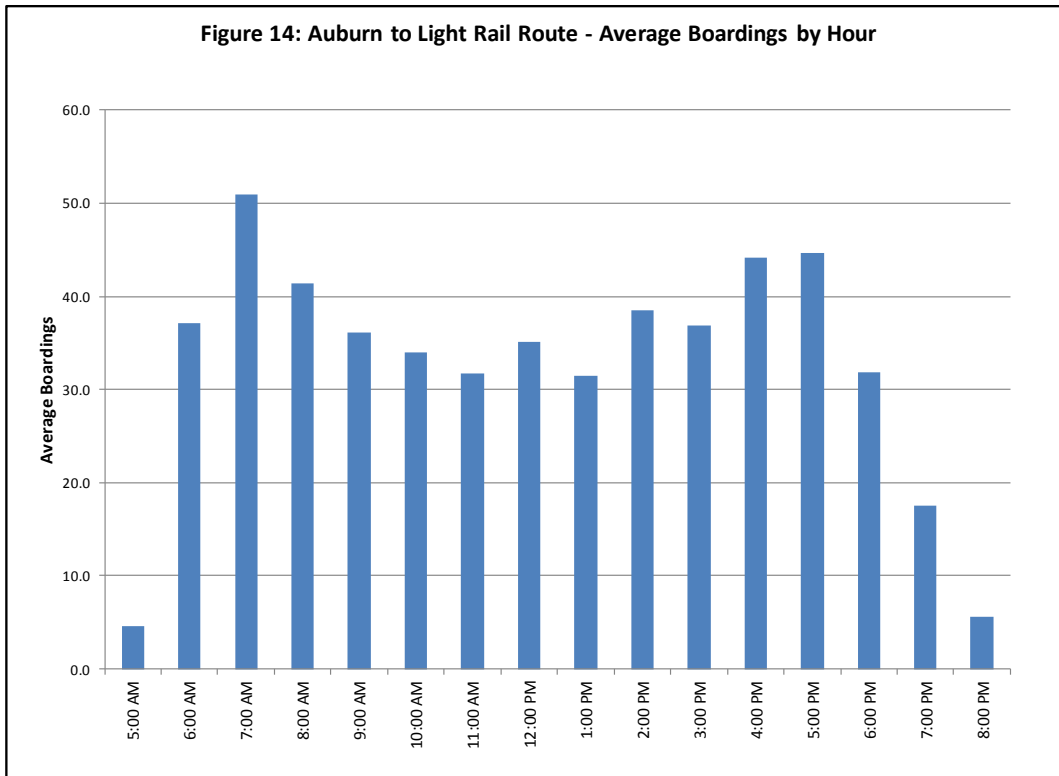


TABLE 11: Boardings by Stop - Lincoln/Rocklin/Sierra College Route
Average Weekday Boardings

Note: Shading indicates stop is outside of Rocklin

Stop	Towards Lincoln		Towards Sierra College		Total		% of Total	
	Pax	Pax	Pax	Pax	Pax	Pax	Pax	Pax
	ON	OFF	ON	OFF	ON	OFF	ON	OFF
Sierra College	55.0	0.0	0.0	38.5	55.0	38.5	15.5%	10.9%
Safeway	3.0	0.0	1.8	12.3	4.8	12.3	1.3%	3.5%
AMF Rocklin Lanes	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%
Sierra Meadows/Pacific	0.0	2.0	0.0	5.3	0.0	7.3	0.0%	2.0%
Pacific/Midas	3.0	1.0	0.0	1.8	3.0	2.8	0.8%	0.8%
Pacific/Pine	3.0	12.0	0.0	0.0	3.0	12.0	0.8%	3.4%
Pacific/Bush St.	0.0	0.0	3.5	3.5	3.5	3.5	1.0%	1.0%
Pacific/Farren	0.0	0.0	0.0	1.8	0.0	1.8	0.0%	0.5%
Les Schwab/Kmart	11.0	0.0	3.5	19.3	14.5	19.3	4.1%	5.4%
Sunset /3rd/Springview	12.0	2.0	3.5	7.0	15.5	9.0	4.4%	2.5%
S.Whitney/Sunset	0.0	0.0	0.0	5.3	0.0	5.3	0.0%	1.5%
S. Whitney/Springview	0.0	1.0	5.3	1.8	5.3	2.8	1.5%	0.8%
S.Whitney/Lincoln	0.0	4.0	0.0	0.0	0.0	4.0	0.0%	1.1%
Roseville Galleria	59.0	42.0	35.0	73.5	94.0	115.5	26.5%	32.6%
Stanford Ranch/Fairway	4.0	1.0	1.8	1.8	5.8	2.8	1.6%	0.8%
Church/Stanford Ranch Road	1.0	0.0	3.5	0.0	4.5	0.0	1.3%	0.0%
Bel Air	1.0	10.0	8.8	3.5	9.8	13.5	2.8%	3.8%
Sunset/Park	5.0	10.0	14.0	3.5	19.0	13.5	5.4%	3.8%
Sunset/Blue Oaks	0.0	7.0	3.5	1.8	3.5	8.8	1.0%	2.5%
Sunset/W. Oaks	1.0	3.0	5.3	0.0	6.3	3.0	1.8%	0.8%
Sunset/W. Stanford Ran.	0.0	0.0	3.5	0.0	3.5	0.0	1.0%	0.0%
Atherton	2.0	9.0	10.5	1.8	12.5	10.8	3.5%	3.0%
Thunder Valley	7.0	19.0	43.8	3.5	50.8	22.5	14.3%	6.3%
Twelve Bridges Library	2.0	32.0	21.0	0.0	23.0	32.0	6.5%	9.0%
Lincoln	0.0	14.0	17.5	0.0	17.5	14.0	4.9%	3.9%
Total	169.0	169.0	185.5	185.5	354.5	354.5	100.0%	100.0%
Total Rocklin	99.0	53.0	57.8	106.8	156.8	159.8		
Rocklin % of Total	58.6%	31.4%	31.1%	57.5%	44.2%	45.1%		

Source: Placer County Transit Trip Samples FY 2013-14

TABLE 12: Boardings by Stop - Auburn to Light Rail Route

Average Weekday Boardings

Note: Shading indicates stop is outside of Rocklin

	To Auburn		To Light Rail		Total		% of Total	
	Pax	Pax	Pax	Pax	Pax	Pax	Pax	Pax
	ON	OFF	ON	OFF	ON	OFF	ON	OFF
Auburn Station	0.0	69.6	100.0	0.0	100.0	69.6	21.7%	15.1%
Sierra College	17.1	45.0	35.0	33.3	52.1	78.3	11.3%	17.0%
Galleria	48.2	78.2	63.3	51.7	111.5	129.9	24.2%	28.2%
Louis & Orlando	34.3	28.9	40.0	33.3	74.3	62.3	16.1%	13.5%
Light Rail	122.1	0.0	0.0	120.0	122.1	120.0	26.5%	26.1%
Total	221.8	221.8	238.3	238.3	460.1	460.1	100%	100%
Total Rocklin	17.1	45.0	35.0	33.3	52.1	78.3		
Rocklin % of Total	7.7%	20.3%	14.7%	14.0%	11.3%	17.0%		

Note: Shading indicates stop is outside of Rocklin

Source: Placer County Transit Trip Samples FY 2013-14

largely a function of vehicle-miles operated, while driver salaries are a function of vehicle-hours operated. In addition, some annual operating costs (such as administrative salaries and facility maintenance costs) are “fixed” in that they typically do not vary with changes in service quantities. The resulting cost model for all PCT operated services (including those not serving Rocklin) for FY 2012-13 is as follows:

$$\text{Annual Operating Cost} = \$61.57 \times \text{vehicle-hours of service} + \$1.27 \times \text{vehicle-miles of service} + \$32.41 \text{ fixed costs per hour}$$

The cost model was employed to allocate operating costs for the Lincoln Sierra College Route and Auburn Light Rail (not just the Rocklin portion of the route) operated in Rocklin. As Placer County contracts with a private transportation company to provide the Taylor Road Shuttle, DAR and PCE service, operating costs for these services represent actual contract costs. Operating quantities and performance measures are presented in Table 13.

Operating cost per passenger-trip for all Rocklin-related PCT services is \$8.56. The PCE commuter service recorded the lowest operating cost per trip of \$6.25 followed by the Auburn to Light Rail, \$7.78 per trip. Demand response type services such as DAR and the Taylor Road Shuttle have higher operating costs per trip, \$28.93 and \$18.91, respectively. In terms of operating cost per hour, all Rocklin PCT services combined cost \$106.62 per vehicle hour of service. Placer Commuter Express has the highest cost per hour of \$162.19 (reflecting in large part the substantial deadhead travel) while DAR has the lowest \$54.56.

A strong indicator of the transit system’s effectiveness is the number of passengers carried per hour of service, as also presented in Table 13. Combined productivity for all services is 12.5 passengers per hour. Commuter services tend to be the most productive, as is the case here with PCE carrying 26.0 trips per hour. A productive local fixed route service should typically carry around 10 trips per hour. The Lincoln Sierra College route surpasses that at 13.5 trips per hour. Demand response services such as DAR can

**TABLE 13: Annual Operating and Financial Characteristics By Route
Fiscal Year 2012 - 2013**

	Route					Total
	Lincoln -- Rocklin -- Sierra College	Taylor Road Shuttle	Placer Commuter Express	Auburn Light Rail	Rocklin/ Loomis DAR	
<u>Annual Operating Data</u>						
One-Way Passenger-Trips	102,306	11,090	80,336	147,490	9,509	350,731
Vehicle Service Hours	7,552	3,814	3,095	8,648	5,042	28,151
Vehicle Service Miles	124,639	59,340	101,019	263,795	47,952	596,745
Total Operating Cost	\$867,614	\$209,690	\$501,974	\$1,146,956	\$275,070	\$3,001,305
Marginal Operating Cost ⁽¹⁾	\$622,897	\$180,246	\$466,974	\$866,712	\$236,146	\$2,372,974
Farebox Revenue	\$76,742	\$8,034	\$394,450	\$111,087	\$12,988	\$603,300
<u>Performance Indicators</u>						
Operating Cost per Trip	\$8.48	\$18.91	\$6.25	\$7.78	\$28.93	\$8.56
Operating Cost per Hour	\$114.89	\$54.98	\$162.19	\$132.63	\$54.56	\$106.62
Operating Cost per Mile	\$6.96	\$3.53	\$4.97	\$4.35	\$5.74	\$5.03
Passengers per Hour	13.5	2.9	26.0	17.1	1.9	12.5
Subsidy per Passenger Trip	\$7.73	\$18.18	\$1.34	\$7.02	\$27.56	\$6.84
Average Fare	\$0.75	\$0.72	\$4.91	\$0.75	\$1.37	\$1.72
Total Farebox Ratio	8.8%	3.8%	78.6%	9.7%	4.7%	20.1%
Marginal Farebox Ratio ⁽¹⁾	12.3%	4.5%	84.5%	12.8%	5.5%	25.4%
Note 1: Does not include fixed costs.						

generally only carry 2 to 5 passengers per hour. The Rocklin – Loomis DAR carries only 1.9 passenger trips per hour.

The average fare paid on Rocklin related PCT services is \$1.72. This varies by route from \$0.72 on the Taylor Road Shuttle to \$4.91 on the commuter route.

A strong indicator of the transit system’s efficiency is the subsidy per passenger trip (total operating cost minus fares divided by passenger trips). Roughly \$7.73 in public funding per passenger trip is required to pay for the Lincoln Rocklin Sierra College Route, \$1.34 for the PCE and \$27.56 for the DAR.

Farebox ratio is determined by dividing passenger fare revenue by operating costs. Table 13 displays two separate farebox ratio calculations: total farebox ratio which includes administrative/fixed costs and marginal farebox ratio which only includes operating costs. As administrative/fixed costs will not change if a route increases or decreases service, it is the marginal operating costs which will be used to evaluate the transit alternatives. PCT services systemwide (including those not listed in Table 13) must meet a blended urban/rural farebox ratio requirement of 13.2 percent (including fixed costs). As shown in Table 13, PCE boosts overall total farebox ratio, as it has a 78.6 percent farebox ratio, while Taylor Road Shuttle and DAR have farebox ratios of less than 5 percent. On a per route basis, the Lincoln – Sierra College route has a farebox ratio of 8.8 percent while Auburn to Light Rail has a farebox ratio of 9.7 percent.

HEALTH EXPRESS

Health Express is a door-to-door transportation service for residents of Western Placer County to and from their non-emergency medical appointments. Rocklin residents can ride to any medical appointment in Western Placer County or Sacramento. This free service is mainly for seniors and disabled persons but the general public can ride as a last resort. Rides can be scheduled 24 hours to 14 days in advance; same day trips are possible on a space available basis.

AMTRAK

The Amtrak train station is located at Rocklin Road and Railroad Avenue. At this location there is an enclosed waiting area but no ticket office. This station is on the Capital Corridor Route which runs from Auburn to San Jose. One roundtrip commuter train to Sacramento per day stops at the Rocklin Station on weekdays: 6:53 AM to Sacramento and 5:56 PM from Sacramento. The weekend Sacramento bound Capital Corridor train departs Rocklin at 8:28 AM and returns at 7:48 PM. Amtrak Thruway connections are possible to all Amtrak destinations.

ROSEVILLE TRANSIT

In the past, the City of Roseville operated a weekday evening shuttle service between Sierra College (in Rocklin) and the Galleria Transfer Point (in Roseville) during the academic year. The College was served four times per evening between 7:51 PM and 9:49 PM. As of January 26, 2015, the Evening Sierra College Shuttle will be discontinued but Roseville Route G and E will provide service between Sierra Gardens Transfer Point in Roseville and Sierra College along Sierra College Blvd, Rocklin Road and I-80 between 7:00 AM and 6:30 PM. PCT passes are accepted for boarding, if accompanied by a \$0.25 surcharge.

Peer analysis is a useful tool in reviewing the performance of public transit services. While no two service areas are identical, a peer analysis can provide overall indications of how a specific area compares with other similar areas.

Operating and funding statistics were compiled for several transit operators in the Sacramento Area Council of Governments (SACOG) area of influence for FY 2011-12. The data are presented in Table 14. Data listed for Rocklin includes only the Rocklin portion of all public transit services operated in Rocklin. Operating costs, vehicle service hours and miles for these services was based on the contract between the City of Rocklin and PCT, while ridership for Rocklin fixed route services was based on the proportion of boardings at Rocklin stops as per surveys. Note that the Folsom data includes expenditures, service quantities, fares and ridership associated with the City of Folsom's support of the RT Light Rail service into Folsom. The overall size of the peer transit programs, as measured in annual operating costs, ranges from a low of \$376,875 for Auburn Transit to a high of \$7,325,369 for Elk Grove.

The resulting peer performance measures are shown in Table 15, and indicates the following:

- ◆ The annual one-way passenger trips per hour in Rocklin (8.8 trips per hour) is below the peer average for all service types of 12.8 passengers per hour, though three of the peers (Folsom, Lincoln and Roseville) are lower. This is also depicted in Figure 15.
- ◆ Operating cost per vehicle service hour (\$92.96) is slightly below the peer average of \$94.46. Six of the peer systems have higher hourly costs.
- ◆ Similarly, the operating cost per vehicle service mile (\$5.09) is lower than the peer average of \$6.15, with six peers incurring higher costs per mile and three incurring lower costs per mile.
- ◆ Rocklin's overall farebox return ratio of 17.4 percent is slightly better than the peer average of 16.9 percent.
- ◆ The LTF expenditure per vehicle service hour (\$48.07) is substantially below the peer average of \$69.41, with only two peer systems (Placer County Transit and Yuba Sutter Transit) requiring less LTF per vehicle service hour.
- ◆ While not strictly a "performance measure" it is useful to compare the proportion of LTF allocated to transit purposes. Of total LTF, Rocklin currently allocates 22 percent for transit, while the peers allocated between 47 percent and 100 percent, with an average of 72 percent.
- ◆ Average operating subsidy per passenger-trip in Rocklin is \$8.71, which is modestly higher than the peer average of \$7.76. Lincoln Transit expends the highest subsidy per passenger-trip at \$13.04 while Yuba Sutter is lowest at \$3.70. Overall, Rocklin's figure is solidly in the middle of the peers.
- ◆ \$13.95 in subsidy is expended annually per capita in Rocklin, which is almost exactly half that of the peer average. This value is lower than any of the peers, as shown in Figure 16.
- ◆ The annual transit vehicle service hours per capita in Rocklin is 0.18, exactly half that of the peer average (0.36). Folsom (excluding light rail) is lowest at 0.15, while Yuba Sutter is highest at 0.51.
- ◆ Comparing total transit ridership with population, the annual ridership per capita of Rocklin residents is estimated to be 1.6. As shown in Figure 17, this is one third of the peer average of 4.8.

Overall, this peer review indicates that transit services in Rocklin are relatively sparse, in terms of service hours or expenditures per capita. The services provided, however, have typical productivity levels for the region.

TABLE 14: Rocklin Peer Community Transit Data

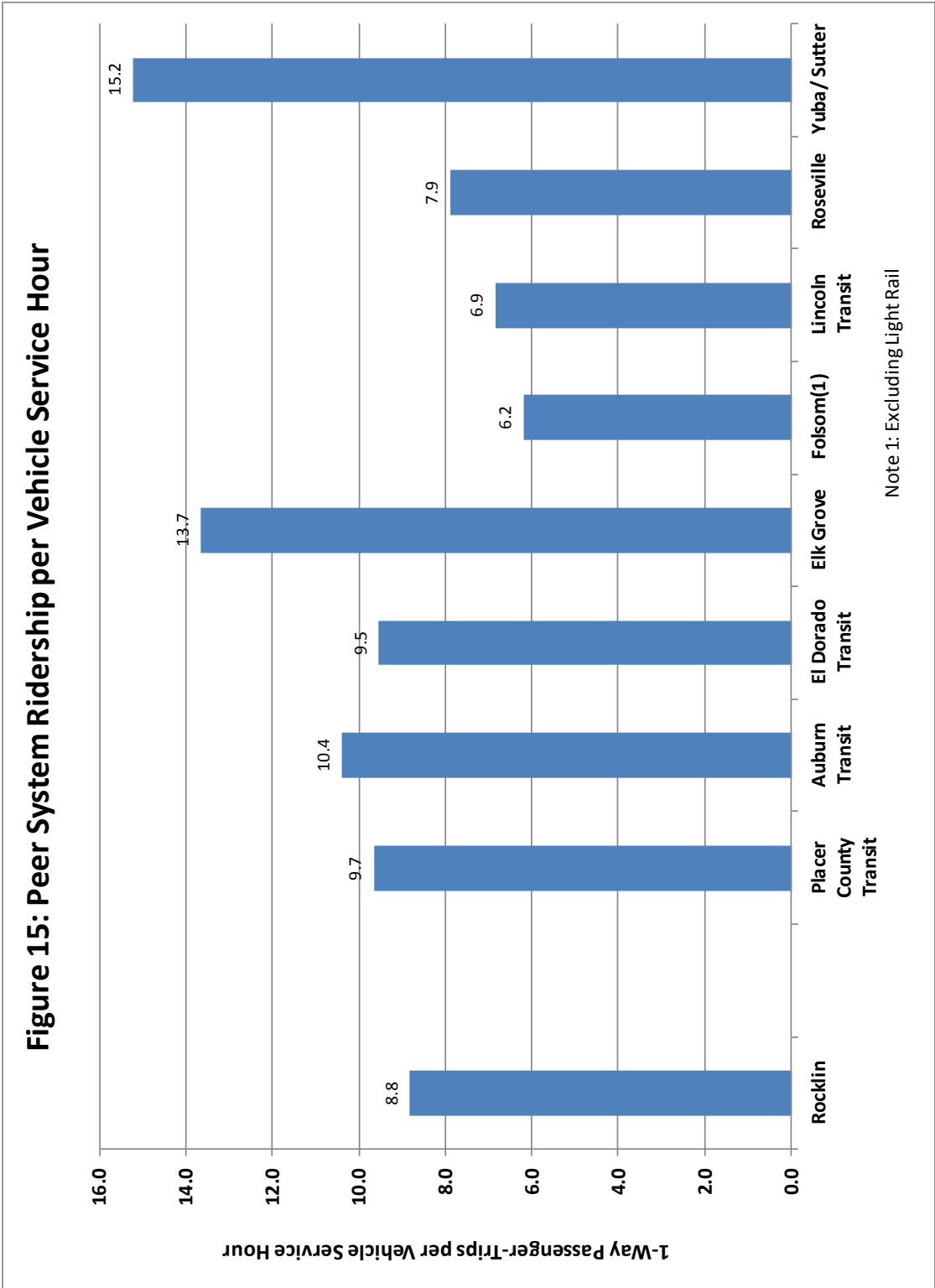
All Data for FY 2011-12	Peer Area									
	Rocklin	Placer County Transit	Auburn Transit	El Dorado Transit	Elk Grove	Folsom(1)	Lincoln Transit	Roseville	Yuba/Sutter	Peer Average
Annual Operating Cost										
Local Fixed Route	\$497,017	\$3,087,422	\$376,875	\$1,781,516	\$3,624,905	\$566,000	--	\$2,837,196	\$3,093,034	\$2,195,278
Demand Response	\$311,354	\$1,053,813	--	\$2,056,344	\$1,349,232	\$296,000	--	\$1,029,790	\$1,386,713	\$1,195,315
Vanpool ⁽²⁾	--	\$231,531	--	\$0	\$0	\$0	--	\$0	\$0	\$38,589
Commuter	\$175,934	\$557,645	--	\$1,472,647	\$2,351,232	\$0	--	\$715,327	\$1,356,705	\$1,075,593
Other (Special Services, etc.)	--	--	--	\$104,853	--	\$1,537,000	--	--	--	\$820,927
TOTAL	\$984,305	\$4,930,411	\$376,875	\$5,415,360	\$7,325,369	\$2,399,000	\$886,899	\$4,582,313	\$5,836,452	\$3,969,085
Annual Farebox Revenue (Does not include local support \$)										
Local Fixed Route	\$45,597	\$250,178	\$26,461	\$196,355	\$613,631	\$87,700	--	\$311,211	\$549,985	\$290,789
Demand Response	\$9,640	\$34,652	--	\$544,647	\$265,985	\$35,400	--	\$90,698	\$137,496	\$184,813
Vanpool ⁽²⁾	--	\$79,792	--	\$0	\$0	\$0	--	\$0	\$0	\$13,299
Commuter	\$116,097	\$411,563	--	\$749,686	\$613,631	\$0	--	\$537,635	\$687,481	\$499,999
Other (Special Services, etc.)	--	--	--	\$6,228	--	\$520,000	--	--	--	\$263,114
TOTAL	\$171,334	\$776,185	\$26,461	\$1,496,916	\$1,493,247	\$643,100	\$51,651	\$939,544	\$1,374,962	\$850,258
Annual TDA Transit Operating Expenditures (see notes)	\$509,006	\$2,242,729	\$221,335	\$3,152,979	\$3,548,072	\$1,025,177	\$516,361	\$2,075,066	\$1,264,700	\$1,755,802
Annual Vehicle-Hours of Revenue Service										
Local Fixed Route	5,095	23,902	4,700	15,757	35,833	7,112	5,560	29,557	47,802	21,278
Demand Response	4,543	16,311	--	16,873	14,248	3,755	3,787	10,772	22,712	12,637
Vanpool ⁽²⁾	--	5,696	--	--	--	--	--	--	--	5,696
Commuter	950	3,200	--	11,185	18,465	--	--	6,287	8,624	9,552
Other (Special Services, etc.)	--	--	--	597	--	2,479	--	--	--	1,538
TOTAL	10,588	49,109	4,700	44,412	68,546	13,346	9,347	46,616	79,138	39,402
Annual Vehicle-Miles of Revenue Service										
Local Fixed Route	121,443	508,379	61,511	277,878	536,063	--	57,096	351,123	555,426	308,615
Demand Response	41,052	155,994	--	401,972	136,279	--	39,568	123,953	300,211	171,290
Vanpool ⁽²⁾	--	250,531	--	--	--	--	--	--	--	250,531
Commuter	30,964	104,256	--	339,828	355,865	--	--	152,336	322,492	217,624
Other (Special Services, etc.)	--	--	--	8,182	--	--	--	--	--	8,182
TOTAL	193,459	1,019,160	61,511	1,027,860	1,028,207	194,900	96,664	627,412	1,178,129	603,034
Annual Ridership (1-Way Passenger-Trips)										
Local Fixed Route	59,118	323,686	48,862	185,021	461,902	57,300	57,312	210,340	975,805	264,372
Demand Response	9,577	34,684	--	64,172	16,918	10,000	6,761	28,834	68,776	29,965
Vanpool ⁽²⁾	--	32,564	--	--	--	--	--	--	--	32,564
Commuter	24,684	83,671	--	138,905	456,956	--	--	128,824	159,949	165,498
Other (Special Services, etc.)	--	--	--	35,423	--	371,600	--	--	--	203,512
TOTAL	93,379	474,605	48,862	423,521	935,776	438,900	64,073	367,998	1,204,530	450,183
Population										
	58,295	107,335	13,468	121,318	154,594	72,203	43,572	122,060	156,190	94,337
Local Transportation Fund \$										
	\$2,348,401	\$3,836,578	\$545,274	\$3,510,966	\$4,664,955	\$2,316,607	\$1,752,421	\$4,889,081	\$4,100,886	\$3,107,241
LTF Transit \$	\$509,006	\$2,325,779	\$254,181	\$3,510,966	\$3,548,072	\$1,535,155	\$699,098	\$3,989,081	\$3,768,964	\$2,237,811
LTF Other \$	\$1,839,395	\$1,510,799	\$291,093	\$0	\$1,116,883	\$781,452	\$1,053,323	\$900,000	\$331,922	\$869,430

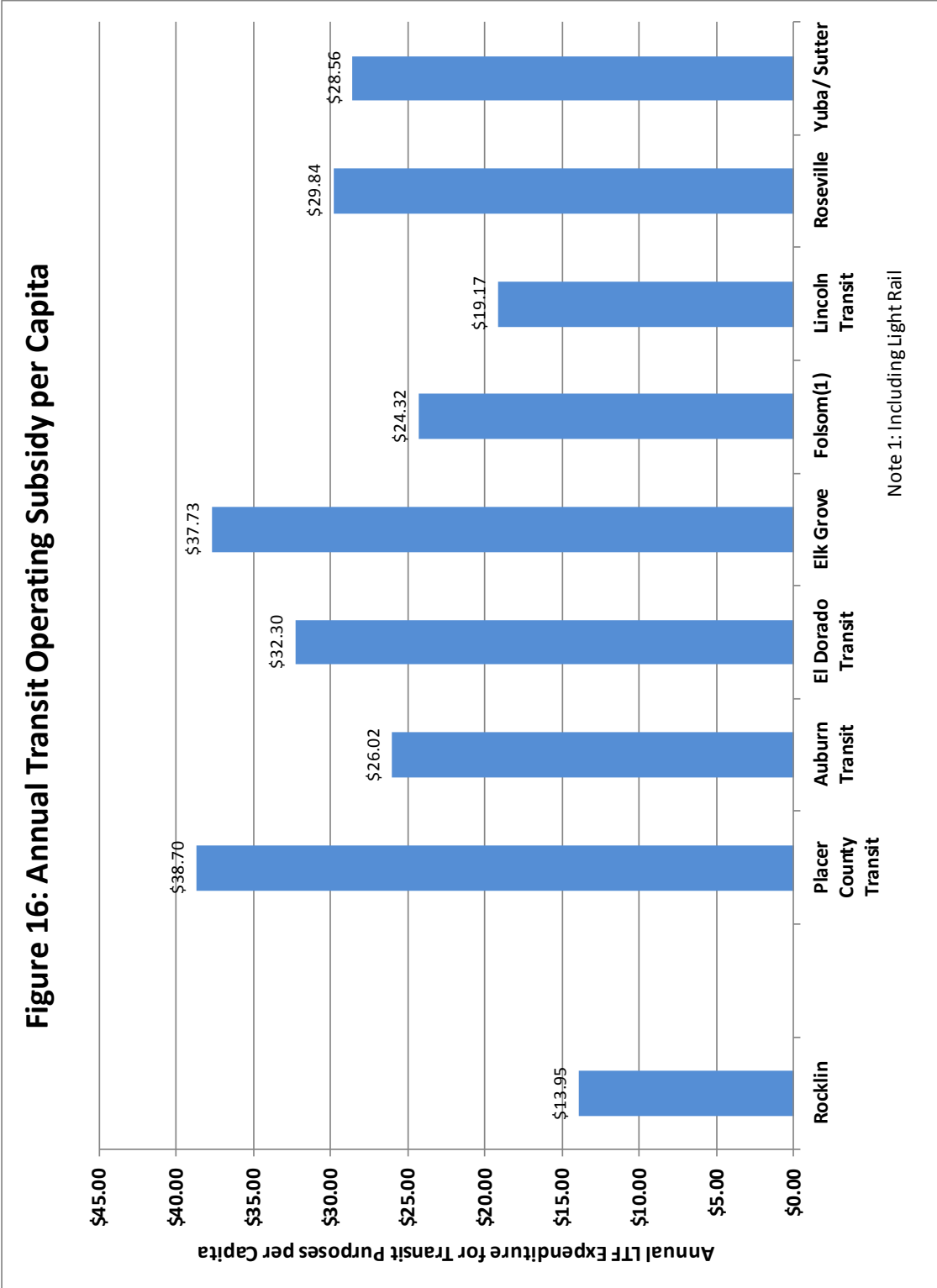
Note 1: "Other" consists of local figures associated with RT light rail service.

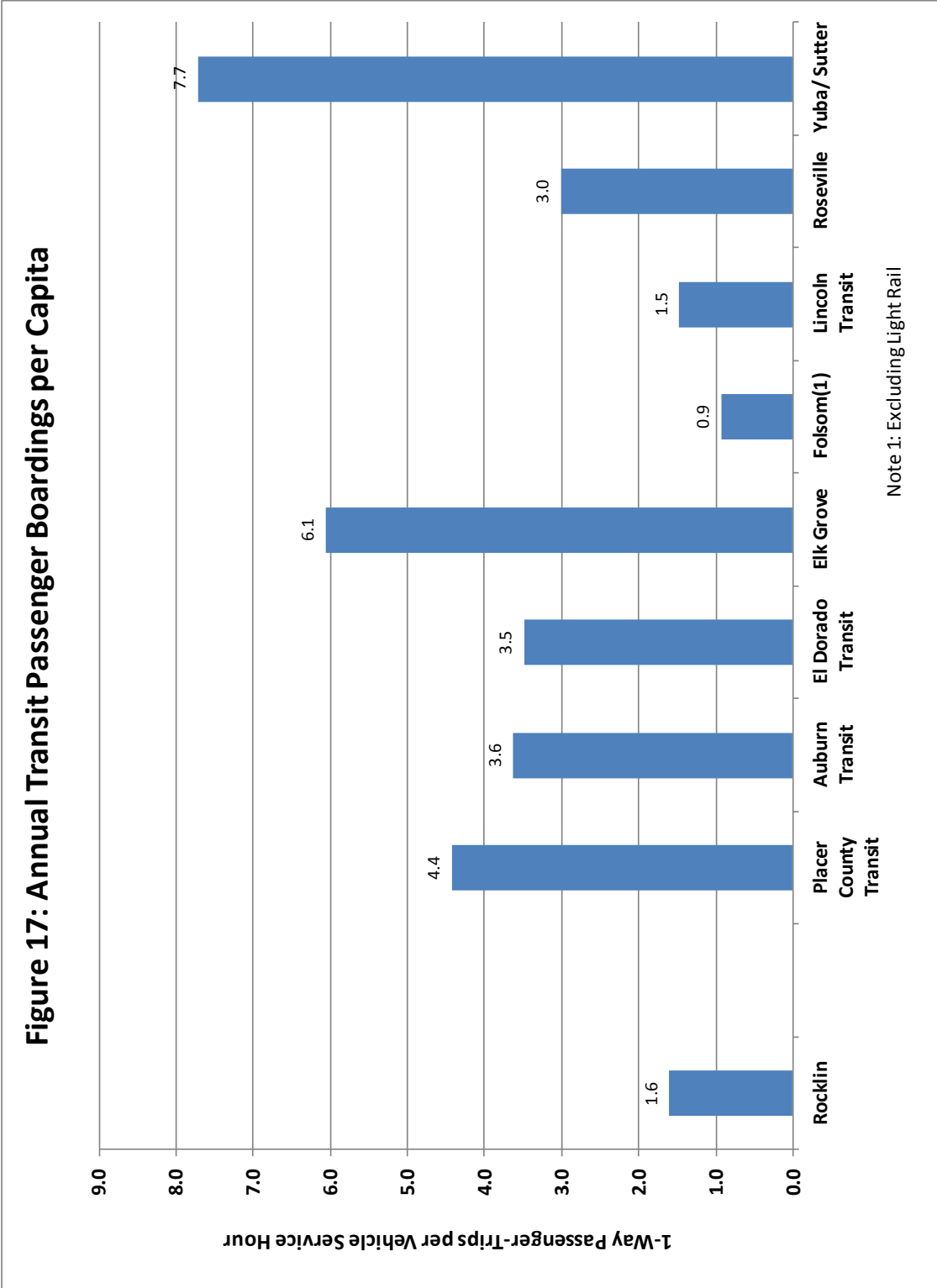
Note 2: Vanpool ridership is from multiple communities in Placer County including Rocklin.

TABLE 15: Rocklin Peer Community Performance Measures

	Rocklin	Peer Area								Peer Average	Rocklin Ranking Among Peers
		Placer County Transit	Auburn Transit	El Dorado Transit	Elk Grove	Folsom(1)	Lincoln Transit	Roseville	Yuba/Sutter		
Passengers per Vehicle Service Hour											
Local Fixed Route	11.6	13.5	10.4	11.7	12.9	8.1	10.3	7.1	20.4	11.8	
Demand Response	2.1	2.1	--	3.8	1.2	2.7	1.8	2.7	3.0	2.5	
Vanpool ⁽²⁾	--	5.7	--	--	--	--	--	--	--	5.7	
Commuter	26.0	26.1	--	12.4	24.7	--	--	20.5	18.5	20.5	
Other (Special Services, etc.)	--	--	--	59.3	--	149.9	--	--	--	104.6	
TOTAL	8.8	9.7	10.4	9.5	13.7	6.2	6.9	7.9	15.2	9.9	7 of 10
Operating Cost per Vehicle Service Hour											
Local Fixed Route	\$97.55	\$129.17	\$80.19	\$113.06	\$101.16	\$79.58	--	\$95.99	\$64.71	\$94.84	
Demand Response	\$68.53	\$64.61	--	\$121.87	\$94.70	\$78.83	--	\$95.60	\$61.06	\$86.11	
Vanpool ⁽²⁾	--	\$40.65	--	--	--	--	--	--	--	\$40.65	
Commuter	\$185.19	\$174.26	--	\$131.66	\$127.33	--	--	\$113.78	\$157.32	\$140.87	
Other (Special Services, etc.)	--	--	--	\$175.63	--	\$620.01	--	--	--	\$397.82	
TOTAL	\$92.96	\$100.40	\$80.19	\$121.93	\$106.87	\$79.32	\$94.89	\$98.30	\$73.75	\$94.46	7 of 10
Operating Cost per Vehicle Service Mile											
Local Fixed Route	\$4.09	\$6.07	\$6.13	\$6.41	\$6.76	--	--	\$8.08	\$5.57	\$6.50	
Demand Response	\$7.58	\$6.76	--	\$5.12	\$9.90	--	--	\$8.31	\$4.62	\$6.94	
Vanpool ⁽²⁾	--	\$0.92	--	--	--	--	--	--	--	\$0.92	
Commuter	\$5.68	\$5.35	--	\$4.33	\$6.61	--	--	\$4.70	\$4.21	\$5.04	
Other (Special Services, etc.)	--	--	--	\$12.82	--	--	--	--	--	\$12.82	
TOTAL	\$5.09	\$4.84	\$6.13	\$5.27	\$7.12	\$4.42	\$9.18	\$7.30	\$4.95	\$6.15	7 of 10
Farebox Ratio	17.4%	15.7%	7.0%	27.6%	20.4%	14.3%	5.8%	20.5%	23.6%	16.9%	5 of 10
LTF Transit Expenditure per Capita	\$8.73	\$21.67	\$18.87	\$28.94	\$22.95	\$21.26	\$16.04	\$32.68	\$24.13	\$23.32	10 of 10
LTF Transit Expenditure per VSH	\$48.07	\$47.36	\$54.08	\$79.05	\$51.76	\$115.03	\$74.79	\$85.57	\$47.63	\$69.41	8 of 10
Percent LTF Used for Transit	22%	61%	47%	100%	76%	66%	40%	82%	92%	72%	10 of 10
Operating Subsidy per Passenger-Trip	\$8.71	\$8.75	\$7.17	\$9.25	\$6.23	\$4.00	\$13.04	\$9.90	\$3.70	\$7.76	5 of 10
Operating Subsidy per Capita	\$13.95	\$38.70	\$26.02	\$32.30	\$37.73	\$24.32	\$19.17	\$29.84	\$28.56	\$27.84	10 of 10
Vehicle Service Hours per Capita	0.18	0.46	0.35	0.37	0.44	0.15	0.21	0.38	0.51	0.36	9 of 10
Annual Transit Ridership per Capita											
Local Fixed Route	1.0	3.0	3.6	1.5	3.0	0.8	1.3	1.7	6.2	2.8	9 of 10
Demand Response	0.2	0.3	--	0.5	0.1	0.1	0.2	0.2	0.4	0.3	6 of 9
Commuter	0.4	0.8	--	1.1	3.0	--	--	1.1	1.0	1.8	7 of 7
TOTAL	1.6	4.4	3.6	3.5	6.1	0.9	1.5	3.0	7.7	4.8	8 of 10
<small>Note 1: Excluding figures for light rail, except for the LTF Transit Expenditure per Capita and the LTF Transit Expenditure per VSH</small> <small>Note 2: Vanpool ridership is from multiple communities in Placer County including Rocklin.</small>											







A key step in developing and evaluating transit plans is a careful analysis of the transit demand and needs of various segments of the population and the potential ridership of transit services. The demand for public transit services is dependent on a number of factors:

- ◆ Concentrations of transit dependent populations
- ◆ Locations of major transit activity centers such as retail centers, schools and human service agencies
- ◆ Commute patterns

Transit demand in Rocklin has the potential to change and/or increase as new development is completed and major transit activity centers such as college expand. This section presents a review of existing and potential future demand for public transit services in Rocklin.

TRANSIT DEMAND

General Public Urban Transit Demand

As Rocklin's population is greater than 50,000 and it is included in the Sacramento Urbanized Area, urban transit demand techniques were used to estimate demand for public transit services in Rocklin. Under this method a simple mode split analysis is employed which estimates that one percent of the population would use transit on a daily basis, making an average of 3.5 trips per day. This method generates an estimated demand for all trips within Rocklin at 498,863 transit trips annually.

Senior Transportation Needs

Typically seniors comprise a significant portion of the population which relies on public transit to get to medical appointments, shopping, etc. As shown in Table 1, persons over the age of 65 account for 11 percent of the population of the City of Rocklin. Neighborhoods with the largest number of seniors are located off of existing fixed route in the Whitney Oaks areas (1,916 persons) and Stanford Ranch (534 persons). This includes two senior apartment complexes located at Park Drive and Stanford Ranch Parkway: Villa Serena (236 units) and Casa de Santa Fe (159 units). Other neighborhoods with relatively high number of seniors are located along the I-80 corridor in southeast Rocklin and near Sierra College. This includes the Lyn Roc Apartments currently served by the fixed route.

Operating statistics obtained from PCT Rocklin-Loomis DAR demonstrate that roughly 33 percent of one-way passenger-trips (roughly 11.6 trips per day) were made by seniors in FY 2012-13 on weekdays and 33 percent of trips (roughly 4.0 trips per day) on Saturdays were made by seniors. The Taylor Road Shuttle carried fewer seniors than the DAR in FY 2012-13 (12 percent or 4.9 daily trips on weekdays and 19 percent or 3.4 daily trips on Saturdays).

Over the next 15 years, transit demand from seniors has the potential to increase significantly. According to Department of Finance projections (as shown in Table 16), the number of "young retirees" age 65 – 74 years old in Placer County is anticipated to increase by 86 percent from 2010 to 2030. The number of older retirees age 75 – 84 years old in Placer County -- those more likely to require specialized transportation -- is expected to increase by 112 percent from 2010 to 2030. While this figure is countywide, one can assume that Rocklin will also experience a similar proportionate increase in elderly populations.

TABLE 16: Placer County Population Projections by Age Category

Year	Total (All ages)	Preschool Age (0-4 years)	School Age (5-17 years)	College Age (18-24 years)	Working Age (25-64 years)	Young Retirees (65-74 years)	Mature Retirees (75-84 years)	Seniors (85 or more years)
2010	350,275	20,795	64,512	27,212	184,088	29,144	17,329	7,196
2020	391,682	21,798	59,350	37,755	197,808	42,398	23,471	9,102
2030	442,505	26,089	62,741	32,950	215,627	54,331	36,752	14,014
<u>2010-30 Change</u>								
#	92,230	5,294	-1,771	5,738	31,539	25,188	19,423	6,819
%	26%	25%	-3%	21%	17%	86%	112%	95%

Source: California Demographic Research Unit, Report P-1

Disabled Transit Demand

In addition to seniors, the disabled population generally comprises a large portion of local transit services, particularly in rural areas. According to PCT operating statistics, 46 percent of Rocklin-Loomis DAR weekday ridership or roughly 16.4 trips per day stemmed from disabled passengers in FY 2012-13. On Saturdays, disabled passengers comprised 46 percent of ridership and about 4.7 trips per day. The disabled weekday ridership proportion on the Rocklin-Loomis DAR has increased by 10 percent since FY 2008-09. For the Taylor Road Shuttle, 40 percent of weekday riders (16.3 daily trips) were disabled passengers while 39 percent of Saturday riders (7.2 daily trips) were disabled passengers. The proportion of disabled ridership on the Taylor Road Shuttle has also increased since FY 2008-09 but the actual number of disabled passenger-trips has decreased slightly.

The ADA Paratransit Handbook, 1991, states that roughly 1.5 percent of the nation’s population is ADA paratransit eligible due to:

- ◆ Being unable to board, ride or disembark from a vehicle even if they are able to get to the bus stop and even if the vehicle is wheelchair-accessible, or
- ◆ Having a specific impairment-related condition and cannot travel to a boarding location or from a disembarking location to their final destination.

Applying this 1.5 percent figure to the City of Rocklin population in 2013 (58,484 persons), we can estimate that approximately 877 persons may be eligible for ADA paratransit service. According to the 2010 Census there are 2,599 persons age 16 - 64 with some type of disability in the City of Rocklin. The ADA Paratransit Handbook references low and high trip rates for ADA eligible individuals of 1.2 and 4.4 trips per person per month in rural areas. By applying this rate, Rocklin would have a potential low ridership demand of 12,630 ADA annual one-way passenger-trips per year and a potential high ridership demand of 46,300 annual one-way passenger-trips per year. The average of these two figures is 29,465 annual one-way passenger-trips per year. Actual ridership in Fiscal Year 2012-13 for all disabled persons on the Rocklin-Loomis Dial-A-Ride was about 4,400 passenger-trips. This is significantly below the low

ridership potential from the ADA demand estimation discussed above, indicating substantial unmet disabled ridership.

Youth Ridership Demand

Youths (age 10 – 17 years old) typically utilize transit for social purposes as well as for school trips. As such, it is important to consider the demand and needs associated with this population group. A review of the US Census data discussed in previous memos shows that the greatest numbers of youths (1,912 persons) reside in the Census Tract which comprises the northwest corner of Rocklin, most of which is not served by the Lincoln-Sierra College fixed route. Neither Whitney High School nor Rocklin High School is directly served by the fixed route; however they are served by DAR.

College Student Ridership Demand

There are two major colleges located in Rocklin: William Jessup University and Sierra College. William Jessup University's current enrollment is roughly 1,100 students with roughly 600 students living either on campus or in Rocklin. The university ultimately wishes to grow enrollment to 3,000 students. Staff indicated that currently most students have their own vehicles or carpool and very few students use public transit.

There are 14,000 students enrolled at the Sierra College Rocklin Campus. Roughly 2,200 of these students live in Rocklin. Staff indicates that enrollment has the potential to double over the next ten years. According to existing on-board survey data on the Lincoln –Sierra College route, 15.5 percent of average daily boardings occur at the Sierra College bus stop. As this stop is located on campus, it is likely that the majority of these boardings are students. Applying the 15.5 proportion to existing annual ridership equates to approximately 16,150 one-way Sierra College passenger trips each year or 7.3 one-way trips per year per student living in Rocklin. If in the future the number of Sierra College students doubles (as projected), the transit demand for Sierra College students living in Rocklin could reach 32,000 one-way passenger trips per year.

Surveys at major institutions such as Seattle Community College and Portland State University have shown that anywhere from 29 to 44 percent of students use public transit as their primary form of transportation to school. These major urban areas offer a much more frequent level of transit service and parking at the school is cost prohibitive. Nevertheless, it can be assumed that the transit mode split for college students living in Rocklin would be greater than the average Rocklin resident.

Low-Income Ridership Demand

Per 2010 Census data, larger numbers of persons living below the poverty level are found in the Census Tracts west of Sunset Boulevard (571 persons), Stanford Ranch between Park and West Stanford Ranch (517 persons) and southeast Rocklin near Sierra College (481 persons). All these Census Tracts border the PCT Lincoln-Sierra College fixed route, however, persons living on the outskirts of the Census Tract are not conveniently located near the fixed route.

Employee / Commuter Transit Demand

Commute pattern data discussed in the demographics memo from the US Census demonstrates that a slightly greater proportion of study area residents work in Sacramento (16.8 percent) or Roseville (15.2 percent) than within the City of Rocklin (12.2 percent). According to PCT surveys in 2013, roughly 33 percent of respondents on the PCE service to downtown Sacramento live in Rocklin. This equates to roughly 26,500 annual passenger-trips or 0.46 trips per capita.

As for commuting within Rocklin, many of shopping and commercial complexes and other such employment locations are served by the fixed route, with the notable exceptions of the Rocklin Crossings and Rocklin Commons shopping centers off of Sierra College Boulevard and the Blue Oaks Shopping Center. Additionally, many residential locations are not served by the fixed route.

UNMET TRANSIT NEEDS

The California TDA requires annual unmet transit needs hearings if a jurisdiction proposes to spend some TDA funds on streets and roads. The TDA is the primary source of funding for public transit in Placer County. Every year the Placer County Transportation Planning Agency holds a series of public meetings to receive public input on transit needs in the region. Below is a summary of unmet transit needs comments which pertain to the City of Rocklin. A full list of unmet needs comments from FY 2008-09 to FY 2012-13 are included as Appendix A.

The Fiscal Year 2012/2013 Unmet Transit Needs process brought forth the following transit needs requests summarized below:

- ◆ The need for short bus routes that connect Rocklin residential neighborhood to transit hubs such as the Rocklin Amtrak Station and Sierra College.
- ◆ The need for local transit service in Rocklin to the train station to match the train schedule.

The two previous Unmet transit needs hearings have yielded the follow requests:

- ◆ The need for more transit service in the neighborhoods of Rocklin outside of the major strips (Pacific Street and Sunset Boulevard).
- ◆ The need for a fixed route bus that would run on all major roads in Rocklin.

As identified in Appendix A, there were a number of comments provided during the Unmet Transit Needs process pertaining to Rocklin. However, upon evaluation these comments were not considered to meet the definition of unmet transit needs because of a lack of understanding about the dial-a-ride service, or other infrastructure needs which have been completed or are funded with non TDA sources.

Summary of Public Input

In addition to a community workshop (see Appendix B), public input regarding changes to public transit services in Rocklin was sought through the distribution of comment cards. Comment cards and invitations to the community workshop were emailed to a list of 70 potentially interested persons/groups. Copies of the cards as well as a summary of input are displayed in Appendix C. Surveys were also distributed to PCT drivers to obtain their input on travel patterns and potential improvements. Responses are shown in Appendix D. The following highlights common input received through this process:

- ◆ Seniors generally living at one of the senior apartments near Park Drive / Stanford Ranch Road requested fixed route service from their home to shopping and other services in Rocklin.
- ◆ Important shopping destinations for potential transit riders include the Blue Oaks Shopping Center (also for the movie theater) and the new Wal-Mart /Target at Rocklin Crossings/Commons.
- ◆ Many commuters requested feeder bus service to the Amtrak station or an earlier return trip to Rocklin.

- ◆ Sierra College students would like a discounted student pass, more frequent service, and service to Walmart for those who live close to campus.
- ◆ William Jessup University would like to see a bus stop on campus in the future and indicated that the Staybridge Suites (where many students live) is not currently served by the fixed route.
- ◆ Improve marketing – Many residents and students are not aware of benefits of fixed route and DAR.
- ◆ Per bus driver surveys, a large part of fixed route ridership comes from students. Popular transit destinations include: Sierra College, Placer County Human Services Office (Welfare Office), Park Drive, Roseville Galleria, and Thunder Valley Casino. Top requests for stops that are not served by the fixed route include: Rocklin High, Fairway & Sunset, Rocklin DMV/Police, Wal-Mart/Target, and Kaiser/Sutter in Roseville.
- ◆ Driver bus stop improvement suggestions included:
 - Shelter at Lonetree/W. Stanford Ranch (Welfare office)
 - Stops unsafe at S. Whitney and Springview
 - General improvements at Sunset & Pebble Creek (BelAir)
 - General improvements at Sunset & Lonetree
 - General improvements at Safeway & Granite Drive
 - More prominent signs for Taylor Road Shuttle
 - Move stop away from fire hydrant at Rocklin High School

All input forums, discussions with stakeholders (Appendix E) such as Sierra College, discussions with the Project Advisory Committee, and Unmet Transit Needs Hearings reports were considered to develop the Transit Alternatives to better meet the transportation needs of Rocklin residents.

MAJOR TRANSIT ACTIVITY CENTERS

In an effort to refine the geographical locations of transit demand, the location of major transit activity centers was reviewed. Rocklin includes major activity centers, notably Sierra College and Blue Oaks Town Center, Rocklin Commons and Rocklin Crossings. Community activity centers potentially generate transit ridership depending on the clientele served. Human service programs typically generate ridership from low income, elderly and/or disabled residents; shopping centers often generate ridership from all types of residents, but particularly elderly and low income passengers; schools and recreational facilities may generate transit ridership from the youth (K – 12) population. Below are lists of major community activity centers in Rocklin which are potential transit ridership generators. *Italic font indicates major transit activity centers not currently served by the fixed route.*

Retail Concentrations

The primary retail-shopping areas in Rocklin include:

- | | |
|--------------------------------|-------------------------|
| – <i>Blue Oaks Town Center</i> | – Rock Creek Plaza |
| – <i>Rocklin Commons</i> | – Rocklin Retail Center |
| – <i>Rocklin Crossing</i> | |

Activity Centers for Seniors, Persons with Disabilities, and Low-Income Persons

- | | |
|----------------------------------|---------------------------------|
| – <i>Villa Serena Apartments</i> | – <i>Quarry Oaks Apartments</i> |
| – <i>Casa de Santa Fe</i> | – Rolling Oaks Apartments |
| – Lyn Roc Apartments | – Bella Vida Senior Apartments |

- Warmline Family Resources Center

Medical Facilities

- *Placer Center for Health, UC Davis Medical Group (550 West Ranch View Drive)*
- *Mercy Medical Group*

Government

Governmental service offices include:

- *Rocklin City Hall*
- *Department of Motor Vehicles Rocklin Office*
- Placer County Offices at 1,000 Sunset
- Santucci Justice Center (Roseville)

Colleges

- Sierra College
- William Jessup University

K-12 Education

There are a number of elementary, middle and high schools in the city, as listed below

- *Antelope Creek Elementary School*
- *Parker Whitney Elementary School*
- *Sierra Elementary School*
- *Breen Elementary School*
- *Rock Creek Elementary School*
- *Sunset Ranch Elementary School*
- *Cobblestone Elementary School*
- Rocklin Elementary School
- Twin Oaks Elementary School
- *Ruhkala Elementary School*
- *Valley View Elementary School*
- *Granite Oaks Middle School*
- *Spring View Middle School*
- *Rocklin High School*
- *Whitney High School*
- *Victory High School*
- *Rocklin Independent Charter Academy*

Other Nearby Transit Activity Centers

- Roseville Galleria
- Thunder Valley Casino

Major Employers

There are many large employers in Rocklin. The top ten largest sourced from the City of Rocklin’s website <https://www.rocklin.ca.us> (October 2011) are listed below:

1. Rocklin Unified School District
2. Oracle
3. United Natural Foods
4. Sierra College
5. UPS Customer Center
6. Educational Media Foundation
7. City of Rocklin
8. RC Willey
9. VeriFone
10. Financial Pacific Insurance

Nearly all of these facilities are served by the Lincoln/Sierra College Route, with the exception of RC Willey and some Rocklin Unified School District locations.

The basis for any transit plan is the development of an effective and appropriate service strategy. The types of service provided, their schedules and routes, and the quality of service can effectively determine the success or failure of a transit organization.

Following an examination of the existing conditions of transit service and potential needs / demand for transit service, a number of service alternatives have been developed to meet these needs, and are evaluated and presented in this chapter. The service alternatives are specifically intended to present multiple options, with varying levels of financial impacts. Each service alternative is described, including operating characteristics, capital needs and financial characteristics. These alternatives focus on high priority transit improvements for the next five years with an overview of potential long-term alternatives. Table 17 presents the ridership and cost impacts of each alternative. Both the cost impact to PCT services as a whole and cost impacts for the City of Rocklin are identified in the table as "Annual Operating Subsidy" and Rocklin Operating Subsidy, respectively.

TYPES OF TRANSIT

Before discussing transit options specific for Rocklin, it is worthwhile to discuss the different common types of transit services, which encompass a wide range of alternatives, as described below.

Fixed Route Service

Fixed-route service fits the popular conception of a bus system – vehicles operating on a predetermined route following a set schedule. Each route consists of a number of specific stops where passengers are picked-up and dropped-off. Routes are typically "radial" in all but the largest cities – they all originate from a common point (typically in a downtown area) and travel to outlying areas before returning. Research has found that fixed-route passengers are willing to walk up to a quarter-mile to reach the bus stop; as a result, an efficient fixed-route service pattern usually consists of routes with half-mile spacing.

Fixed-route service is particularly convenient for passengers without mobility impairments, such as the low-income and the general public. The advantages of fixed-route service are: 1) it can be provided at a relatively low cost on a per passenger-trip basis, 2) schedule reliability is relatively high since buses do not deviate from the route, and 3) service does not require an advance reservation.

On the other hand, many persons with a car available for a trip find fixed-route transit service to be relatively unattractive. The need to walk even a few hundred yards to a bus stop, coupled with waiting for the vehicle on an often cold, wet, or hot street corner makes the option of a warm, comfortable car an easy choice. Furthermore, operating a fixed-route service requires that a complementary paratransit service is available within three quarters of a mile of the route to accommodate individuals with disabilities under the Americans with Disabilities Act (ADA). In Rocklin, the Lincoln-Sierra College Route is a fixed route service. Rocklin DAR acts as the ADA paratransit service as well as a general public DAR.

Demand Response Service

Demand response transit service, also termed Dial-A-Ride (DAR), is characterized as door-to-door (or curb-to-curb) service, scheduled by a dispatcher. A 24-hour advance reservation for service is normally required, though some immediate requests are typically filled as time permits and if the service is particularly needed. PCT currently operates a demand response service in the communities of Rocklin and Loomis.

TABLE 17: Rocklin Transit Service Alternatives

FY 2014-15

	Route Hours Allocated to Rocklin per Run	Annual In-Service Vehicle-Hours	Total Annual Operating Cost ⁽¹⁾	Ridership (One-way Passenger Trips)		Annual Farebox Revenue	Annual Operating Subsidy	Rocklin Operating Subsidy (1)
				Average Daily	Annual			
Existing Lincoln - Rocklin - Sierra College Route								
Serve Walmart/Target - Realign Route	0.13	540	\$19,100	60	17,970	\$13,500	\$5,600	\$0
Half Hourly Service - All Day Weekdays	1.233	7,056	\$719,700	160	40,400	\$30,300	\$689,400	\$425,100 (1)
Half Hourly Service - 2:00 PM - 5:00 PM	1.233	2,016	\$205,600	50	13,700	\$10,300	\$195,300	\$120,500 (1)
Extend Service until 10:00 PM	1.233	1,008	\$102,800	17	4,400	\$3,300	\$99,500	\$61,400 (1)
Taylor Road Shuttle								
Serve Walmart/Target During Layover	0.30	607	\$500	20	6,800	\$4,900	(\$4,400)	\$24,500 (2)
Add Walmart/Target to Existing Route	0.17	337	\$200	40	10,400	\$7,500	(\$7,300)	\$8,700 (2)
Add Walmart/Target to Existing Route Assuming Lincoln Sierra College Serves Walmart			\$200	12	3,120	\$2,300	(\$2,100)	\$13,900
New Local Service								
One Bus Option	1	4,048	\$412,900	80	22,700	\$17,000	\$395,900	\$395,900 (1)
Two Bus Option	2	8,096	\$825,800	100	26,700	\$20,000	\$805,800	\$805,800 (1)
Two-Bus Local Service and Reduction in Lincoln - Rocklin - Sierra College								
Reduction in Lincoln Rocklin Sierra College		4,048 (4,048)	\$412,900 (\$412,900)	70 -30	17,900 -8,800	\$13,400 (\$6,600)	\$399,500 (\$406,300)	\$440,100 (\$365,700)
Checkpoint Service	1	4,048	\$412,900	50	12,800	\$17,500	\$395,400	\$395,400 (1)
DAR								
Dial-A-Ride Sunday Service	5	260	\$306,300	6	330	\$500	\$293,300	\$263,970
ADA Paratransit Service		4,200	\$255,200	10	3,300	\$4,500	\$250,700	\$250,700
Reduce DAR to ADA Paratransit Requirements Only		(842)	(\$51,100)	-20	-6,200	(\$8,500)	(\$42,600)	(\$13,270)
Deviated Fixed Route								
Deviated Two Bus Option	1	8,096	\$826,000	100	28,100	\$21,100	\$804,900	\$804,900
Commuter Feeder Service								
Taxi Voucher Program		--	\$92,500	--	5,500	\$5,500	\$87,000	\$87,000 (1)
Special Activity Bus/DAR Tripper		208	\$12,600		520	\$700	\$11,900	\$11,900 (2)

Note 1: Assuming Rocklin charged per current agreement.

Demand response service is most convenient for persons who can schedule their trips in advance. The need to provide door-to-door service increases the time required to serve each passenger, which in turn requires a relatively high cost per trip provided. A standard “productivity” of demand response service is on the order of three to five passenger-trips per hour. The Rocklin-Loomis DAR carries around two passenger-trips per hour and ridership on the service has decreased by five percent over the past four years, indicating the potential need for change.

The other substantial limitation of demand response service is that it is, by its very nature, less dependable in terms of pick-up and arrival time than fixed-route transit. To maximize productivity, vehicles are dispatched to make several pick-ups in a residential area before travelling to the commercial core (or other destination). Individual passengers must therefore wait for the vehicle while subsequent pick-ups are made. This factor substantially decreases the attractiveness of demand response service to passengers that are time-sensitive, particularly if they have an auto available for the relatively short trips within Rocklin.

Deviated Fixed Route

Another common type of transit service is “deviated fixed route”. Transit vehicles follow a specific route, but leave the route to serve demand response origins or destinations. The vehicles are required to return to the designated route within a block of the point of deviation to ensure all stops along the route are served. As with the demand response service, passenger on-board travel time is increased and actual times of service vary more than under a fixed route schedule. However, by allowing a route to deviate up to three quarters of a mile from the fixed route, deviated fixed route service complies with the requirements of the ADA without the need to provide complementary paratransit service.

Checkpoint Service

A “checkpoint” service does not follow a specific route, but instead serves only a series of designated checkpoint stops. These stops may be either scheduled (served on a published schedule) or “on call” (served only when requested). The driver has the discretion to use any streets to travel between checkpoint stops, so long as these stops are served within the defined schedule window. This service type is more appropriate in areas where land use and street patterns concentrate the need for service in specific locations, or where it is difficult to establish stops on a regular spacing along local streets. Stops can also be located to better serve passengers with mobility limitations, such as directly serving the front door of a medical facility rather than a stop along the adjacent street. Depending on the time required to accommodate the checkpoint stops, it may also be possible for a checkpoint vehicle to serve additional deviations for ADA eligible passengers. Checkpoint service in Rocklin would potentially serve neighborhoods not currently served by the fixed route and eliminate the need for Rocklin residents to schedule a ride in advance for certain destinations.

MULTI-JURISDICTIONAL CONSIDERATIONS

Prior to discussing specific service alternatives for Rocklin, it is worthwhile to review the issues associated with the provision of transit in a multi-jurisdictional setting. One of the challenges of providing public transit in South Placer County is that there are multiple jurisdictions operating transit service which do not always align with transit ridership patterns. The Cities of Auburn, Lincoln and Roseville operate their own transit systems. Placer County Transit (PCT) operates public transit for the entire region, including those jurisdictions, such as Rocklin, which do not operate their own transit system. The City of Rocklin pays PCT each year for the portion of the Lincoln-Sierra College, Placer Commuter Express, DAR, and Auburn to Light Rail routes which are operated in Rocklin based on miles, hours, riders and population. The City of Rocklin does not pay for a portion of the Taylor Road Shuttle.

Another important consideration for this study is that each neighboring jurisdiction's transit system is linked to the next through timed transfers. Timed transfers (whereby buses on different routes serve a specific stop at the same time) are very important in the overall convenience of transit service. For example, a passenger on the Lincoln Sierra College Route can transfer directly to Auburn – Light Rail Route or to several Roseville Transit routes at the Galleria with no layover. This occurs at half past the hour. Timed transfers to Lincoln Transit are also currently provided at Twelve Bridges (for a majority of the runs), while timed transfers to Auburn Transit are available at Nevada Station in Auburn via the Auburn to Light Rail route. Therefore, significant changes to existing PCT services schedules in Rocklin would have an impact on South Placer transit services as a region, and any change needs to be made in consideration of how transfer opportunities are affected throughout the PCT service area.

SERVICE ALTERNATIVES

Modifications to the Existing Lincoln-Rocklin-Sierra College Route

Serve Rocklin Crossings (Walmart) and Rocklin Commons (Target)

Eliminate Some Stops East of Galleria

Within the last year, two new significant commercial retail centers have begun construction in Rocklin. Rocklin Crossings, located on the southeast side of I-80 off of Sierra College Blvd, includes a Walmart Supercenter with more retail shops to come. Target is the anchor retail space for Rocklin Commons located on the northwest side of I-80 off of Sierra College Blvd. As these are new developments, they are not currently served by the PCT Lincoln Sierra College fixed route; however, residents could access these commercial centers by requesting a deviation on the Taylor Road Shuttle or Dial-A-Ride. Public comment has indicated a need to serve Rocklin Crossings and Rocklin Commons. Typically, a Walmart Supercenter is a significant transit generator in small cities.

The two shopping centers are located roughly within a three-quarter-mile walk from each other, and also long walks from Sierra College Boulevard. Walking between the two centers requires crossing freeway onramps/ off ramps and a six lane arterial. Therefore, both shopping centers would need to be directly served by public transit, at stops internal to the sites. Serving Rocklin Crossings and Rocklin Commons would add roughly four miles per trip or 15 to 20 minutes to the existing schedule. Under this alternative, the existing Lincoln – Sierra College Route would be extended (within the current 2-hour total cycle length) by streamlining the existing route, in order to maintain the current hourly route headway.

Boarding and alighting data by stop on the Lincoln – Sierra College route was reviewed to determine if there are existing stops which could be eliminated to free up time in the existing schedule in an effort to serve Rocklin Crossings and Rocklin Commons. Average boardings for 14 weekday runs over a six month period (Table 11) indicates that less than 1 percent of boardings occur at the following stops: AMF Rocklin Lanes, Sierra Meadows/Pacific, Pacific/Farren, Whitney/Sunset, South Whitney/Lincoln. All of these stops are located east of the Galleria. One option is to eliminate the following stops by travelling directly on Rocklin Road to reach Pacific Avenue:

- ◆ AMF Rocklin Lanes
- ◆ Sierra Meadows/Pacific
- ◆ Pacific/Midas
- ◆ Pacific/Pine

Assuming an average travel time on the Lincoln Sierra College route of around 18 miles per hour, eliminating these stops would save roughly four minutes. About 8 minutes of layover time is built into the schedule at the Galleria so as to allow for transfers to/from other routes and Roseville Transit. On the Sierra College end, there is a 12 minute layover. When the bus is travelling from the Galleria to Sierra College, if the 8 minutes of layover time and the 4 minutes saved from stop eliminating bus stops were put toward serving Walmart/Target, it would only add up to about 12 minutes. It is likely that at least 15 minutes would be required to properly serve Walmart/Target. Additionally, the extra layover time at the Galleria (8 minutes) is sometime necessary to remain on schedule during peak hours. Therefore, using that time would likely make the Lincoln – Sierra College route run continually behind schedule.

It would be possible to travel from Sierra College to the Galleria more quickly if no local stops were served. For example, the trip from Sierra College to the Galleria takes only 6 minutes via I-80 with no local stops served or 11 minutes via Rocklin Road and Pacific with no local stops served. However, if the Lincoln – Sierra College route is to continue as **local** fixed route, there does not appear to be sufficient time to serve both Walmart and Target within the current hourly headways. This alternative is therefore considered to be infeasible. The more streamlined version of a regional Lincoln – Sierra College Route is reviewed later in this section.

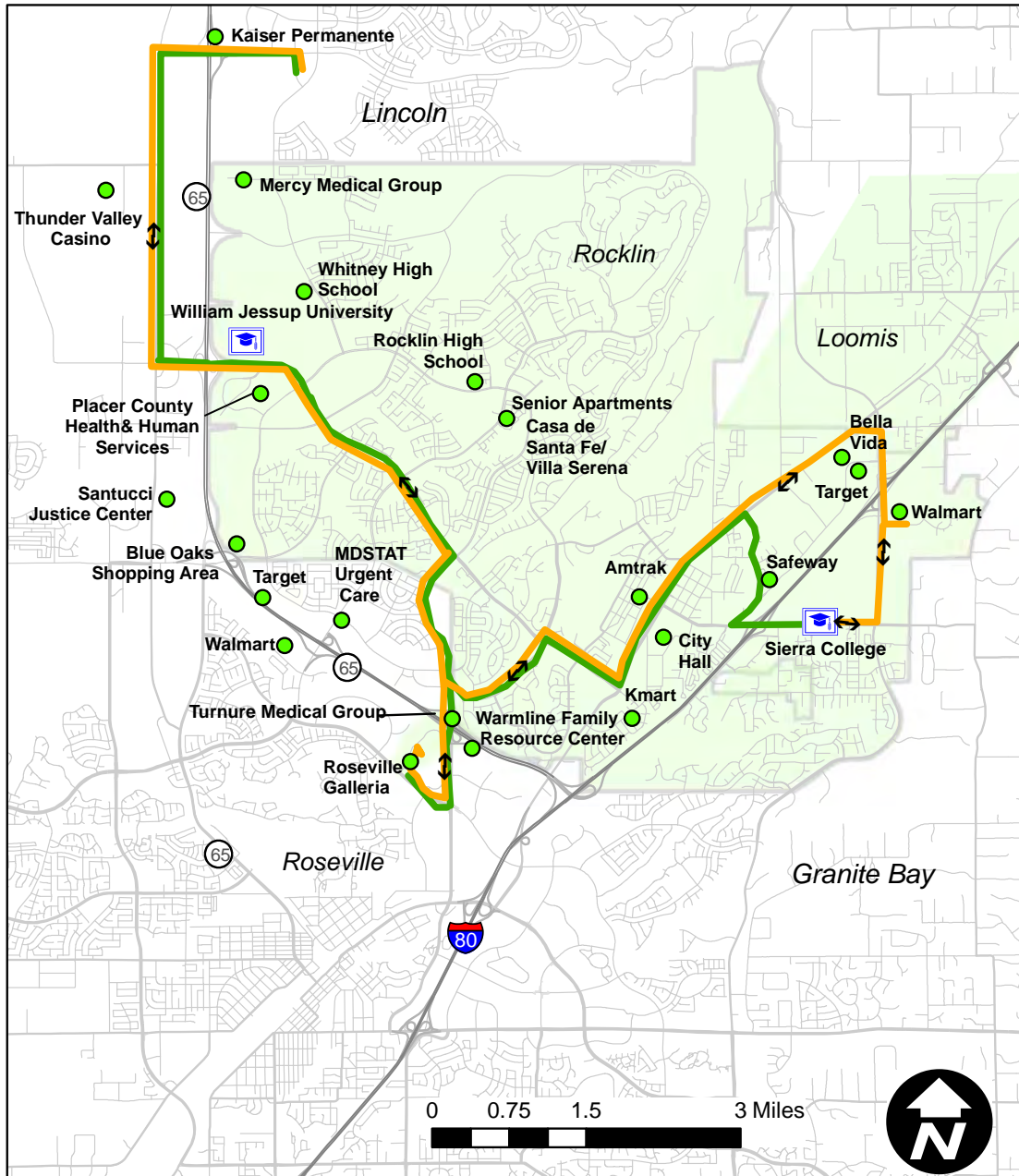
Realign Route along Granite Drive

Another potential option to serve Rocklin Commons and Rocklin Crossings is to realign the existing Lincoln – Sierra College Route along Granite Drive (as shown in Figure 18). Instead of an eastbound bus turning right on to Granite Drive from Sierra Meadows Drive, the realigned route would turn left on to Granite Drive. Traveling north on Granite Drive, the bus could serve the new bus stop behind Target on the east side of Granite Drive. Next, the bus would continue east and turn right on to Sierra College Boulevard and left into the Rocklin Crossings shopping center to serve the existing shelter. The route would then continue to the Sierra College campus via Sierra College Boulevard and Rocklin Road. In order to serve westbound passengers, a new bus stop would need to be located within the existing right of way on the west side of Granite Drive across the street from Target with connecting sidewalks/crosswalks to the shopping center. Additionally, the bus stops for Safeway and the old Jaspers would need to be relocated to the north of Sierra Meadows Drive on Granite Drive as the realigned route would no longer serve the existing stops.

It is estimated that this would add an additional 1.8 miles in travel distance each way. Depending on traffic conditions this could add at least 6 to 8 minutes each way to the existing schedule. As noted above there is roughly 8 minutes of leeway in the existing Lincoln – Sierra College route schedule before the departure from the Galleria to Sierra College and 12 minutes leeway before departing Sierra College to the Galleria, if the Lincoln – Sierra College Route is operating on-time. Therefore, it is possible that this realignment option along Granite Drive would be feasible. However, this would leave no additional time in case of heavy traffic congestion or a high level of boardings. Initial “dry runs” of the realigned Lincoln Sierra College Route were performed by PCT staff. Results demonstrated that this alternative would be possible but timing would be tight, particularly if the bus needs extra time such as for wheelchair boardings. New bus stop locations for the Safeway bus stops will also need to be evaluated. Potentially these could be located on existing shoulders or commercial parcels.

As Sierra College expands, it may be worthwhile to move the existing Sierra College bus stop to the eastern edge of campus off of Sierra College Boulevard. This would have the benefit of reducing travel time of this alternative. However, moving the Sierra College bus stop prior to College expansion may have a negative impact as it would require a longer walk to the center of campus. This relocation is not assumed as part of this alternative.

Figure 18
 Realigned Lincoln Sierra College Route



- Alternate Route Scenario to Serve Commons and Crossings
- Existing Lincoln Sierra College Route
- Dial-A-Ride Service Area
- Point of Interest



On the financial side, it is estimated that this alternative would require an additional 14,600 vehicle service miles per year. As the driver is already been paid for this time, the marginal per mile cost of PCT operated transit services was applied to estimate a total additional cost of \$19,100 for this alternative. The primary benefit of this option is that service to the Super Walmart and Target could potentially add an average of 60 one-way passenger trips per day or a total of 17,970 annually. This figure was estimated by applying ITE Trip Generation rates to the square feet of the Walmart Supercenter and multiplying by the one percent transit mode split assumed for urban areas and the 2009 Household Travel Survey vehicle occupancy rate. Reductions were also made to account for the following:

- ◆ Public transit is not available for the entire span of hours that Walmart is open
- ◆ Fixed route public transit is not available for all Rocklin residents

With this level of ridership, farebox revenues would reach \$13,500, thereby requiring an operating subsidy of \$5,600 per year for PCT. However, the cost sharing agreement between Placer County and the City of Rocklin for the operation of the Lincoln Sierra College Route is based on vehicle service hours. Total vehicle service hours would not change for this alternative as time which was been used as layover is now used to provide transit service. Therefore, this alternative would not increase Rocklin's cost under the existing agreement in the short term. However, going forward PCT's overall operating costs will increase as there will be an increase in vehicle service miles under this alternative. This in turn will eventually increase the contract per hour rate between Placer County and the City of Rocklin. Due to the fact that no additional labor is required for this alternative, the increase in the contract per rate will be relatively low.

Weekday Half Hourly Service

The existing PCT Lincoln-Sierra College route operates on an hourly schedule. Half-hourly service would encourage greater ridership as it allows for greater flexibility in trip scheduling and half the wait time if one misses the bus. On the other hand, by doubling transit service, operating costs are also roughly doubled. As more frequent service is a common improvement request, it deserves analysis in this study.

For Entire Service Day

Each year the City of Rocklin and Placer County enter into a contract for the provision of public transit service. Placer County charges Rocklin for the operation of the Lincoln-Sierra College Route based upon the number of minutes of operation within Rocklin per roundtrip. Using the FY 2014-15 cost per vehicle service hour in the contract (\$102), the total estimated operating cost of increasing service on the Lincoln Sierra-College Route to half hourly headways on weekdays is \$719,700.

It is important to note that doubling transit service will not necessarily double ridership. An "elasticity analysis" can be employed to estimate a proportionate change in ridership in response to a one percent change in headways, based on a survey of various transit agencies. Elasticity analysis is the standard methodology for assessing changes to the quality of an existing transit service. It is based on the principals of microeconomics, comparing the change in ridership to the change in service quality (in this case, service frequency) based upon the change in ridership associated with previous changes in service quality in other similar settings. Applying this methodology, ridership is anticipated to increase by 40,400 one-way passenger trips per year. Assuming the existing average fare paid per passenger of \$0.75 per trip, increased service to half-hourly headways on weekdays would increase fare revenue by \$30,300. The City of Rocklin and Placer County contract is based on an estimated cost per hour minus the fare per hour. Applying the 2014-15 hourly costs and the estimated fare per hour for this alternative (\$4.29), Rocklin would be responsible for \$425,100 in additional operating costs.

During Peak Period Only

Operating on half hourly headways for the entire service day is a costly alternative. A less expensive option is to only increase service during peak periods. Figure 13 presents boardings on the Lincoln Sierra College Route boardings by hour. As shown, the busiest time of day for this route is between 2:00 PM and 4:00 PM. Students compose a significant proportion of ridership on the Lincoln Sierra College Route as roughly 15 percent of average daily boardings occur at Sierra College. College staff indicates that the majority of classes occur between 8:00 AM and 2:00 PM Monday through Thursday. It is likely that student class beginning times vary throughout the day but the majority of students tend to leave campus around 2:00 PM. Therefore, it reasonable to increase service on the Lincoln-Sierra College route to half hourly service beginning at 2:00 PM and ending at 5:00 PM. Although there are fewer classes on Fridays, providing a consistent schedule is an important service quality strategy. Additionally, operating statistics show that ridership on Friday is only seven percent below the weekday average and may not be worth confusing regular passengers with a disjointed schedule. Therefore, increased service should occur on a Monday through Friday basis.

As demonstrated in Table 17, the additional three hours of transit service would cost on the order of \$205,600 in total annual operating costs. An additional 13,700 one-way passenger-trips would result annually along with \$10,300 in farebox revenue. Annual additional total subsidy would be \$195,300, of which Rocklin would be responsible for \$120,500

Later Service – Until 10 PM

After more frequent service, service later in the day and evening is a top requested public transit improvement for all areas. In Rocklin, many seniors have indicated a desire for transportation to the movie theatre or other evening activities that are currently impossible without a private vehicle.

As Rocklin is largely a suburban environment, there is little need to operate public transit service later than 10:00 PM. The Lincoln-Sierra College Route currently ends at 8:00 PM on weekdays. The cost per hour rates in the Rocklin – Placer County contract were applied to estimate the additional cost of operating two more hours per service weekday. Annual operating costs of this alternative are estimated at \$102,800.

Ridership was estimated by reviewing weekday evening ridership patterns on Roseville Transit routes. A sample of Roseville Transit operating statistics from FY 2013-14 demonstrate that weekday evening ridership (between 8:00 PM and 10:00 PM is roughly five percent of total ridership (including Saturdays). This proportion was applied to total Lincoln Sierra College ridership to estimate evening ridership of roughly 4,400 one-way passenger trips annually. Rocklin would be responsible for roughly \$61,400 per year.

Modifications to the Existing Taylor Road Shuttle

The Taylor Road Shuttle, which operates every other hour, currently travels along Sierra College Boulevard past the Rocklin Crossing shopping center (including Walmart) and Rocklin Commons (including Target), but does not stop. Effectively serving these large centers would require diverting off of Sierra College Boulevard to serve stops along internal roadways. There are two general ways that this could potentially be accomplished, as discussed below.

Use Existing Layover Time to Operate a “Shopper Shuttle” Additional Route Segment

The existing schedule includes a half hour layover at Sierra College, arriving at 15 minutes past the hour and departing at 45 minutes past the hour. In addition to providing a driver break, this schedule provides

convenient transfers both to the westbound Auburn – Light Rail Route departure at 17 minutes past the hour as well as from the eastbound Auburn—Light Rate Route arrival at 40 minutes past the hour.

It may be possible during the layover period to make a quick round trip to the Rocklin Crossings and Commons shopping centers. After arriving from Auburn at 15 minutes past the hour, the Taylor Road Shuttle bus would turn around to serve the two shopping center stops, returning to the Sierra College stop at roughly 35 minutes past the hour. After a 10 minute layover, it would depart on the current Taylor Road schedule. This alternative is depicted in Figure 19.

This “shopper shuttle” could serve Sierra College students as well as residents of immediately surrounding neighborhoods. As the Lincoln – Rocklin -- Sierra College Route arrives 29 minutes prior to the departure of the shopper shuttle at 17 minutes after, and as westbound Lincoln – Rocklin – Sierra College Route departure would be 25 minutes after the return of the shopper shuttle, Rocklin residents not living within a convenient walk of the Sierra College stop would be faced with very long waits at this stop to make the transfers. This would tend to substantially reduce the potential ridership of most Rocklin residents to use the Shopper Shuttle.

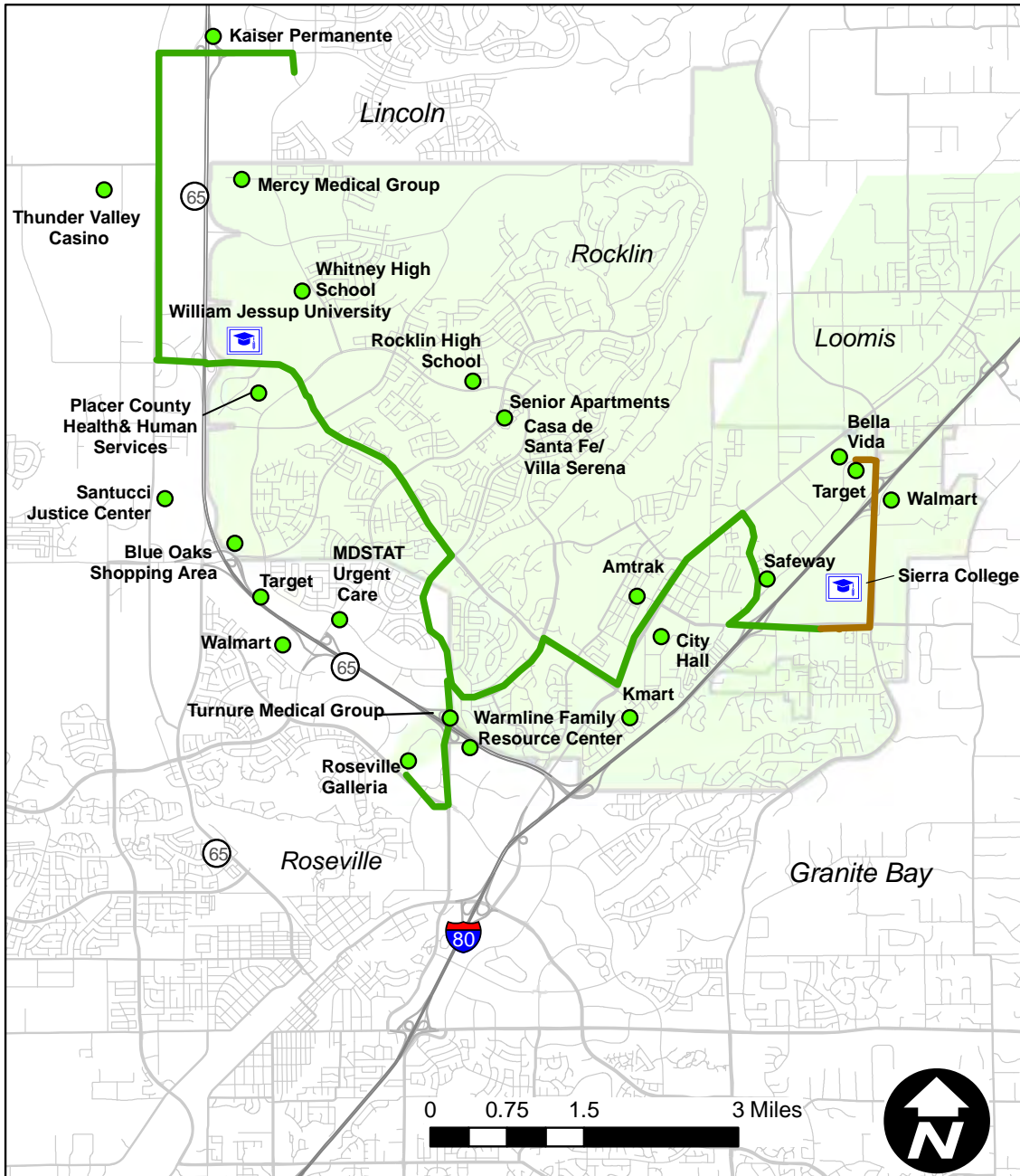
It is estimated that the four mile trip from Sierra College to Walmart and Target would take roughly 18 minutes. As the driver is already being paid for this time, the marginal cost is limited to the contractor’s mileage costs. This would add only approximately \$500 in annual operating costs, if operated on every run Monday through Saturday. Ridership generated by the additional Shopper Shuttle was estimated by applying ITE Trip Generation rates to the square feet of the Walmart Supercenter and multiplying by the one percent transit mode split assumed for urban areas and the 2009 Household Travel Survey vehicle occupancy rate. Reductions were also made to account for the following:

- ◆ Public transit is not available for the entire span of hours that Wal-Mart is open
- ◆ Taylor Road Shuttle is only available every other hour
- ◆ Transfers to/from the Lincoln-Rocklin-Sierra College route would be inconvenient.

Based on transit ridership observed at other similar commercial centers and these factors listed above, it was estimated that roughly 22 average daily one-way passenger-trips would be generated at Target and Walmart, or 6,800 boardings per year. This would generate approximately \$4,900 in passenger fare revenues, resulting in a reduction in marginal subsidy (marginal operating costs minus fares) of \$4,400 per year. According to the existing contract between the City of Rocklin and Placer County, Rocklin does not give Placer County LTF funds for the operation of the Taylor Road Shuttle. If this alternative were implemented, it would prompt a review of the existing cost structure. If the existing cost sharing agreement used to allocate costs to Rocklin for the Lincoln-Rocklin-Sierra College Route is applied (using the MV contract costs), total allocated cost would be \$29,400, yielding a subsidy requirement of \$24,500 for the City of Rocklin.

As Taylor Road Shuttle passengers have the option of requesting a deviation anywhere along the route, deviations to Walmart/Target between Sierra College and Loomis would need to be coordinated with the new Shopper Shuttle extension. A review of Taylor Road Shuttle reservations showed that over a five day period, four pick-ups/drop offs or an average of 0.8 per day occurred during the half-hour layover period at Sierra College. This shows that in general there is sufficient time in the “on demand” schedule to serve Walmart/Target during the layover but reservations would need to be scheduled around the new Shopper Shuttle extension.

Figure 19
Taylor Road Shopper Shuttle Transit Alternative



- Taylor Rd. Shopper Shuttle
- Lincoln Sierra College Route
- Dial-A-Ride Service Area
- Point of Interest



Add Stops at the New Shopping Centers to the Existing Route in Both Directions

Another option to expand services to the Rocklin Crossings and Rocklin Commons shopping centers would be to add stops within both centers in both directions of the Taylor Road Shuttle. In both centers, a stop would need to be established that provides a reasonable walk to the stores while minimizing transit vehicle conflicts with other traffic. This would add approximately 10 minutes to the running time of the Taylor Road Shuttle, which would eliminate the current ability to provide direct transfers to/from Auburn-Light Rail service. However, it would provide the opportunity to shift the schedule forward by 25 minutes, thereby improving transfers to other routes:

- ◆ At the west end of the route, the westbound bus would arrive at Sierra College at 45 minutes past the hour, 3 minutes prior to the arrival of the Lincoln-Rocklin-Sierra College and 5 minutes after the eastbound Auburn-Light Rail bus. It would lay over until 5 minutes after the hour. This would provide Rocklin residents arriving on the Lincoln-Rocklin-Sierra College bus service to the new shopping centers with a 17 minute layover, and a 15 minute layover in the opposite direction.
- ◆ At the eastern end of the route, the Taylor Road Shuttle currently arrives at 25 past the hour and departs at 35 past the hour. All other local routes (Highway 49 PCT Route, Auburn Blue Route and Auburn Red Route), however, arrive around 55 minutes past the hour and depart at the top of the hour, resulting in roughly 35 minute transfer waits for Taylor Road Shuttle passengers. With the 25 minute shift in schedule times, the Taylor Road Shuttle would arrive at 50 past the hour and depart at the top of the hour, providing direct bus-to-bus transfer opportunities to these other local routes.

PCT conducted surveys of boarding/alighting and transfer patterns on the Taylor Road Shuttle for a period of three days between November 19 – 21, 2014 in order to determine how many passengers may be affected by the proposed schedule change. Out of the 35 respondents over the three day period, layover times for transfers between Taylor Road Shuttle and other routes (Auburn – Light Rail) for five respondents would increase from roughly 5 minutes to 30 minutes. Three respondents' layover times between transfers (Lincoln Sierra College Route or Auburn Routes) would decrease to as little as a five minute layover. This equates to roughly 8.6 percent of respondents' layover times improving while 14.3 percent of respondents' layover times getting worse. Applying these proportions to estimated average daily ridership on the Taylor Road Shuttle of 35 one-way trips per day equates to roughly 2 one-way passenger trips per day being negatively affected by the schedule change of the Taylor Road Shuttle.

Depending on the specific location of bus stops in the two new centers, serving these stops would add roughly 0.6 miles of one-way route length. Under the MV contract, this additional mileage increases the operating cost of the route by an estimated \$200 per year. Ridership generated by the shopping centers would be higher than the other option, given the better transfers to the Lincoln – Rocklin – Sierra College Route. Also considering the loss of ridership transferring to/from Auburn-Light Rail Route and the increase in ridership associated with more convenient transfers to local routes in Auburn, overall this option is estimated to increase overall ridership by 40 passenger-trips per day or 10,400 per year. This would generate an increase in farebox revenue of \$7,500 per year, yielding a net reduction in subsidy of \$7,300 per year. If the cost sharing agreement is applied to the 10 minutes per run of running time at the MV contract rate, this yields a subsidy requirement to Rocklin of \$8,700 per year.

Another factor to consider is the effect that implementing both the Realigned Lincoln – Sierra College Route and Taylor Road Shuttle alternative will have on ridership. As stated above, Rocklin residents will choose to use the Lincoln-Sierra College Route to access Walmart without transferring to the Taylor Road Shuttle. Therefore, ridership estimates for the Taylor Road Shuttle would be reduced if the realigned Lincoln – Sierra College Route is implemented. Based on population distribution, it is estimated that roughly 70 percent of transit trips generated by the Rocklin Commons/Crossings shopping centers would arrive from the Rocklin side or on the Lincoln – Sierra College route. The remaining 30 percent would be generated by the communities along Taylor Road. Therefore, ridership on the Taylor Road shuttle would

only be increased by 3,210 one-way passenger-trips instead of the 10,400 estimated if the Lincoln-Sierra College Route did not serve Walmart/Target.

Currently, the City of Rocklin does not pay for the Taylor Road Shuttle as the only stop in Rocklin is at Sierra College. As the new Taylor Road Shuttle plan element will include two more stops in Rocklin and provide an important transit connection to major commercial services for Rocklin residents, the agreement between the City of Rocklin and Placer County should be amended to include the Taylor Road Shuttle. The Taylor Road Shuttle Plan element will require roughly an additional 2,430 vehicle service miles and 337 vehicle service hours per year. Applying MV's contract per hour/mile rate with Placer County for the operation of the Taylor Road Shuttle, increased for inflation, equates to a cost of \$16,200. After subtracting the fare revenue generated by the additional passengers (\$2,300), Rocklin's operating subsidy or what Rocklin would be responsible for would be \$13,900 if both this Taylor Road Shuttle alternative and serving Walmart with the Lincoln-Sierra College Route are implemented.

If it proves that the Lincoln – Sierra College Route cannot be realigned, the Taylor Road Shuttle would be the only public transit service which provides access to Rocklin Commons and Rocklin Crossings. This would increase ridership on this route, to 10,400 additional one-way passenger-trips annually or an average of 40 trips per day. This would generate on the order of \$7,500 in fare revenue annually. Rocklin's operating subsidy would be \$8,700 in this scenario as ridership estimates for the Taylor Road Shuttle are greater.

New Rocklin Local Fixed Route

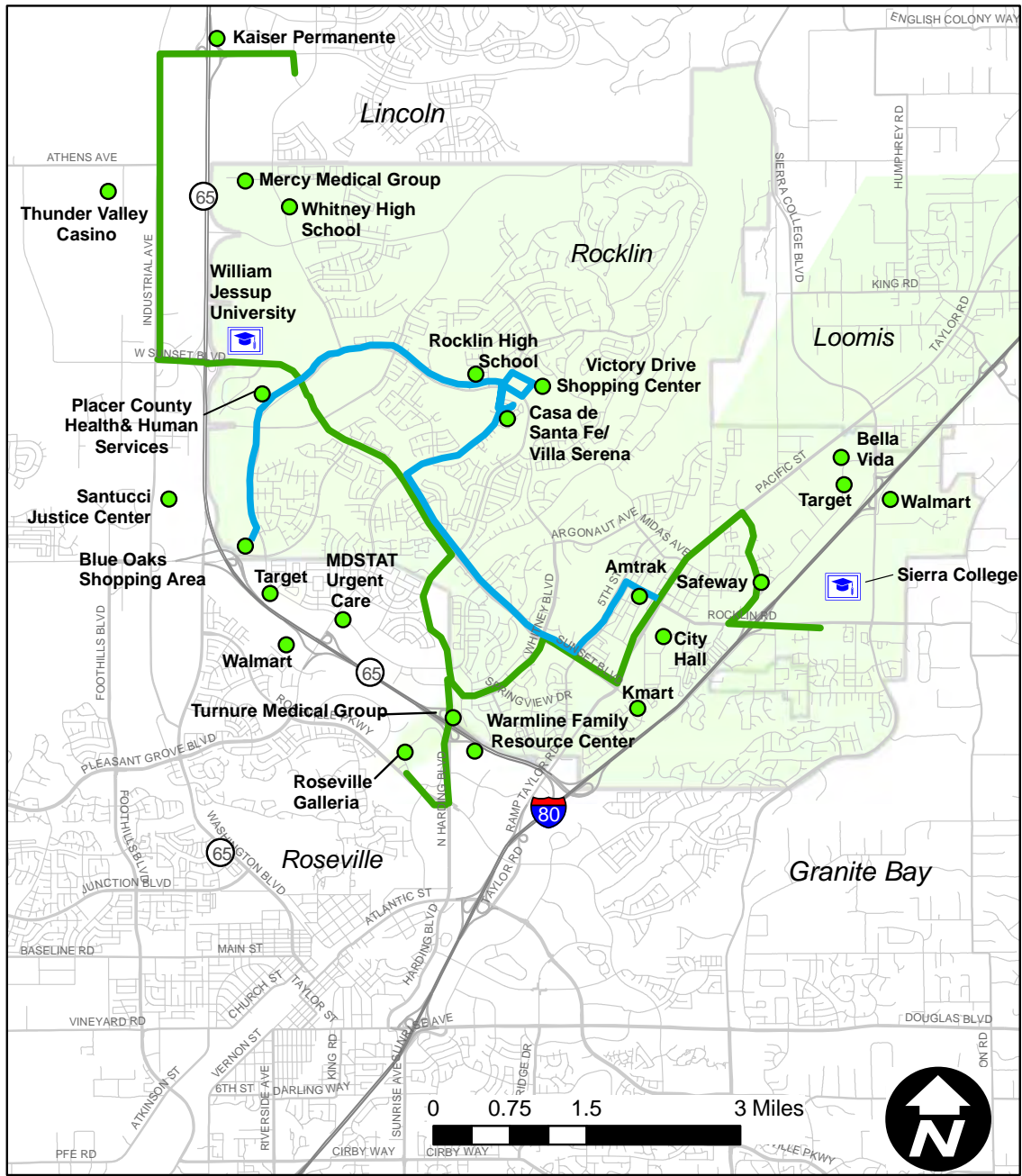
One key objective of this study is to address the issue that many Rocklin neighborhoods and activity centers are not currently served by fixed route transit service. One alternative is to establish a new local fixed route within the City of Rocklin in addition to the existing Lincoln-Sierra College Route. With limited funding available, it is not likely that a new local fixed route system could support more than one local route. The community of Rocklin includes commercial core areas, which are generally served by the Lincoln-Sierra College Route with the exception of Rocklin Crossings, Rocklin Commons and Blue Oaks Shopping Center. A multitude of lower density residential areas (primarily though not entirely consisting of single family homes) are spread throughout the community away from the commercial core. As it is not feasible to serve every neighborhood in Rocklin with a single new route, a new Rocklin Local Fixed Route would best focus on the unserved neighborhoods and transit activity centers with the highest potential demand. Based on the transit demand analysis, a Rocklin local route could be as shown in Figure 20 and as follows:

One Bus Option

- ◆ Begin at the Rocklin Amtrak Station (Connect with Lincoln Sierra College Route)
- ◆ West on Rocklin Rd
- ◆ South on 3rd St
- ◆ West on Sunset (Near Rolling Oaks Apartments)
- ◆ North on Stanford Ranch Rd (Bel Air)
- ◆ South on Park Dr. to serve Casa de Santa Fe and Villa Serena
- ◆ Continue West on Stanford Ranch Rd
- ◆ Continue on to Lonetree Blvd
- ◆ End at Blue Oaks Shopping Center

The bus would return via the same route. This roughly 15 mile round trip route could be operated on hourly headways with one bus. Other than a small overlap with the existing Lincoln – Sierra College Route between 3rd / Sunset and Whitney / Sunset, this new local route would serve currently unserved neighborhoods along 3rd Street, Sunset (between Whitney Blvd and Stanford Ranch), Stanford Ranch Rd and the Blue Oaks area. Service hours would be similar to those operated by the Lincoln-Sierra College

Figure 20
One Bus Local Route Transit Alternative



- One Bus Local Route
- Lincoln Sierra College Route
- Dial-A-Ride Service Area
- Point of Interest

Route: between 6:00 AM and 8:00 PM on weekdays and between 8:00 AM and 6:00 PM on Saturdays. Under this scenario, DAR service would continue operation and serve as the ADA complementary paratransit service; therefore deviations would not be required.

In order to estimate ridership on a new local fixed route, a transit trip rate per capita was developed for Rocklin residents. First, boardings by stop on the Lincoln-Sierra College Route were reviewed to estimate the number of annual boardings generated by Rocklin residents. For example, a large portion of riders who board the bus at Sierra College travel through to the Roseville Galleria. Therefore, it was assumed that only 20 percent of boardings at Sierra College stem from Rocklin residents. On the other hand, for bus stops such as Sunset/Springview which are primarily residential, it was assumed 100 percent of boardings stem from Rocklin residents. In total, it was estimated that Rocklin residents generate roughly 26,350 one-way passenger-trips per year on the Lincoln – Sierra College route. The second step was to determine the number of people living in Rocklin who are actually served by public transit, in other words, those living within one-quarter mile of the bus route. Using census maps, this figure was estimated at 12,400 persons. Dividing the estimated annual Rocklin ridership by Rocklin residents who have access to public transit equates to a Rocklin transit trip rate of 2.12 trips per person per year.

The next step in the process was to apply this trip rate to the number of Rocklin residents served by the new local fixed route (living within one-quarter mile of the route). Also taken into consideration for this analysis was the fact that different areas of Rocklin are more transit dependent than others. A transit dependent factor was assigned to each census tract in Rocklin based on the number of elderly, low income and disabled residents in each census tract. The 2.12 trip rate was then multiplied by the ratio of transit dependency for residents served by the alternative to transit dependency of residents served by the existing fixed route. For example census data shows that residents served by the one bus local fixed route alternative tend to be less transit dependent than those currently served by the Lincoln – Sierra College Route. Therefore, ridership estimates were adjusted downwards to reflect that fact. Finally, it was estimated that the one bus local fixed route alternative would produce on the order of 22,700 one-way passenger trips per year.

In this alternative, it is assumed that the City of Rocklin would contract with Placer County for the operation of this service. Therefore, the contract cost per hour for the existing Lincoln Sierra College route was applied to estimate costs of this alternative. In total, the one bus local fixed route option would cost on the order of \$412,900 for roughly 4,048 annual vehicle service hours. Assuming the same average fare as the existing Lincoln-Sierra College Route, annual farebox revenues would be around \$17,000. As this alternative stays within the boundaries of the City of Rocklin, the City would be responsible for the entire operating subsidy of \$395,900.

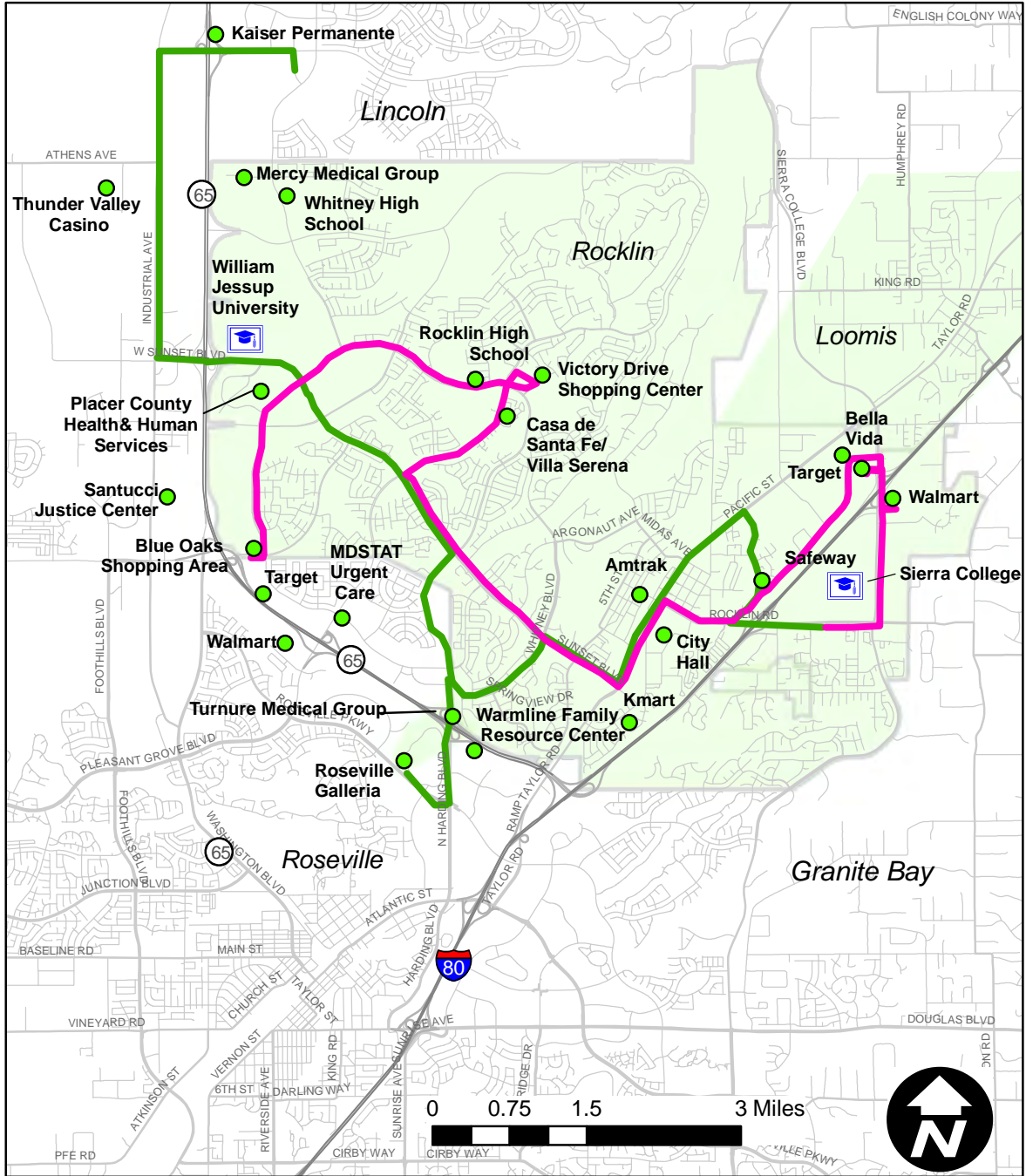
Two Bus Option

In an effort to connect Rocklin residents with major transit generators such as Wal-Mart/ Target at Rocklin Crossings/Commons, the ridership potential and costs of a two bus option was reviewed. This would provide the running time needed to serve a longer route.

As shown in Figure 21, the hourly one-way trip would begin at Sierra College with timed transfers to/from the Lincoln Sierra College Route¹. From there, the route would travel eastbound on Rocklin Road and north on Sierra College Blvd to the new Walmart and Target centers. The new route would then travel west back on Granite Drive to Rocklin Road and travel west towards the Amtrak station. After turning south onto Pacific Avenue, the local bus would travel west on Sunset Boulevard to serve the Rolling Oak Senior Apartments and the residences near Fairway and Sunset, which are currently not served by transit. At the Bel Air Shopping Center, the bus would travel north on Stanford Ranch Road to Park Drive

¹ Because the Auburn-Light Rail service in either direction does not serve this stop at the same time, it is not feasible to coordinate this new route schedule with the regional route.

Figure 21
Two Bus Local Route Transit Alternative



- Two Bus Local Route
- Existing Services
- Dial-A-Ride Service Area
- Point of Interest

near (not at the driveway) Casa de Santa Fe and Villa Serena Senior Apartments. The route would continue along Stanford Ranch Road all the way to Sunset Boulevard near the Placer County Health and Human Services Center. Next, the bus would continue on to Lonetree Boulevard and end at the Blue Oaks Shopping Center. The return trip would follow the same route.

In addition to serving new areas, this option would provide additional service in the important downtown area. This route would require approximately 40 minutes to operate in one direction, yielding a two-hour cycle length (with a generous layover). With two buses, hourly headways could be provided. Similar to the one bus option, this route would be operated within the same time span as the Lincoln-Sierra College Route.

Ridership was estimated in a similar manner as the one bus route option. In this case, residents served by the two bus route option are generally more transit dependent. In total, it is anticipated that the two bus route option would carry around 26,700 annual one-way passenger-trips. Total cost of this alternative would be on the order of \$825,800 with an annual operating subsidy of \$805,800.

Implement Two-Bus Local Route and Shorten Lincoln-Rocklin-Sierra College Route

The Rocklin Local Route alternatives discussed above assume no change to the existing Lincoln-Rocklin-Sierra College Route. If a new two-bus local service is initiated, it would be possible to reduce the existing Lincoln-Rocklin-Sierra College Route to become a Roseville – Rocklin – Galleria Route, operating the existing hour-long schedule between the Roseville Galleria and Lincoln. Service to Sierra College would then be limited to the Auburn-Light Rail Route, which would allow passengers from Lincoln and northern Rocklin to access the college via a transfer at the Galleria, as shown in Figure 22.

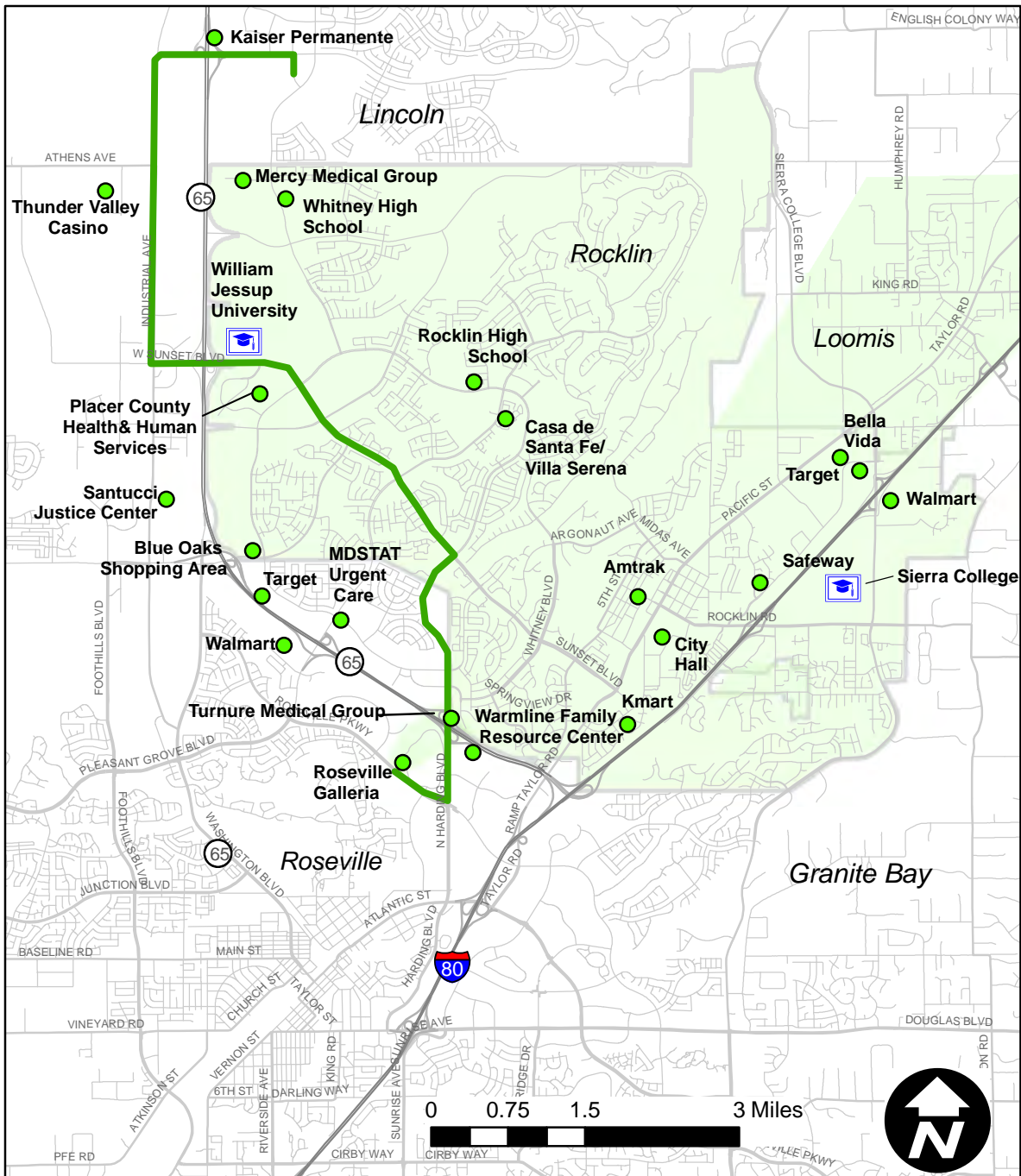
Under this scenario, only one bus would be required to operate the Roseville-Rocklin-Lincoln regional route. The money saved under this option could be put toward the two bus Local Rocklin Route option, so as to continue service to Sierra College and commercial centers in that area. The primary disadvantage of this alternative is that the Roseville Galleria would only be accessible via public transit by the Auburn to Light Rail route at Sierra College, or by DAR, and residents of Rocklin along the existing local route between Sierra College and the Galleria would only be able to access the Galleria via a transfer at Sierra College.

The reduction in the existing Lincoln – Rocklin -- Sierra College Route would save on the order of \$412,900 annually in operating costs. Considering that an estimated 90 percent of this route segment is within Rocklin, the reduction in Rocklin's required subsidy would be \$365,700. Using boarding by stop data, and considering that some existing ridership would shift to the new local route, it is estimated that by eliminating service on the eastern portion of the route, roughly 8,800 existing one-way passenger trips would be lost annually. Existing Lincoln – Rocklin -- Sierra College Route passengers who board at Sierra College and alight at the Galleria would switch to the Auburn to Light Rail route. Overall, it is estimated that under this alternative systemwide ridership would increase by 17,900 one-way passenger-trips. Considering the increase in fare revenue, the overall impact on Rocklin subsidy requirements would be \$440,100 per year.

Checkpoint Service

The existing Lincoln-Sierra College route generally follows the commercial core area of Rocklin on the streets of Sunset, Pacific, Sierra Meadows, Rocklin Road and Whitney Boulevard. The remainder of Rocklin consists of primarily single family neighborhoods which are spread out through a network of small residential streets running outwards from the main commercial areas. Currently DAR serves all the residential neighborhoods of Rocklin with one day advance notice. The requirement to make a reservation eliminates the ability for transit dependent residents to meet "last minute" transportation needs. One alternative is to combine the benefits of both fixed route and demand response service into a

Figure 22
 Implement Two Bus Local Route and Shorten Lincoln-Sierra College Route



- Lincoln-Sierra College Route
- Point of Interest
- Dial-A-Ride Service Area



checkpoint DAR service. This alternative would provide local transit service to areas not currently served by the Lincoln-Sierra College Route without the need to make advance reservations. The existing Rocklin/Loomis DAR would still be available for door to door service and as the ADA complementary paratransit service.

Under this alternative a number of time checkpoints would be designated that focus on serving seniors and persons with disabilities, as shown in Figure 23. These would be served on hourly headways with a timed connection to the Lincoln Sierra College Route at Sierra College. Each checkpoint stop would be served within a 10 minute window of a set scheduled time. The checkpoint service would operate throughout the span of a normal service day of the Lincoln-Sierra College route.

Using existing DAR trip patterns as a guide, a reasonable list of checkpoints would be:

- ◆ Walmart/Target – Not currently served by fixed-route
- ◆ City of Rocklin Offices/DMV/Apartments on Grove St. – Not currently served by fixed route and near apartments and Rocklin Mobile Home Park which are common DAR destinations.
- ◆ Senior Apartments at Park and Stanford Ranch – Not currently served by fixed route, common DAR destination and public comment request.
- ◆ Apartments Wildcat/Whitney Ranch – Not currently served by fixed route, common DAR destination.
- ◆ Placer County Health and Human Services
- ◆ Blue Oaks Shopping Center – Not currently served by fixed route, common DAR destination and public comment request
- ◆ Sierra College (transfer to Lincoln – Sierra College Route)

The checkpoints could be served generally as a large one-way loop following Sunset Blvd in one direction and using SR 65 and I-80 to travel between Blue Oaks and Sierra College. The difference between a checkpoint service and a deviated fixed route is that the driver for the checkpoint service has to option to travel on whatever roads he/she feels is best to serve checkpoint stops as the driver will not be missing any intermediary stops. If only one vehicle were used, the checkpoint service would generally operate as a one-way loop. The disadvantage of a one-way loop is that some passengers may be required to ride the bus for most of the one hour period even though their destination is relatively nearby to their boarding location.

It is estimated that if the most direct route were used to reach the above listed checkpoints, it would take just under one hour to complete one loop (including stops). Applying the operating cost per hour of the existing Lincoln-Rocklin-Sierra College route, the annual cost of this scenario is estimated at \$412,900.

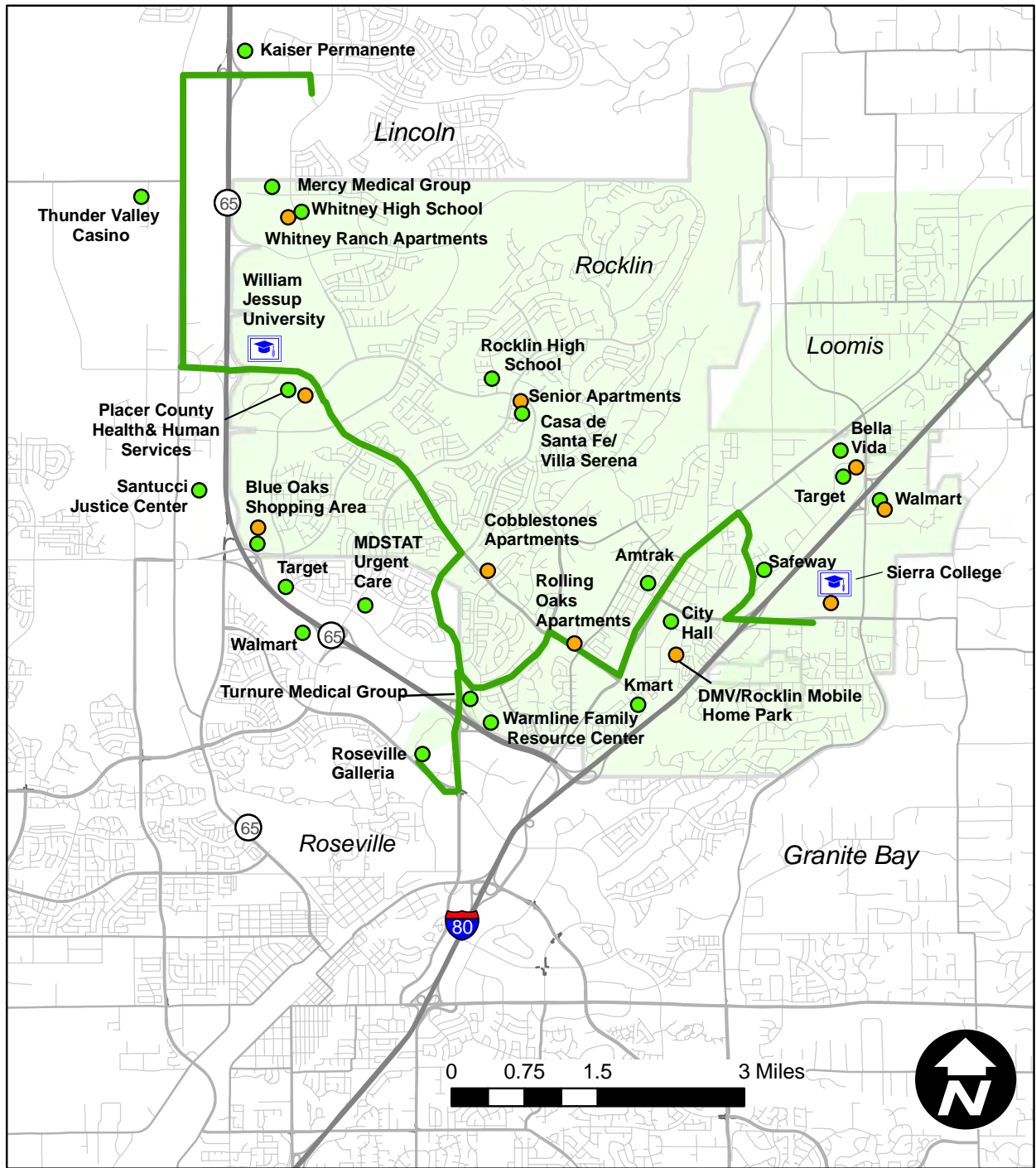
Ridership estimates on a checkpoint service was developed by estimating the proportion of residents in each census tract living within one-quarter mile of each checkpoint. This figure was adjusted by the average per capita transit dependency factor for each census tract and multiplied by the Rocklin annual transit trip rate. The calculation results in annual one-way passenger trips of 12,800. Assuming the same average fare as the current DAR service, checkpoint service would generate roughly \$17,500 in fare revenue, equating to an operating subsidy of \$395,400.

Dial-A-Ride Alternatives

Demand Response Sunday Service

Public input indicated a need for transit service on Sundays, particularly for seniors. Research shows that demand for transit service on Sundays (for the limited number of smaller cities served on Sundays) is approximately 25 percent of weekday ridership. With a lower level of demand spread between a dispersed community and the loss of student ridership on weekends, a reasonable Sunday service option

Figure 23
Checkpoint Service Transit Alternative



- Dial-A-Ride Service Area
- Lincoln Sierra College Route
- Point of Interest
- Checkpoint

would be to provide general public DAR. Sunday service would operate between the hours of 9:00 – 2:00 PM. If service were only available in Rocklin and to the Roseville Galleria, the City of Rocklin would be responsible for the entire cost of this alternative, or roughly \$15,800. This figure was calculated using the current contract rate with MV Transportation for the operation of the Rocklin – Loomis DAR. It should be noted that after the expiration of the contract, rates will be negotiable and subject to change.

According to ridership by day of week data (Table 8), average weekday ridership on the Rocklin/Loomis DAR is around 30 one-way passenger trips per day and 7 one-way trips on Saturdays (23 percent of average weekday ridership). Although Sunday ridership is typically less than Saturday ridership, it was assumed that Sunday DAR ridership for this alternative would be similar to Saturday DAR ridership as there would be no other type of public transit available on that day. This equates to roughly 330 passenger-trips per year. Subtracting an estimated \$500 in fares, the subsidy requirements for this service would be \$15,300 per year.

Only Provide Dial-A-Ride Service in the ADA Paratransit Service Area

The American with Disabilities Act (ADA) requires that if a public entity operates fixed route transit service, comparable public transit service should be provided to those who are unable to use that fixed route system. This is called complementary paratransit service. Comparable service can consist of demand response transit, such as DAR within three-quarters of a mile of the fixed route or allowable three-quarter mile deviations on the fixed route for eligible individuals. In Rocklin, the DAR service goes beyond the legal bounds of ADA law by providing demand response transit to all individuals anywhere within the City of Rocklin.

If deemed appropriate and needed to reduce overall costs, PCT could legally limit the Rocklin DAR service area to within a three-quarter mile radius of the Lincoln-Rocklin-Sierra College route (including Roseville Galleria, Thunder Valley Casino and destinations in Lincoln) and only available to persons with disabilities. However, this option does not meet the goal of providing mobility to all Rocklin residents and should only be considered if there is a sudden and significant reduction in transit revenues.

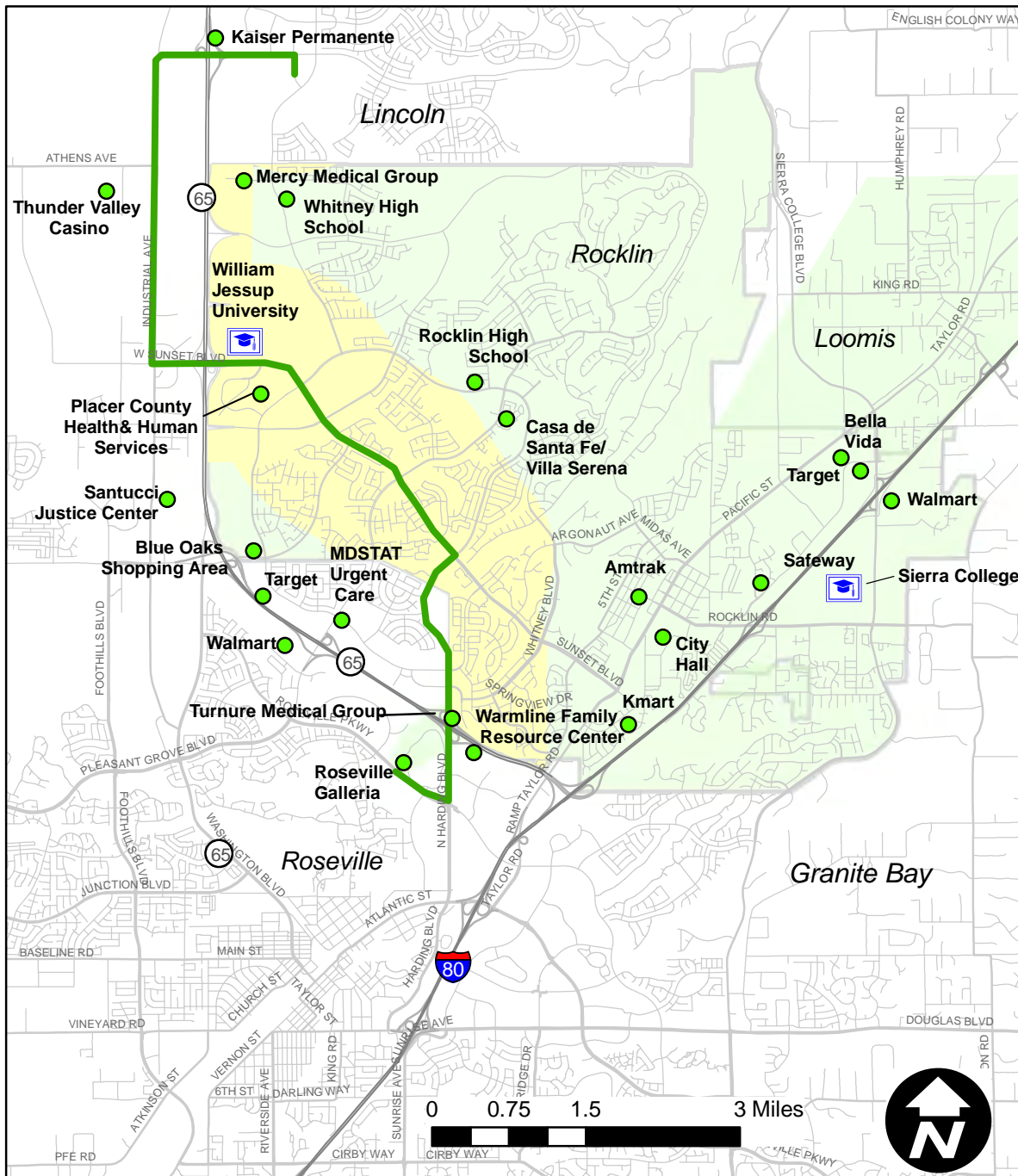
For comparison purposes, the cost and ridership impacts of reducing demand response service to serving only passengers with disabilities within a three-quarter mile radius of the fixed route was analyzed, as summarized in Figure 24. FY 2012-13 DAR data shows that roughly 46 percent of DAR trips are generated by persons with disabilities. A review of DAR pick up and drop off locations shows that many common locations (such as Senior Apartments, Rocklin High School, and Wildcat Apartments) are outside the three-quarter mile boundary. It was estimated that 75 percent of existing DAR pickups/drop offs could be served with the three-quarter mile boundary restriction.

To meet the requirements, only one vehicle would be required to operate within the span of service of the Lincoln-Rocklin-Sierra College Route. However, as this vehicle would still be required to operate during the 14 hour daily service span of the Lincoln –Sierra College Route only 840 vehicle service hours would be saved. This would reduce costs of demand response service by \$51,100 annually. Roughly 6,200 one-way passenger trips would also be lost, compared to a total of 9,500 trips currently. Considering the reduction in fare revenue of \$8,500 per year, the net impact on subsidy requirements would be \$42,600 annually.

Deviated Fixed Route

Another option would be to allow deviations on one of the fixed route alternatives so as to serve a greater number of Rocklin residents. While the existing Lincoln-Rocklin-Sierra College route has some extra time built into the schedule at the Roseville Galleria so as to make timed transfers with other routes, this time cushion can be used to “catch up” if traffic delays the bus. The one bus local route alternative has an extra 10 minutes or so in the schedule while the two bus local route alternative has an

Figure 24
 ADA Paratransit Service Only Comparison



- 3/4 Mile Service Area
- Dial-A-Ride Service Area
- Existing Services
- Point of Interest

extra 20 minutes of layover. Therefore, the deviated fixed route option would work best with the two bus local route option. Under this scenario, DAR would operate as usual and serve as the ADA complementary paratransit service for both the existing Lincoln-Sierra College Route and the new local deviated fixed route. With only 10 additional minutes of running time (while still providing 10 minutes for driver breaks), it would not be feasible to serve more than one deviation per vehicle round trip. In order to limit the number of potential deviations, the deviation service area would be limited to roughly one-third of a mile radius from the local two bus route, as shown in Figure 25.

The potential additional ridership associated with deviations would be limited by the capacity. In addition, not all service times would be convenient for potential deviation requests. Also, the reduced reliability of the route (due to the time needed to serve deviations) would reduce ridership among non-deviation passengers. Overall, this option would only add an estimate 28,100 passenger-trips per year.

Operating costs were estimated using the cost per hour estimate for the Lincoln Sierra College route plus estimated fuel costs for deviations. This equates to \$826,000 annually. Subtracting \$21,100 in fares, the subsidy requirements total \$804,900 per year.

Fixed Route Feeder Van Service to Serve Capital Corridor and Placer Commuter Express at Amtrak Station

As discussed in existing services, Placer Commuter Express (PCE) offers three commuter round trips to downtown Sacramento departing from the Rocklin Amtrak station. Commuters can also catch a Capital Corridor train to Sacramento once a day. One of the top requests from Rocklin residents is to establish feeder bus service from Rocklin neighborhoods to the Amtrak station to eliminate the need to use a private vehicle for commute trips.

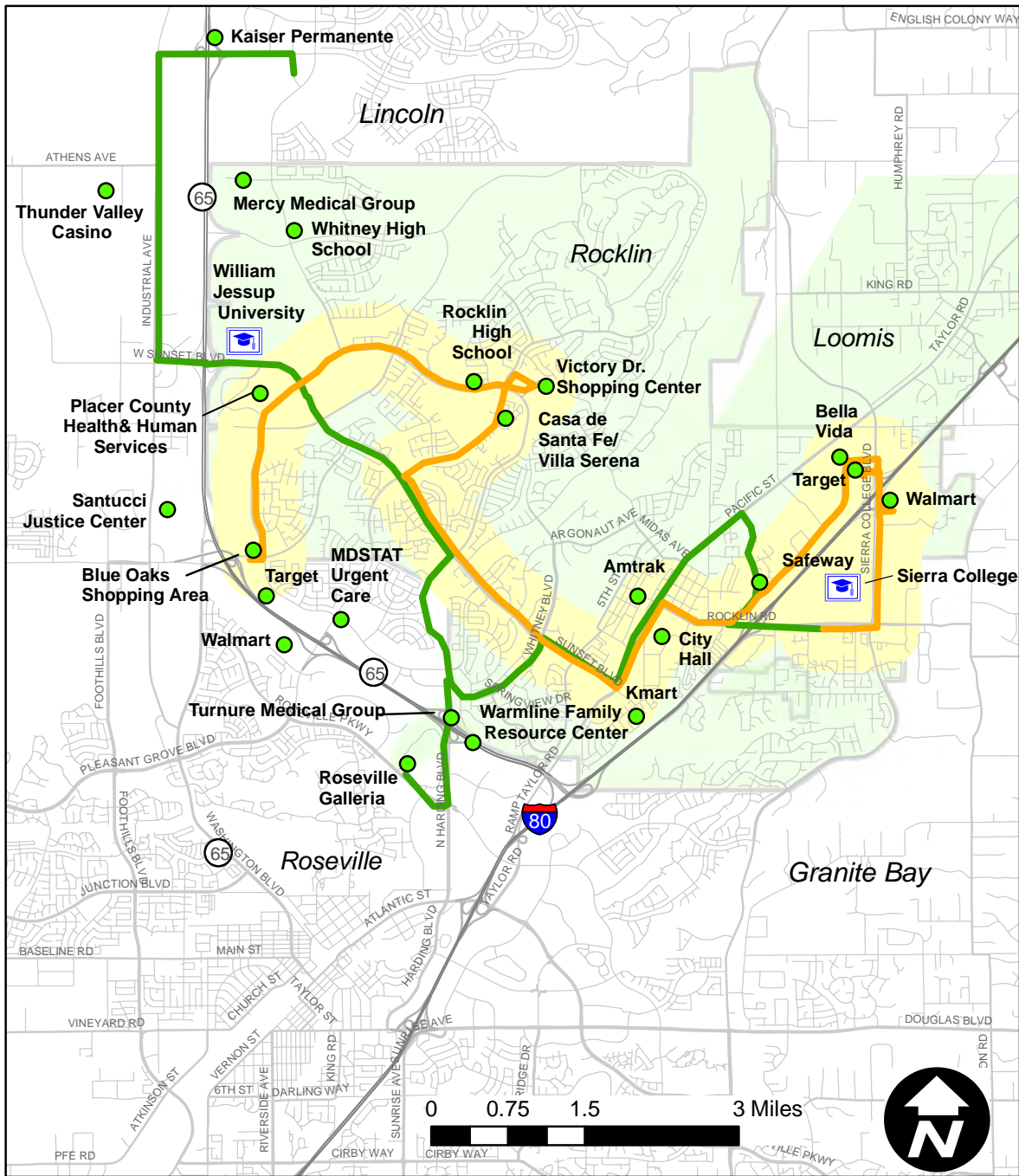
Research demonstrates that there are multiple challenges associated with commuter feeder service. *TCRP Report 55 Guidelines for Enhancing Suburban Mobility Using Public Transportation* reviewed fixed route commuter feeder service in areas such as Walnut Creek and Riverside, as well as in New Jersey. Ridership on these services range from 3 – 11 passengers per run. Services which performed the best were the most competitive with the private automobile. These are primarily areas where there is limited or expensive parking at the regional transit hub or rail stations. With sufficient free parking available, it is not likely that commuters would be willing to add fifteen minutes or more to their commute time by travelling by bus or walking to a bus station, if they have a vehicle available. Commuter feeder routes which serve middle or high income low density neighborhoods have had less success than those serving lower income or higher density neighborhoods.

A good example of this type of service in a nearby community is the Rancho Cordovan. The City Department of Public Works operates two commuter van services funded completely by a local tax initiative.

- ◆ Village Service - A fifteen minute loop from the Zinfandel Sac RT Light Rail Station around the Stone Creek neighborhood. The route runs in opposite directions in the morning as the afternoon. There are 14 scheduled morning departures between 6:00 AM and 9:00 AM and 15 scheduled afternoon departures between 3:30 PM and 7:00 PM.
- ◆ Anatolia Service – Van service is provided for the Anatolia development area. This is a 45 minute loop between the Zinfandel Light Rail Station and the Anatolia Clubhouse. Four round trips are made in the morning and five in the afternoon.

The City of Rancho Cordova contracts with Sac RT to operate the service. The van service is free to Sac RT pass/ticket holders and a \$0.50 base fare is charged for others. Roughly 200 one-way trips per day are provided. This equates to roughly 5.2 passenger trips per run.

Figure 25
Deviated Fixed Route Transit Alternative



- Deviated Fixed Route
- Lincoln Sierra College Route
- 1/3 Mile Deviations Area
- Point of Interest
- Dial-A-Ride Service Area



In Rocklin, a feeder commuter van service would be most attractive to residents if it did not take five to ten minutes more than a comparable trip by private vehicle **and** residents did not have to walk more than a quarter mile to reach the pickup point. A review of Census 2010 Longitudinal Employer Household Dynamics (LEHD) data demonstrates that the largest concentrations of Sacramento employees live in Census Tract 213.09 Northwest Rocklin/Stanford Ranch (685 employees), Census Tract 213.23 Clover Valley Road/Whitney Oaks (445 employees), and Census Tract 211.31 Stanford Ranch South (323 employees). A reasonable fiscally constrained alternative would be to have one van operate a 30 minute loop from the Amtrak station around the neighborhoods with the highest concentration of employed residents. As shown in Figure 26, the fixed route commuter service could travel as follows with set timed stops:

- From the Amtrak station, south on Pacific
- Right on Sunset
- Right on Stanford Ranch
- Left on Crest
- Right on Whitney Blvd
- Left on Argonaut Blvd
- Right on Midas
- Right on Pacific, back to the Amtrak station

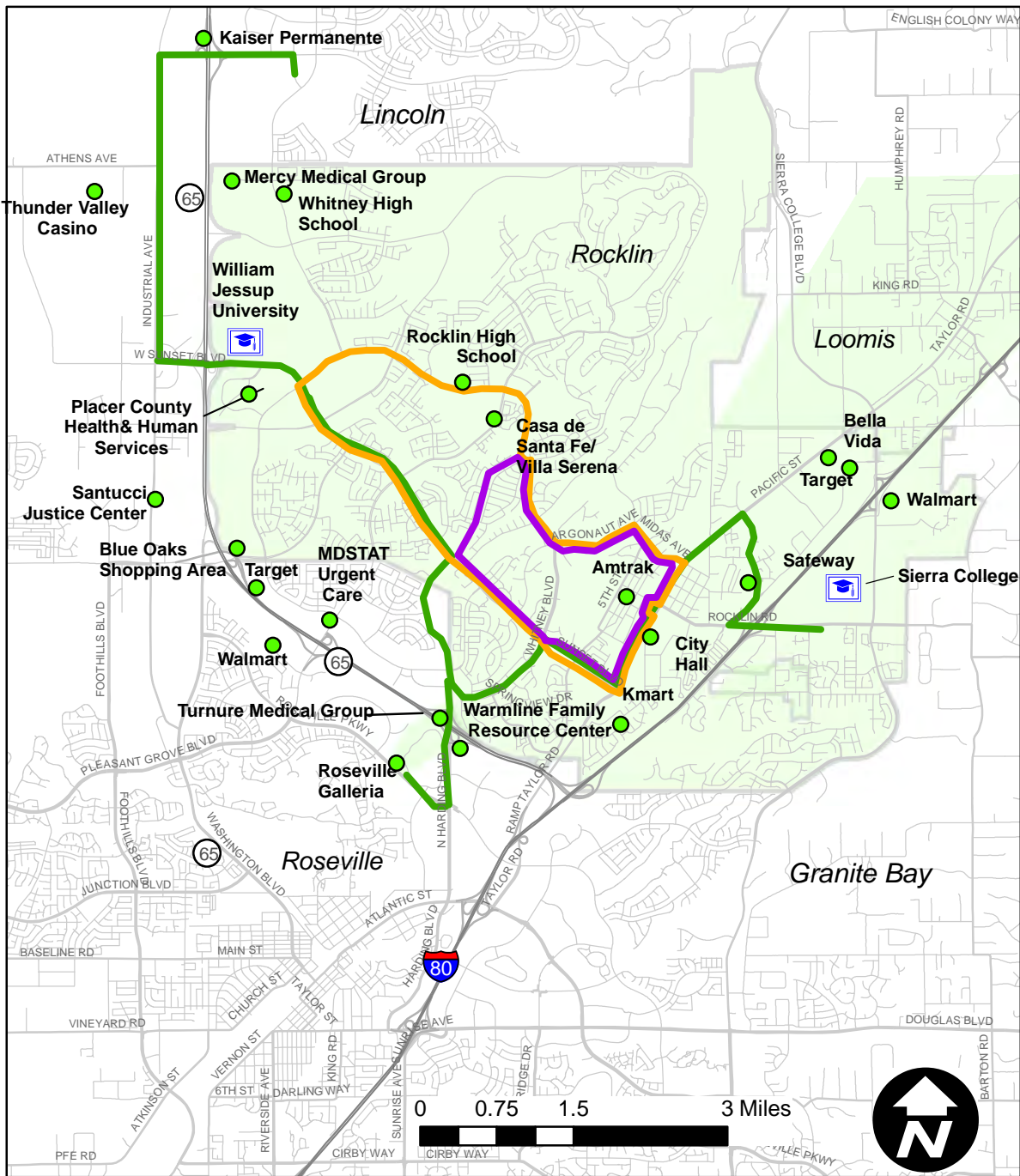
If the van operated two loops in the morning and two in the evening, it could be timed to directly transfer to the one PCE run at 6:26 AM and the 5:35 PM as well as the Capital Corridor train. A total of four loops per day equates to roughly two vehicle service hours per day. As it may be difficult to hire a driver to work only two hours per day (unless driver shifts mix well with other services), it was assumed that the driver should be paid for a total of at least four hours per day. If this is the case, it makes sense to operate another commuter loop. Unfortunately, the two other PCE departure times are less than one half hour apart from each other so it would not be possible to connect directly with the other two PCE buses. However, if a shortened loop of around 15 minutes were operated, connections could be made. In summary, it would be possible to make two half-hour loops and one 15 minute loop in both the morning and evening. This would provide connections to three PCE buses and the Capital Corridor train. A new vehicle(s) would need to be purchased under this alternative.

It was assumed that the City of Rocklin would contract with Placer County to operate this service; therefore the current contract cost for the Lincoln-Sierra College route was applied to estimated service hours to determine approximate operating costs. Total cost of a commuter feeder van service is estimated at \$102,800. Considering the effectiveness of feeder services in other areas, the lack of paid parking requirements, and the fact that the service only supports one rail and one commuter bus round-trip per day, an average of 3 passenger-trips per half-hour run and 1.5 passenger-trips per 15 minute run is estimated, equating to 3,800 transit ridership per year. It would be reasonable to charge fares consistent with existing PCT local fares. This would decrease the operating subsidy to \$99,900.

Taxi Voucher Program

The concept of a “user-side subsidy” program is to direct the public subsidy funding traditionally provided to the transit provider (such as PCT) and instead providing it directly to the transit user, in the form of a voucher that can be used to purchase private transportation services. As these private transportation services are often taxi companies, this concept is also referred to as a “taxi voucher” program. A taxi voucher program would be similar to DAR in the sense that passengers must call for a ride but the City would only be paying for the time trips are actually provided as opposed to an entire service day that a public transit vehicle is in service. Rides could also be provided outside the service hours of normal public transit operation. This alternative would be in addition to existing DAR service.

Figure 26
Commuter Feeder Van Transit Alternative



- Commuter Feeder Van
- Commuter Feeder Van-Reduced
- Dial-A-Ride Service Area
- Existing Services
- Point of Interest

The concept takes advantage of existing private transportation providers and the market process, making transportation affordable and strengthening private companies. User-side subsidy programs are commonly provided for relatively low-demand areas, typical of point-to-point services provided for special user groups (e.g., elderly persons and persons with disabilities). Eligible citizens receive subsidies in the form of coupons or vouchers to purchase transportation services at a discount. The sponsoring agency (city, county, or other group such as a social service agency) redeems the coupons or vouchers at full value, with rates negotiated with private firms in advance. This ensures that the providers receive full fare for their services.

There are three basic approaches to a user-side subsidy program:

- ◆ One is to sell coupons at a discount through approved outlets. For instance, a book of 20 \$1 coupons, for use as payment for rides, might sell for \$10.
- ◆ The second approach is to issue identification cards to eligible users. Upon presentation of the card, the individual pays a fixed price (such as \$1) for the trip, or a variable price based on mileage. The carrier presents the signed voucher to the sponsoring agency for the difference.
- ◆ In the third form, if a taxicab service is used, the user pays a percentage of the metered fare upon presentation of the ID card.

In all cases, it is important to establish rigorous controls and monitoring procedures to address any potential for abuse.

Under this alternative, the City of Rocklin could contract with a local cab company to provide this service. Eligible trips for the program could include: trips to from medical/social service appointment for low income individuals in Rocklin and trips for ADA eligible residents in Rocklin. Medical trips outside of the Rocklin area are currently provided by Health Express. The private company would need to understand ADA requirements and other funding-related guidelines and regulations to provide service, as well as be willing and able to provide a high standard of customer service and to monitor and report on the service. A lack of these abilities has been the downfall of many taxi voucher programs. It would therefore be critical that a clear and precise contract be developed for the voucher program. There would also be City of Rocklin staff time associated with administration of the program and oversight of the contract with the taxi company.

The City of Rocklin could negotiate a flat fare with a local taxi cab company for eligible passenger trips. The average rate for local cab companies in Rocklin is a flag fee of \$4.00 and \$3.00 per mile thereafter. The approximate average mileage of existing DAR requests (including destinations in Roseville) is around three miles per one-way trip. This would equate to a full fare cab ride of \$13.00 per one-way trip.

It is difficult to predict the ridership that would be generated by a taxi voucher program. The most likely users of this program would be households with zero vehicles. In Rocklin, there are roughly 273 households with no vehicle available or roughly 740 people (average household size of 2.71 persons). Adjusting for transit dependency and applying the Rocklin trip rate of 2.12 transit trips per year equates to roughly 5,500 one-way trips annually on a taxi voucher service. This is comparable to ridership of existing taxi voucher programs of roughly 6,000 both ADA and general public trips. If eligible passengers paid \$1.00 per trip, the operating subsidy for this service would be \$66,000. Experience at other agencies indicates up to \$15,000 in management costs for program administration as well as an additional \$6,000 in voucher printing costs. In total the program could cost at least \$92,500 annually with an operating subsidy of \$87,000.

Special Activity Bus/DAR Tripper

Under this option, an additional demand-response activity bus would be made available in Rocklin, one day a week for transportation to special activities such as Senior Lunches at the Senior Café or weekly shopping trips. This additional service would be available upon request only within the normal DAR service hours, one day a week, and would be open to all passengers. It would be intended to serve passengers who can schedule their travel in advance. Reservations would be accepted no more than 14 days in advance, and no less than two days in advance. Service would only be operated if a minimum of five requests are made in advance, though additional rides could be accommodated on a time-available basis on the day of service.

As this alternative is a "by request" type of service, it was assumed that the Special Activity Bus would operate on average four hours per week. If operated by the current DAR contractor, this alternative would cost around \$12,600 annually. The minimum of 5 requests per service day or 10 one-way passenger trips is assumed for ridership, or roughly 520 passenger-trips per year. This alternative does not have to be limited to administration by PCT, but rather could be beneficial for entities providing services to seniors. As such, a Special Activity Bus could be partially funded with non-transit funding such as Area 4 Agency on Aging.

Serve William Jessup University Directly in the Long Term

Currently the Lincoln-Sierra College Route serves William Jessup University on Sunset Avenue, roughly a quarter mile from the main buildings. In the near future, a new roadway will be built connecting Sunset Blvd to the new Whitney Ranch Parkway extension. After completion of the roadway and as the University grows, PCT could serve William Jessup University directly.

Service Alternatives Performance Analysis

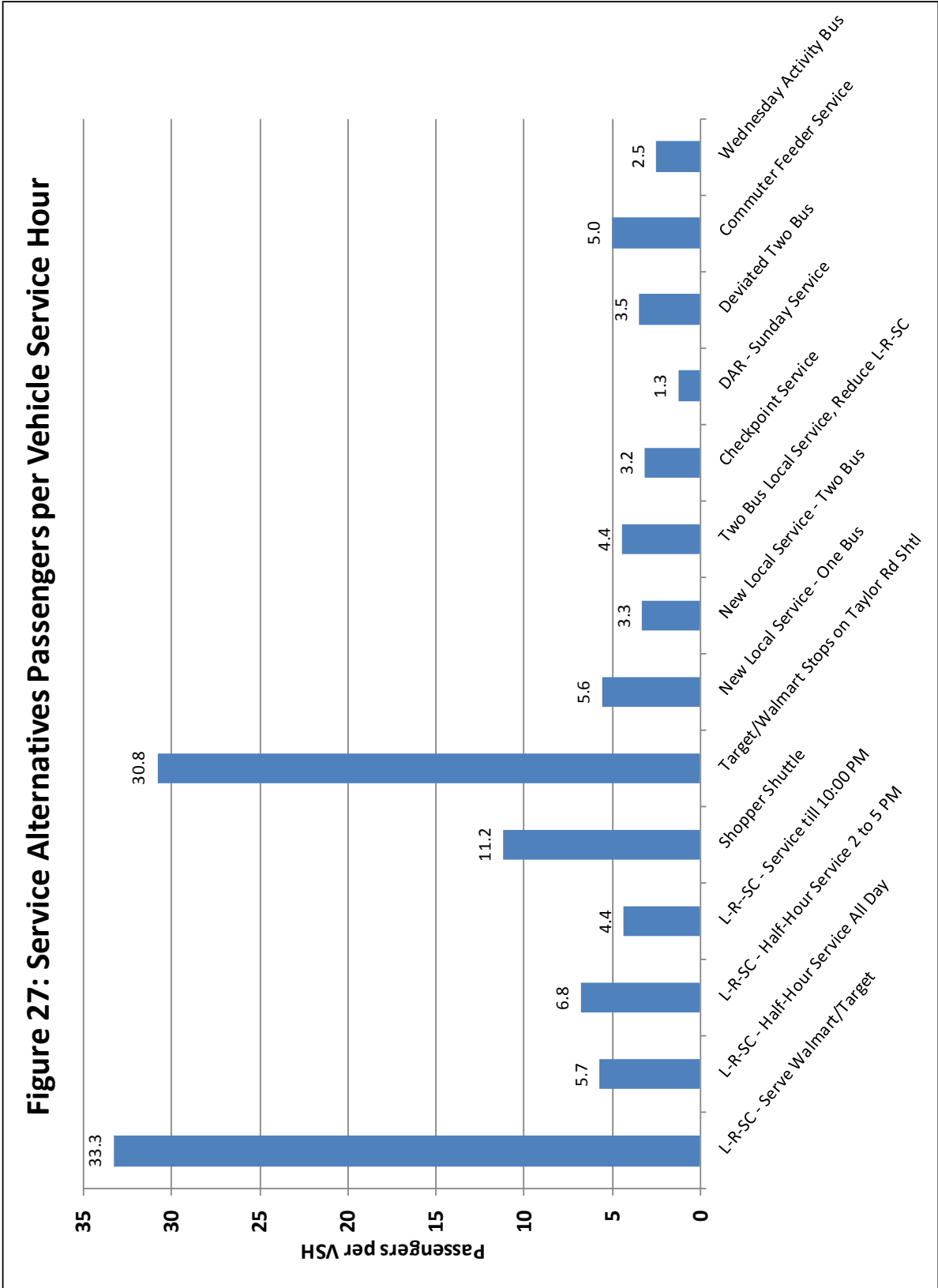
Using the information presented above, a performance analysis was conducted that allows a convenient comparison of the various service alternatives. This performance analysis, based on a series of four standard transit performance measures, is shown in Table 18. Service alternatives which reduce transit service are displayed in italics. A review of this table indicates the following:

- ◆ A key measure of the operating effectiveness of the alternatives is the marginal one-way passenger-trips per vehicle service hour. The existing Rocklin related transit services carries 12.5 one-way passenger-trips per vehicle service hour. The **Passenger-Trips per Vehicle-Hour of Service** ranges from a high of 33.3 for adding service to Rocklin Crossings and Rocklin Commons on the Lincoln – Sierra College route to a low of 1.3 for DAR Sunday Service. These values are also shown in Figure 27. For the option of reducing DAR to ADA paratransit service only, the figure of 7.4 reflects the net reduction in passenger-trips per hour of service reduction. Beyond the Taylor Road Shuttle options, the best performing alternative is half-hourly service on the existing Lincoln-Rocklin-Sierra College Route, at 6.8 passengers per vehicle-hour
- ◆ A key measure of cost efficiency is the **Cost per Passenger-Trip**. A lower value reflects a "better" or more efficient alternative for the options which increase service. These values range from a low of \$1.06 for adding shopping center stops on the Lincoln Sierra College Route to a high of \$30.93 for the Two Bus Local Route. Of the Lincoln-Rocklin-Sierra College route alternatives, Half Hourly Peak Service is the most cost effective and for the new local route alternatives, the one bus option is the most cost effective. For the service reduction alternatives, marginal subsidy per passenger-trip should preferably be a large number, representing a large amount of operating cost saved for every passenger-trip not served. ADA Paratransit Service Only saves \$8.24 per trip.

TABLE 18: Service Alternative Performance Analysis

Destination/Alternative	Performance Measure			
	Marginal Passenger-Trips per Vehicle-Hour	Marginal Cost per Passenger-Trip	Marginal Subsidy per Passenger-Trip	Marginal Farebox Return Ratio
Existing Lincoln - Rocklin - Sierra College Route				
Serve Walmart/Target - Realign Route	33.3	\$1.06	\$0.31	70.7%
Half Hourly Service - All Day Weekdays	5.7	\$17.81	\$17.06	4.2%
Half Hourly Service - 2:00 PM - 5:00 PM	6.8	\$15.01	\$14.26	5.0%
Extend Service until 10:00 PM	4.4	\$23.36	\$22.61	3.2%
Taylor Road Shuttle				
Serve Walmart/Target During Layover	11.2	\$4.32	(\$0.65)	980%
Add Walmart/Target to Existing Route	30.8	\$1.56	(\$0.70)	3750%
New Local Service				
One Bus Option	5.6	\$18.19	\$17.44	4.1%
Two Bus Option	3.3	\$30.93	\$30.18	2.4%
Two-Bus Local Service and Reduction in Lincoln - Rocklin - Sierra College Route	4.4	\$23.07	\$24.59	3.2%
Checkpoint Service	3.2	\$32.26	\$30.89	4.2%
Dial-A-Ride Sunday Service	1.3	\$47.88	\$46.36	3.2%
Reduce DAR to ADA Paratransit Requirements Only	7.4	\$8.24	\$6.87	16.6%
Deviated Fixed Route				
Deviated Two Bus Option	3.5	\$29.40	\$28.64	2.6%
Commuter Feeder Service	5.0	\$27.05	\$26.29	2.8%
Taxi Voucher Program	--	\$16.82	\$15.82	5.9%
Special Activity Bus/DAR Tripper	2.5	\$24.23	\$22.88	5.6%

Note: Italics indicate alternative reduces service.

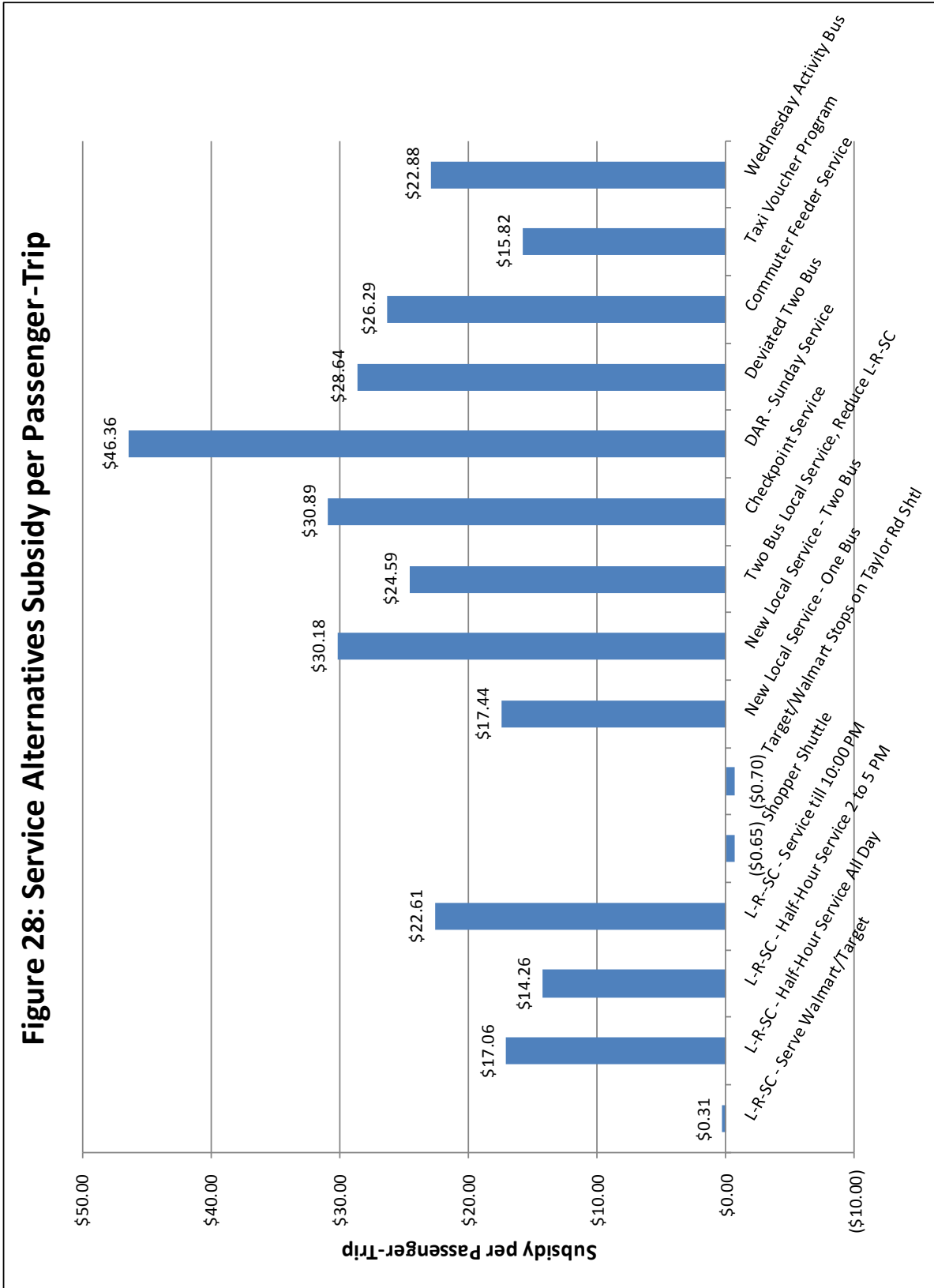


- ◆ Perhaps the best overall measure of efficiency is the **Subsidy per Passenger-Trip**. This directly relates the key public input (funding) with the key output of a transit service (passenger-trips). As also indicated in Figure 28, the best increase service alternative by this measure is adding shopping center stops to the Taylor Road Shuttle, which would actually reduce subsidy by \$0.70 per new passenger-trips (indicating that additional fare revenues exceed the modest incremental operating costs). On the other extreme, the Two Bus Local Route would require \$30.18 per passenger-trip.
- ◆ Finally, the **Marginal Farebox Return Ratio** is calculated as the ratio of farebox revenues to operating costs. The “best” alternatives by this measure are serving the new shopping centers along Sierra College Boulevard, as farebox revenues exceed operating costs. Of the other options that increase service, none exceed a 6 percent farebox return ratio.

Overall, this performance analysis indicates the following:

- Providing service to the Rocklin Commons and Rocklin Crossings shopping center are the best options, no matter how measured. Realigning the Lincoln Sierra College Route to serve the shopping centers would produce the greatest ridership. Adding stops to the existing Taylor Road Shuttle is the option that performs better, compared with operating a separate Shopper Shuttle using this vehicle during the layover period.
- Significantly, none of the other service expansion alternatives achieve the adopted minimum farebox return ratio of 13.5 percent, on a marginal basis.
- A taxi voucher program would perform slightly better than the other traditional service expansion alternatives, as indicated by the lower subsidy per passenger-trip and higher farebox return ratio.
- Beyond the serving Walmart/Target options, the “best” bus service expansion alternative is half-hourly peak service on the existing Lincoln-Rocklin-Sierra College Route.
- Of those alternatives that would expand scheduled bus service into new Rocklin neighborhoods, the best alternative is the One-Bus New Local Route option. Of note, this option performs better than the other option to add a net of one bus to serve new neighborhoods (the Two Bus Local Route with Reduction in Lincoln-Rocklin-Sierra College).
- The only option considered that would reduce service (replacing existing Dial-A-Ride with ADA Complementary Service) would only save a relatively modest \$6.87 in subsidy per passenger-trip eliminated.

Figure 28: Service Alternatives Subsidy per Passenger-Trip



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One of the primary objectives of this study was to explore options for expanding local fixed route service to more Rocklin neighborhoods. As shown in the previous chapters, however, these alternatives do not perform well in comparison with transit industry standards. In general, this is due to the fact that it is difficult to cost-effectively serve a suburban area such as Rocklin with public transit. As a result, this study does not recommend new bus routes but rather recommends adjustments to existing routes that will serve the new major transit activity centers. Currently the Lincoln-Sierra College Route does not serve three major commercial and employment centers: Rocklin Commons, Rocklin Crossings, and the Blue Oaks Shopping Center. The need for service to these areas was identified in the public/stakeholder input portion of the study. The alternatives analysis demonstrated that by serving Rocklin Crossings/Commons not only will many of these needs be met but the proposed alternatives will boost overall ridership and farebox ratio with relatively low marginal operating costs.

At present, substantially expanding transit services to serve outlying neighborhoods would not be in line with City of Rocklin goals. This is not to say that these alternatives should be dismissed completely. As the City of Rocklin continues to grow and as conditions change, options such as those evaluated in Chapter 6 should continue to be considered as part of future transit planning efforts such as S RTP updates.

It should also be noted that these recommended strategies are intended to provide guidance for the City of Rocklin, PCTPA and PCT staff for implementation of transit improvements and evaluation of unmet transit needs. These recommendations are not meant to commit or constrain decision makers in the development of future services, budgets and establishment of policies.

SERVICE PLAN

So long as it can be operated while maintaining adequate on-time performance, realigning the Lincoln – Sierra College Route along Granite Drive to serve the Rocklin Crossings and Commons shopping centers is a recommended strategy. In addition, it is recommended that the Taylor Road Shuttle be revised to serve the Rocklin Crossings and Rocklin Commons shopping centers as the route travels along Sierra College Boulevard.

The consultant has developed the following detailed strategies. Ridership, fare revenue and cost estimates are presented in Table 19.

Lincoln – Sierra College Route – Realign Route along Granite Drive to Serve New Shopping Centers

The Lincoln – Sierra College route is the primary public transit route for Rocklin residents. It connects residents with important local goods and services as well as to regional transit services. Realigning this route to serve one of the largest new commercial centers in Rocklin will serve the most Rocklin residents as well as produce the greatest ridership. The realigned route would travel east along Granite Drive (stop behind Target) to Sierra College Boulevard (stop at Walmart) and Rocklin Road to Sierra College (Figure 18). An example schedule is presented in Table 20.

Although actual total running time of the route would not change from the existing configuration, this element would add roughly 1.8 miles per one-way trip for a total of 14,600 vehicle miles for the year or an additional \$19,100 in total operating costs. However, by serving the Rocklin Commons and Rocklin Crossings shopping centers, the Lincoln – Sierra College Route could potentially increase ridership by 17,970 one-way passenger trips per year. The fare revenue of \$13,500 generated by the additional

ridership would reduce costs to an annual increase in operating subsidy of \$5,600. The cost sharing agreement between the City of Rocklin and Placer County for the operation of the Lincoln – Sierra College Route is based in the number of vehicle hours in Rocklin. As total vehicle service hours will not change as part of the plan element, Rocklin's costs will only increase slightly. In the short term, Rocklin's cost per hour would not change but over time Placer County's overall operating cost per hour would increase as more miles are being operated. This in turn would have a small impact on Rocklin's transit costs.

TABLE 19: Rocklin Community Transit Plan

	Projected FY14-15	Projected FY15-16	Projected FY16-17	Projected FY17-18	Projected FY 18-19
Annual Ridership					
Lincoln - Sierra College - Serve Walmart/Target	17,970	18,400	18,900	19,400	19,900
Taylor Road Shuttle - Add Walmart/Target Stops	3,120	3,200	3,300	3,400	3,500
<i>Total</i>	<i>21,090</i>	<i>21,600</i>	<i>22,200</i>	<i>22,800</i>	<i>23,400</i>
Annual Fare Revenue					
Lincoln - Sierra College - Serve Walmart/Target	\$13,500	\$13,855	\$14,220	\$14,595	\$14,979
Taylor Road Shuttle - Add Walmart/Target Stops	\$2,300	\$2,361	\$2,423	\$2,487	\$2,552
<i>Total</i>	<i>\$15,800</i>	<i>\$16,216</i>	<i>\$16,643</i>	<i>\$17,081</i>	<i>\$17,531</i>
Annual Rocklin Operating Subsidy					
Lincoln - Sierra College - Serve Walmart/Target	\$0	\$0	\$0	\$0	\$0
Taylor Road Shuttle - Add Walmart/Target Stops	\$13,900	\$14,386	\$14,826	\$15,279	\$15,747
<i>Total</i>	<i>\$13,900</i>	<i>\$14,386</i>	<i>\$14,826</i>	<i>\$15,279</i>	<i>\$15,747</i>
Annual PCT Operating Subsidy					
Lincoln - Sierra College - Serve Walmart/Target	\$5,600	\$5,818	\$6,043	\$6,276	\$6,518
Taylor Road Shuttle - Add Walmart/Target Stops	(\$2,100)	(\$2,155)	(\$2,211)	(\$2,268)	(\$2,327)
<i>Total</i>	<i>\$3,500</i>	<i>\$3,663</i>	<i>\$3,832</i>	<i>\$4,008</i>	<i>\$4,191</i>
Capital Plan					
1 Bus Shelter	\$10,000	\$0	\$0	\$0	\$0
1 Bus Stop with Pullout	\$10,000	\$0	\$0	\$0	\$0
<i>Subtotal</i>	<i>\$20,000</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Priority Two					
Bus Shelter (2)	\$20,000	\$0	\$0	\$0	\$0

Taylor Road Shuttle - Add Stops at the New Shopping Centers to the Existing Route in Both Directions

If the Lincoln-Sierra College Route begins service to Rocklin Crossings and Rocklin Commons, there would be little need for Rocklin residents wishing to travel to Walmart/Target to transfer to the Taylor Road Shuttle. However, there is still a desire for residents of Loomis, Penryn, Auburn and Newcastle to reach these new shopping centers. Surveys on the Taylor Road Shuttle conducted by Placer County demonstrated that the revised Taylor Road schedule to serve Walmart/Target would negatively impact roughly two passenger-trips per day. In the alternatives analysis, it was estimated that by serving Walmart/Target, the Taylor Road Shuttle could increase ridership by roughly 12 passenger-trips per day (under the assumption that the Lincoln-Sierra College Route also serves Walmart/Target). Therefore, it is recommended that the Taylor Road Shuttle service be adjusted to serve Walmart/Target in both directions. An example schedule is presented in Table 21. As described in the alternatives section, the

TABLE 20: Revised Schedule for Lincoln - Sierra College Route

Bus Stop	To Sierra College														
	6:00 AM	--	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM
Lincoln - 3rd & F															
Twelve Bridges Library															
Thunder Valley Casino															
Sunset/Atherton															
Sunset/W Oaks															
Sunset/Pebble Creek															
Stanford Ranch/Fairway															
Galleria															
S Whitney/Lincoln															
Sunset/S Whitney															
Pacific/Sunset K-Mart															
Pacific/Pine															
Pacific/Midas															
Pacific/Sierra Meadows															
Sierra Meadows															
Granite Dr															
Target (Granite Dr.)															
Walmart															
Sierra College															
Bus Stop	To Lincoln														
Sierra College															
Walmart															
Target (Granite Dr.)															
Granite Dr															
AMF Rocklin Lanes															
Sierra Meadows/Pacific															
Pacific/Midas															
Pacific/Pine															
Pacific/Sunset Les Schwab															
S Whitney/Sunset															
S Whitney/Lincoln															
Galleria															
Stanford Ranch/Fairway															
Sunset/Pebble Creek Bel Air															
Sunset/W Oaks															
Sunset/Atherton															
Thunder Valley Casino															
Twelve Bridges Library															
Lincoln - 3rd & F															

revised Taylor Road Shuttle service would include stops at Rocklin Commons and Rocklin Crossings in both directions as well as include timed transfers to Auburn Transit and PCT services (Highway 49 and Lincoln- Sierra College Route). This plan element would increase ridership by 3,120 one-way passenger trips annually. As fare revenues (\$2,300) would exceed the additional operating cost (\$200) of this plan element, Placer County’s costs would not be increased by the implementation of this plan element.

TABLE 21: Taylor Road Shuttle Plan Element Revised Schedule

Bus Stop	Westbound						
Auburn Station ⁽¹⁾	6:00 AM	8:00 AM	10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM
Ophir Park 'n' Ride	6:05 AM	8:05 AM	10:05 AM	12:05 PM	2:05 PM	4:05 PM	6:05 PM
Newcastle/Taylor Rd	6:07 AM	8:07 AM	10:07 AM	12:07 PM	2:07 PM	4:07 PM	6:07 PM
Penryn	6:15 AM	8:15 AM	10:15 AM	12:15 PM	2:15 PM	4:15 PM	6:15 PM
Loomis	6:20 AM	8:20 AM	10:20 AM	12:20 PM	2:20 PM	4:20 PM	6:20 PM
Target	6:40 AM	8:40 AM	10:40 AM	12:40 PM	2:40 PM	4:40 PM	6:40 PM
Walmart	6:45 AM	8:45 AM	10:45 AM	12:45 PM	2:45 PM	4:45 PM	6:45 PM
Sierra College ⁽²⁾	6:50 AM	8:50 AM	10:50 AM	12:50 PM	2:50 PM	4:50 PM	6:50 PM
	Eastbound						
Sierra College ⁽³⁾	7:05 AM	9:05 AM	11:05 AM	1:05 PM	3:05 PM	5:05 PM	7:05 PM
Walmart	7:10 AM	9:10 AM	11:10 AM	1:10 PM	3:10 PM	5:10 PM	7:10 PM
Target	7:15 AM	9:15 AM	11:15 AM	1:15 PM	3:15 PM	5:15 PM	7:15 PM
Loomis	7:35 AM	9:35 AM	11:35 AM	1:35 PM	3:35 PM	5:35 PM	7:35 PM
Penryn	7:40 AM	9:40 AM	11:40 AM	1:40 PM	3:40 PM	5:40 PM	7:40 PM
Newcastle/Taylor Rd	7:47 AM	9:47 AM	11:47 AM	1:47 PM	3:47 PM	5:47 PM	7:47 PM
Ophir Park 'n' Ride	7:50 AM	9:50 AM	11:50 AM	1:50 PM	3:50 PM	5:50 PM	7:50 PM
Auburn Station ⁽⁴⁾	7:55 AM	9:55 AM	11:55 AM	1:55 PM	3:55 PM	5:55 PM	7:55 PM

Note 1: Transfer from PCT Hwy 49, Auburn Transit
 Note 2: Transfer to Lincoln - Sierra College Saturday Times
 Note 3: Transfer from Lincoln - Sierra College
 Note 4: Transfer to PCT Hwy 49, Auburn Transit

As noted in the alternatives analysis, the City of Rocklin does not pay for the Taylor Road Shuttle as the only stop in Rocklin is at Sierra College; however, the new Taylor Road Shuttle plan element will benefit the City of Rocklin in the following ways:

- ◆ Add two more stops in Rocklin
- ◆ Encourage more residents along the Taylor Road corridor to shop at the new Rocklin Commons/Crossings shopping centers in Rocklin by providing an important transit connection

Therefore, it is recommended that the agreement between the City of Rocklin and Placer County be amended to include the Taylor Road Shuttle service. The Taylor Road Shuttle Plan element will require roughly an additional 2,430 vehicle service miles and 337 vehicle service hours per year. Applying MV’s contract per hour/mile rate with Placer County for the operation of the Taylor Road Shuttle, increased for inflation, equates to a cost of \$16,200. After subtracting the fare revenue generated by the additional passengers (\$2,300), Rocklin’s operating subsidy or what Rocklin would be responsible for would be \$13,900.

Other Plan Elements

Special Activity Bus

A special activity bus for Rocklin residents should be considered one day per week using non-transit funding, such as Area 4 Agency on Aging. The service would be by reservation only and could fill the need for groups such as seniors to access senior nutrition programs, shopping, or movie outings.

CAPITAL PLAN

The above service plan will require the addition and relocation of some bus stops. Basic planning level improvement recommendations are identified below. More detailed engineering and cost analysis will be required prior implementation.

Taylor Road Shuttle

At Rocklin Crossings (Walmart), the Taylor Road Shuttle could use the existing bus stop. There is no existing bus stop inside the Rocklin Commons (Target). The Taylor Road Shuttle uses small buses so there are a few potential options for serving Target.

- ◆ Place a bus stop in the Park and Ride lot south of Commons Drive at the entrance to the shopping center.
 - Advantage – Shorter running time
 - Disadvantage – Longer walk to stores for passengers
- ◆ Construct a bus stop pullout along the street bordering the north edge of Target. The bus could then loop back around on Granite Drive back to Sierra College Boulevard
 - Advantage – Shorter walk to stores for passengers
 - Disadvantage – Potentially greater costs
- ◆ Use the existing bus stop on Granite Drive behind Target. To access this stop, the bus would be required to drive through the parking area via Commons Drive but not drop off passengers until the bus has turned right on to Granite Drive to the existing bus stop. The bus would then loop back around to Sierra College Boulevard.
 - Advantage – No new bus stop required
 - Disadvantage – Increased run time and longer walk for passengers to stores.
- ◆ Negotiate with Target to eliminate a few parking spaces and construct a bus stop in the eastern portion of the parking lot.
 - Advantage – Central location for bus and passengers
 - Disadvantage – Cost and elimination of parking

Given the high level of ridership generated by these two stops, it is recommended that a shelter be constructed for the Rocklin Commons stop.

Lincoln – Sierra College Route

Under this plan element, some bus stops will need to be relocated to match the new route realignment as follows:

- ◆ Relocate the existing bus stops in front of Safeway and in front of the old Jaspers (currently located south of Sierra Meadows Drive) to the north of Sierra Meadows Drive, as these stops will no longer be accessed by the realigned Lincoln-Sierra College Route. It may be possible to use existing

shoulders and only require modified striping. Another option would be to relocate the bus stops to along Sierra Meadows Drive just north of Granite Drive, adjacent to two commercial parcels.

- ◆ Use the existing bus stop for Target on the east side of Granite Drive and construct a new bus stop on existing right of way on the southbound Granite Drive near Commons Drive with appropriate crosswalks/sidewalks for the westbound Lincoln – Sierra College bus.
- ◆ Use the existing bus stop at Walmart.

Long – Term

It is also recommended that the City work with Placer County to identify needed improvements to all Rocklin bus stops. Many stops lack amenities such as lighting, benches, and shelters. During times of inclement or hot weather, shelters are an important amenity. Additionally, lighting can provide safety, particularly for children or college students. Bus stop amenities are an important part of providing good customer service which in turn increases ridership.

FINANCIAL PLAN

Table 19 presents estimated additional costs for the City of Rocklin and PCT for the different plan elements for a five year period. Both estimated service plan and capital plan element costs are presented. Operating plan element costs for Rocklin will be from \$10,000 to \$15,000 per year while capital costs could total as much as \$20,000 for the entire 5 year period; however capital costs will depend on the degree of required improvements. Potential funding sources include:

- ◆ TDA funds could be used to pay for both operating and capital elements.
- ◆ Proposition 1B Public Transportation Modernization, Improvement, and Service Enhancement Account Program PTMISEA and Transit System Safety, Security & Disaster Response Account (TSSSDRA) for capital improvements.
- ◆ Low Carbon Transit Operations Program (LCTOP) Funds – New funding source available to transit projects which enhance or increase transit mode share and reduce Greenhouse Gas Emissions. Available for both operating and capital projects.

IMPLEMENTATION PLAN

The following outlines an implementation plan for the recommended strategies to improve mobility in Rocklin. The responsible agency/agencies are identified in parenthesis.

FY 2014-15

- ◆ Accept the Rocklin Community Transit Plan as a basis for evaluating unmet transit needs for Rocklin. (PCTPA)
- ◆ Work cooperatively to determine an implementation schedule for service recommendations, including necessary operating, schedule, capital, marketing, and funding elements. (City of Rocklin, Placer County)

FY 2015-16

- ◆ Amend contract between Placer County and the City of Rocklin to reflect the agreed upon implementation schedule for the Lincoln Sierra College Route and Taylor Road Shuttle operating, capital, schedule, marketing and funding elements. (City of Rocklin and Placer County)

Summary of Financial Impacts

- ◆ Annual Operating Subsidy Impact to Placer County - \$3,500
- ◆ Annual Operating Subsidy Impact to Rocklin - \$13,900 (due to new cost sharing agreement for Taylor Road Shuttle)
- ◆ Approximate Capital Cost Impact - \$20,000
- ◆ Annual Increase in Ridership – 21,090 one-way passenger trips

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