Lake Transit

Transit Development Plan & Marketing Plan

For Lake County/
City Area Planning Council

Final Report

June 2015

mobility PLANNERS

TRANSIT marketing LLC

In coordination with

AMMA TRANSIT PLANNING

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Executive Summary

Lake Transit Authority (LTA) last developed a Transit Development Plan (TDP) in September 2008. The primary purpose of the TDP is to guide the development of Lake Transit services in order to provide improved mobility for Lake County residents and visitors over the next five years. In this TDP update, a Marketing Plan has been added. This is a summary of the Transit Development Plan and Marketing Plan.

Recent History of Lake Transit

There have been a number of changes to Lake Transit services over the past several years. These changes provide an important context in order to understand the fluctuations in performance as shown in Figure ES-1.

Fares were increased in February 2012 toward the end of FY 2011/12. The overall base local fare was increased to $1.25 and the regional fares for seniors and disabled individuals were increased to $2.25. After a public hearing on February 12, 2014, additional fare changes were approved by the LTA Board. A key change was the reduction of the regional route discount fare for passengers who are elderly or have disabilities from $2.25 to $1.50. $1.50 was the discounted fare for regional routes prior to the February 2012 fare increase.

Labor strife issues led to the disruption of Lake Transit service in August 2013 and service resumed on September 3rd, 2013.

Expanded services were implemented in the Clearlake area on September 23rd, 2013 with three daytime routes and two late evening routes that extended hours to 11:00 pm. An evening Dial-A-Ride service, the Nite Rider, was implemented in the Lakeport area in May 2014.

Gas prices have fluctuated greatly. High gas prices helped to increase ridership in 2011 and 2012. Lower gas prices have appear to be a contributing factor to dampening ridership growth recently.

Land use changes such as the re-location of Mendocino College added running time without adjustments being made to the schedule. A detailed evaluation of schedule adherence in February 2014 found that buses were on-time at scheduled timepoints just 66% of the time compared to the 95% standard adopted as part of the 2008 TDP. The analysis also found that 7% of buses departed before the published schedule timepoint.

Figure ES-1 Systemwide Lake Transit Performance

	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15*
Base Statistics (Annual)	Actual	Actual	Actual	Actual	Projected
Ridership	326,874	395,013	362,217	294,761	335,328
Service Hours	38,566	38,897	38,530	40,900	46,704
Service Miles	827,853	837,584	825,967	824,040	917,392
Fare Revenue	$ 462,095	$ 558,762	$ 581,060	$ 512,638	$ 562,328
Operating Costs	$ 2,307,731	$ 2,443,883	$ 2,464,431	$ 2,595,824	$ 2,932,772
Performance					
Passengers/Service Hour	8.48	10.16	9.40	7.21	7.18
Passenger/Service Mile	0.395	0.472	0.439	0.358	0.366
Average Fare/Passenger	$ 1.41	$ 1.41	$ 1.60	$ 1.74	$ 1.68
Farebox Recovery	20.0%	22.9%	23.6%	19.7%	19.2%
Cost/Service Hour	$ 59.84	$ 62.83	$ 63.96	$ 63.47	$ 62.79
Cost/Passenger Trip	$ 7.06	$ 6.19	$ 6.80	$ 8.81	$ 8.75
Subsidy/Passenger Trip	$ 5.65	$ 4.77	$ 5.20	$ 7.07	$ 7.07

*Annualized based on Ist quarter 2014/15 statistics

All of these factors resulted in a projected increase in service supply from 38,566 vehicle service hours in FY 2010/11 to a projected total of 46,704 in FY 2014/15. Ridership peaked at 395,013 in FY 2011/12, but declined 25% to 294,761 in FY 2013/14 after the labor strife and service disruption. In FY 2014/15, based on the first quarter 2014/15 results, ridership is expected to increase back to about 335,000, just above the ridership in FY 2010/11. Despite an increase in fares, fare revenues are projected to be at the same level in FY 2014/15 as they were in FY 2011/12, but with a higher fare per passenger of $1.68. Cost containment has been excellent with the cost per vehicle service hour increasing at less than the California Consumer Price Index.

Overall, Lake Transit has gone through some difficult times in the past couple of years. However, there have been some significant improvements in mobility options implemented with JARC funding which the first three quarters of 2014/15 performance results indicate are starting to pay off with ridership growth. Expanded service on Routes 1/8 with additional runs to the North Shore and service until 11:00 pm was implementedin January 2015. Efforts have been made to improve schedule adherence as expanded service is implemented.

Key Challenges Over the Next Five Years

There has been positive momentum for Lake Transit in FY 2014/15. The Transit Development Plan and Marketing Plan is meant to provide a proactive framework for addressing the important challenges facing Lake Transit from now through FY 2019/20.

The greatest ongoing challenge is the need for public transportation in Lake County. An onboard survey of passengers found that nearly half (47%) have incomes of less than $10,000

per year. Another 23% have incomes between $10,000 and $14,999. Of the adults riding Lake Transit, 55% have no license and no car and another 25% have a license and no car.

44% of the Lake Transit ridership depends on the service to get to and from school or work. Another 17% use Lake Transit to get to medical appointments. 26% of the riders surveyed utilized the service to get to and from shopping.

Like many other counties, Lake County is getting grayer. The age cohort between 65 and 74 years old is expected to increase by 65% between 2010 and 2020 and residents 75-84 are expected to increase by 33%. As the aging population is no longer able to drive, some seniors will increasingly depend on Lake Transit fixed route and demand response services for their daily mobility.

A second major challenge will be to maintain the momentum of the service level improvements that have been enabled by the JARC grant. The JARC funding ended in FY 2014/15, and the challenge will be to sustain those expanded services that have demonstrated sufficient ridership response to warrant continuation of the service improvement. As mentioned previously, there has been positive momentum in FY 2014/15 and being able to retain expanded services will be part of the challenge.

A third primary challenge will be recovering ridership that was lost in FY 2013/14. Ridership dropped by 25% between FY 2011/12 and FY 2013/14. Gaining ridership back will require improved customer satisfaction, service reliability, and services that meet the needs of a very transit dependent population. Falling gas prices will make the task even more challenging. An attribute that Lake Transit can control is providing dependable transportation for those who need it. There is significant work to be done in providing improved service reliability. Services need to be designed with the customer in mind and drivers need to be trained and monitored to ensure that buses do not leave early from a timepoint.

In FY 2013/14, Lake Transit relied on federal funding for 31% of its operating revenues. Federal funding is derived from the federal gas tax that funds both the Highway Trust Fund and the Mass Transit Account. With Congressional inaction in finding a sustainable solution to dwindling resources, both the Mass Transit Account and Highway Trust Fund will run out of funding in May 2015. How and if Congress addresses this issue may or may not impact Lake Transit, but dealing with the uncertainty of federal funding could be a prevalent challenge over the next five years.

Finally, the Transit Manager has worked for Lake Transit since 1996. Towards the end of the TDP five-year planning horizon, it is possible that the Transit Manager will retire. There is a need for a succession plan from the existing arrangement when the Transit Manager retires or is no longer available to contract with Lake Transit to provide transit management services.

The subsequent chapters of the TDP and Marketing Plan are all intended to address one or more of the above challenges.

Financial Framework

In order to address the financial challenges, three scenarios were developed to provide a bracketing of possible financial outcomes. The assumptions for each scenario are detailed in Chapter 11.

Pessimistic Scenario: The assumptions utilized in the pessimistic scenario are as the name implies. The assumptions are not the worst-case scenario, but provide a reasonable lower end bracket for operating revenues.

Best Estimate Scenario: The best estimate scenario would maximize the use of transit funding sources to achieve the highest potential transit service levels in Lake County. The best estimate scenario uses assumptions based on currently available information or historical precedent.

Maximum Funding Scenario: The maximum funding scenario assumes that both federal, state and LTF funding assumptions turn out to be better than expected.

A summary of the outcomes of the financial scenarios is shown in Figure ES-2. The Best Estimate Scenario indicates that operating revenues will remain generally flat between FY 2015/16 and FY 2019/20 at around $2.9 to $3.0 million per year. JARC funding will end in FY 2014/15, which is responsible for a drop in federal funding in the table. Expected growth in Local Transportation Funds from the sales tax are expected to make up some of the difference as is growth in ridership and fare revenues. However, the Best Estimate Scenario projection is that operating revenues will be $2.86 million in FY 2015/16 and will be just $3.10 million in FY 2019/20.

At the same time, operating costs per vehicle service hour are expected to increase to $69.82 per vehicle service hour in FY 2015/16 due to the decline in vehicle service hour, and increased costs for mobility management, and facility security. In FY 2019/20, with anticipated increases in administrative costs, the cost per vehicle service hour could climb to $80 per vehicle service hour.

A primary conclusion from the evaluation of the financial scenarios is that the Best Estimate Scenario, with the revenue sources that are known to be available in 2015, will not be sufficient to retain the service improvements that the JARC funding has enabled. There will be a need to reduce vehicle service hours from approximately 47,000 to 42,000 vehicle service hours in FY 2015/16, a reduction of 5,000 vehicle service hours. It points to the need to pursue as many of the Maximum Funding Scenario revenue sources as possible.

In 2015/16, the Best Estimate Scenario would require the following service reduction to achieve the 5,000 vehicle service hour reduction:

- Route 5 cuts the last two runs of the evening, ending service at 9 pm
- Elimination of Route 12 evening service after 9 pm
- Elimination of Route 12 Saturday service
- Elimination of Nite Rider service
- Reduction of Clearlake Dial-A-Ride service to ADA Paratransit and seniors 65 and older
- Reduction of Lakeport Dial-A-Ride service to ADA Paratransit and seniors 65 and older
- Reduction of Route 1 and 8 late evening runs, eliminating the last two runs in each direction.
- Reduction of a deadheading run on Route 4

Figure ES-2 Financial Scenario Summary

	FY 2014/15 Projected	FY 15-16 Projected	FY 16-17 Projected	FY 17-18 Projected	FY 18-19 Projected	FY 19-20 Projected
1. Fares						
Pessimistic		$ 513,619	$ 506,239	$ 498,969	$ 491,808	$ 484,755
Best Estimate	$ 555,299	$ 551,738	$ 554,112	$ 562,405	$ 577,041	$ 592,072
Maximum Funding		$ 594,947	$ 699,660	$ 856,157	$ 936,490	$ 1,022,854
2. Partnershps						
Pessimistic		$ 69,031	$ 73,235	$ 75,432	$ 77,695	$ 80,026
Best Estimate	$ 71,102	$ 71,102	$ 73,235	$ 75,432	$ 77,695	$ 80,026
Maximum Funding		$ 96,747	$ 146,584	$ 196,664	$ 231,997	$ 267,597
3. Local/State						
Pessimistic		$ 926,095	$ 953,496	$ 975,813	$ 998,378	$ 1,021,410
Best Estimate	$ 1,373,756	$ 1,505,339	$ 1,556,015	$ 1,608,071	$ 1,661,529	$ 1,716,656
Maximum Funding		$ 1,783,083	$ 1,876,150	$ 1,973,841	$ 2,076,385	$ 2,184,078
4. Federal						
Pessimistic		$ 540,056	$ 385,858	$ 393,275	$ 400,916	$ 408,785
Best Estimate	$ 885,667	$ 731,944	$ 674,862	$ 686,108	$ 697,691	$ 709,622
Maximum Funding		$ 771,424	$ 937,496	$ 954,370	$ 972,089	$ 990,693
5. Total Operating Funds						
Pessimistic		$ 2,048,801	$ 1,918,828	$ 1,943,490	$ 1,968,797	$ 1,994,976
Best Estimate	$ 2,885,824	$ 2,860,122	$ 2,858,224	$ 2,932,016	$ 3,013,957	$ 3,098,376
Maximum Funding		$ 3,246,201	$ 3,659,890	$ 3,981,032	$ 4,216,960	$ 4,465,222

The Maximum Funding Scenario includes the following additional funding resources that Lake Transit should pursue. Once these initiatives are successful, they can move from the "what if" Maximum Funding Scenario to the Best Estimate Funding, the known funding sources:

1. In FY 2016/17, funding from FTA 5311(f) and Toll Credits increase from $300,000 to $600,000 based on two separate applications from Routes 4 and 7 and Routes 1 and 3.[1]

2. Partnership funding includes both Medi-Cal funding and a Yuba College Student fee program. Medi-Cal funding is for eligible trips through an agreement with the Lake County Department of Health. A pilot program is being recommended for a Yuba College Student fee program. Initially, the money that Lake Transit receives from the Cap and Trade program would be utilized to fund the first year of the program. It would enable Yuba College students to ride Lake Transit when they present their Student ID card. After service improvements are made, and after one year of implementation and evaluation, Yuba College students would be asked to vote for a student registration fee to match available Cap and Trade funding. Partnership funding increases from $96,247 in FY 2015-16 to $267,597.

3. Significantly more Local Transportation Funds are available for Lake Transit. This is based on a 4% growth rate of LTF funds, and a significant reduction in the "off the top" monies that are currently legitimately taken by Lake APC and assumes, for example, no bicycle funding allocations from LTF funds.

In the Best Estimate Funding scenario, none of the desired improvements in Lakeport, including a Lakeport circulator bus, expanded route 1/8 service to Konocti Vista Casino, and Sunday services desired by passengers are feasible with known available financial resources. Many of these service improvements could be feasible if elements of the Maximum Funding Scenario are successful.

Action Plan Summary by Plan Year

The following chapters provide significant details on transit needs, individual route assessments, priorities for service levels by types of service, as well as a detailed marketing plan. The following is the recommended action plan by year to guide the development and promotion of Lake Transit service through FY 2017/18. Each year has relevant transit management actions, service level actions, fare actions, marketing plan actions, and capital actions as appropriate based on the details in subsequent TDP and Marketing Plan chapters.

[1] Between the Draft and Final TDP and Marketing Plan, LTA has submitted a grant application to Caltrans that, if approved, could move approval and implementation of this recommendation in FY 2015/16.

FY 2014/15

Transit Management Actions

- Adopt the Transit Development Plan and Marketing Plan. This is a blueprint for service planning, transit management and marketing actions. Individual elements will be brought to the LTA Board for approval before implementation.
- With Paratransit Services, rewrite all Lake Transit schedules utilizing the extensive RouteMatch data to provide a data-driven approach to establish appropriate intervals between timepoints. The consulting team employed such an approach to the expanded Route 1/8 schedule that was implemented in January 2015, and a similar approach needs to be utilized for all routes. This would address many of the schedule adherence issues highlighted in subsequent chapters, and make Lake Transit services much more reliable.
- Ensure that all transfer connections have reasonable times for connections to both other Lake Transit Routes and external services such as Greyhound. This may require upgraded driver scheduling of vehicles, commonly called "runcutting" by Paratransit Services.
- Plan for updated improved schedules for implementation in September 2015.
- Incorporate adopted minimum and target performance standard charts from Chapter 3 into the Lake Transit Annual Report. This will enable the LTA Board to graphically see how systemwide performance is meeting adopted performance standard and what the performance trends are.
- Begin Mobility Management program. After a RFP procurement process, Paratransit Services was awarded a contract to provide the Mobility Programs Coordinator position.
- Submit separate FTA 5311(f) applications for Routes 1 and 3 and Routes 4 and 7.

Service Planning Actions

- The expanded Route 1/8 schedule with additional runs to North Shore and expanded evening service was implemented in January 2015.

Capital Actions

- Order two FTA 5311(f) replacement buses with luggage compartments.

FY 2015/16

Transit Management Actions

- Develop a systemwide listing of prioritized bus stop improvements. Develop a detailed database of bus stop locations, photographs, and current needs. RouteMatch data at the stop level should be utilized to discern where boarding and alighting patterns justify

shelters, benches, and information panels. Many bus stop improvements will require upgrades to ADA Paratransit services, and a civil engineering firm should be utilized to estimate grading, drainage, concrete pad requirements, and relevant costs. Estimated costs of bus stops in the high volume category will be prioritized based on a balance of boarding activity, upgrade feasibility, and costs. Develop a capital improvement program for implementation. Amend the TDP Capital Plan to reflect the five-year bus stop improvement program.

- Mobility Manager initiates steps with the Lake County Department of Health Services for approving eligible Lake Transit trips at Medi-Cal Administrative Activity. The objective is to execute an agreement with Department of Health Services by March 1, 2016. Develop implementation action plan.
- Procurement of Operations and Maintenance Contract.
- Utilizing RouteMatch data from May 2016, evaluate schedule adherence for all routes systemwide and compare to performance standards. Take corrective action as necessary.

Service Planning Actions

- In adjusting the September 2015 schedules, optimize drop off and pick up of both Yuba College and Mendocino College students in the proposed September 2015 schedule change.
- In the September 2015 schedule change, eliminate Route 12 Saturday service, which is very unproductive.
- Reconfigure Route 5 as a flex-route for evening service in Clearlake. Coordinate with Yuba College peak evening class end time at 8:20 pm. Reduce runs from four to three in order to enable flex stops.
- In writing September 2015 schedule changes, provide an additional run on Route 4 Eastbound between the existing 10:45 am and 2:00 pm runs.

Fare Actions

- Meet with Yuba College administration and student body representatives to discuss a one-year pilot program for a student fee program. Essentially, Low Carbon Transit Operations Program (LCTOP) funds, new California "Cap and Trade" funds, would be utilized to fund the first year pilot program. The first year would help determine the ridership demand for such a program, with all of the JARC expanded and evening services in place. Based on follow-up surveys of participating students, the utilization patterns and financial implications of a permanent student fee program would be evaluated. In the initial discussion with Yuba College, it would be made clear that a second year program and beyond would need to be a partnership with adopted student fees matching LCTOP funds.

Marketing Plan Actions

- With implementation of September 2015 schedule changes, consider conversion to a single guide. Update passenger information guide.
- Implement schedule information panels at key passenger activity centers:
  - Clearlake
    - Ray's
    - Lakeshore & Old Highway 53
    - Austin Park/City Hall
    - Burns Valley Mall
    - Yuba College
  - Lakeport
    - 3rd & Main
    - Mendocino College
    - KMART
  - Sutter-Lakeside Hospital
  - Middletown – Hwy 29 & Young St.
  - Kit's Corner
- Purchase and develop information displays and distribute prior to September 2015 schedule change.
- Implement target marketing campaign in advance of September 2015 schedule change.
- Update website with September 2015 changes.

Capital Plan Actions

- Incorporate fleet recommendations from the Energy Use Reduction Plan and amend recommended TDP procurement schedule.
- Order nine replacement buses.
- Conduct Bus Stop Improvement Study.
- Conduct feasibility study for Clearlake Transit Center.

FY 2016/17 Actions

Transit Management Actions

- Evaluate financial implications of Yuba College student fee program. Conduct intercept survey of Lake Transit passengers at Yuba College. Evaluate feasibility and student fee structure for vote by Yuba College student body.
- Investigate feasibility of expanding student fee program to Mendocino College.
- Implement Medi-Cal Administrative Activity Program.

Service Planning Actions: Best Estimate Financial Scenario

- None

Service Planning Actions: Maximum Funding Scenario

- Implementation of Sunday service on all routes except for Routes 12, 2 and 4A

Fare Actions

- LTA Board approves pilot student fee program for implementation in September 2016 or January 2017, depending on how quickly a memorandum of understanding between Yuba College and Lake Transit can be executed.

Marketing Plan Actions

- Target marketing campaign for Sunday service implementation (Maximum Funding Scenario).
- Continue ongoing outreach and promotion to key stakeolders.

Capital Plan Actions

- Conduct land acquisition for Clearlake Transit Hub.
- Order seven replacement transit buses.
- Implement first phase of bus stop improvement plan.

FY 2017/18 Actions

Transit Management Actions

- Evaluate Yuba College Student fee program.
- Work towards mileage reimbursement program (Coordinated Plan).
- Incorporate target and minimum performance standards and performance into Annual Report. Make service adjustments as necessary.

Service Planning Actions: Best Estimate Financial Scenario

- Eliminate Route 5.
- Reduce evening services on Route 1/8.
- Terminate Nite Rider service.

Marketing Plan Actions

- Update passenger guide and website to reflect service changes (Best Estimate Financial Scenario).

Capital Plan Actions

- Conduct design and environmental Work for Clearlake Transit Center.
- Implement second phase of bus stop improvement plan.

Service Monitoring

Chapter 3 includes a very detailed discussion of recommended minimum and target performance standards. Figure ES-3 is a summary of the key systemwide minimum and target performance standards. We recommend the performance standards be incorporated into the Lake Transit Annual Report.

Figure ES-3 Recommended Minimum and Target Performance Standards

Performance Standard: Systemwide	Minimum Standard	Target Standard	FY 2014/15 Performance
Cost Per Vehicle Service Hour	$75.00	$65.00	$62.79
Farebox Recovery Ratio	15%	20%	19.2%
Passenger Per Vehicle Service Hour	7.0	10.0	7.18
Operating Cost per Passenger	$10.00	$8.00	$8.75
Administrative Cost/Total Op. Costs	15%	10%	6.3%

Succession Planning

During the time frame of the five-year Transit Development Plan, it is possible that the existing Transit Manager of Lake Transit Authority will retire. There is a need for a transition plan from the existing arrangement with the contract Transit Manager for when he retires or is no longer available to provide the transit management services. Chapter 10 provides a detailed evaluation of the options available to Lake Transit Authority. The following is a brief summary of the key findings.

Lake Transit Authority contracts for transit management services. The Transit Manager contract is a continuously renewable agreement that has been on a year-to-year basis since it was competitively procured in 1996. Each year the contract terms includes the scope of work, level of effort, and increases in the rate per hour which has typically been adjusted based on the California CPI.

The outsourcing for Executive Director of Lake Transit Authority, the Transit Manager and the Operations and Maintenance contract has resulted in a very cost-effective Lake Transit service with a very low overall cost per vehicle service hour when compared to other California rural transit systems. For four small rural transit agencies with contracted operations, the average administrative cost per vehicle service hours was $16.64 and Lake Transit's was just $4.02 per vehicle service hour. For contracted operations, the average administrative cost of four rural transit agencies was 22% and Lake Transit's was just 6.3%.

Interviews were held with three well known Transit Mangers who work for California rural transit agencies. There was strong consensus on the four most important skills and experience for a rural Transit Manager:

- Government experience with Federal contracting and compliance requirements
- Administrative and political skills of managing a joint powers authority
- Procurement skills, the most important of which are generally bus procurements and contracting for the operations and maintenance contractor
- Experience budgeting and financial planning

All Transit Manager peers pointed to the compensation package as critically important in recruiting a qualified Transit Manager. This includes a competitive salary and excellent health and retirement benefits.

There are essentially four main categories of organizational options for the Transit Manager:

1. Keep the status quo, and contract for a part-time or full-time Transit Manager with a management firm or independent contractor.
2. Hire a full-time employee of the Lake Transit Authority and provide CalPERS retirement and health benefits.
3. Modify the scope of work of the Lake APC Administrative and Fiscal Services contract to provide Transit Manager position as part of the current or future contract.
4. Lake County hires the Transit Manager.

There are no recommendations made on the organizational option but pros and cons for each of the above options are provided as a resource to the Lake Transit Authority. Insights from the three peer Transit Managers are also provided.

1. Introduction

Purpose of Transit Development Plan

Lake Transit Authority (LTA) last developed a Transit Development Plan (TDP) in September 2008. The primary purpose of the TDP is to guide the development of Lake Transit services in order to provide improved mobility for Lake County residents and visitors over the next five years. More specifically, the TDP process:

- Provides opportunities for public input into the future of both traditional public transportation services as well as mobility management strategies throughout Lake County.
- Establishes goals, objectives and performance standards.
- Conducts market research to determine who is currently riding Lake Transit buses, how satisfied they are with the services provided, and what the priorities for improvements should be.
- Evaluates the recent performance of existing services.
- Provides service plan and fare recommendations.
- Develops a comprehensive marketing plan for communicating to the public about Lake Transit services.
- Establishes a detailed operating and capital financial plan.

The next section provides an overview of existing Lake Transit services. The third section of this chapter profiles overall systemwide performance over the past five years. The consulting team provided concurrent planning and marketing support for implementation and marketing of new and revised services and fares in conjunction with developing a five-year plan. The fourth section provides the key milestones of the planning process. Finally, the last section of the chapter provides an overview of the chapters in the Transit Development Plan and Marketing Plan.

Overview of Lake Transit Services

Lake Transit Authority is a joint powers authority between Lake County and the two cities, Clearlake and Lakeport, with a Board of Directors comprised of the same members as the Lake County/City Area Planning Council. The exception is that the LTA Board does not include a Caltrans representative. Lake Transit operates service six days a week, not on Sundays and Federal holidays.

Lake Transit currently has five types of services:

- Local Routes
- Regional Routes
- Intercity Routes
- Rural Routes
- Dial-A-Ride Services

The Lake Transit network of routes has been evolving and changing. The overview is accurate at the time of writing on January 5, 2015.

An overview of Lake Transit fixed routes is shown in Figure 1-1. It includes boarding volumes at scheduled timepoints. Detailed maps of Clearlake and Lakeport are included in Chapter 4 Clearlake Local Routes and Chapter 5 Regional Routes.

Local Routes

Lake Transit has local routes in Clearlake and Lakeport.

Clearlake Local Routes

Clearlake local routes are currently Routes 5, 10, 11, and 12.

Route 5 is the Clearlake Park loop within the City of Clearlake that makes four runs in the evening only, starting and ending at Ray's Food transfer point, hourly beginning at 7:15 pm. The entire loop takes 52 minutes to complete. The last run starts at 10:15 pm and ends at 11:07 pm.

Route 10 is a Clearlake North loop within the City of Clearlake. It runs on the hour, from 6:00 am to 6:00 pm, starting and ending at Ray's Food transfer point. The entire loop takes 48 minutes to complete.

Route 11 is The Avenues loop within the City of Clearlake. It runs on the hour, from 6:00 am to 6:00 pm, starting and ending at Ray's Food transfer point. The entire loop takes 47 minutes to complete.

Route 12 is a Clearlake/Lower Lake - South loop that serves Clearlake and the community of Lower Lake. It runs on the hour, from 7:00 am to 6:00 pm, starting and ending at Ray's Food transfer point. It crosses Ray's one more time at the 17th minute, and also connects to the Austin Park transfer point. The entire loop takes 49 minutes to complete. In the evening, it makes four hourly runs from 7:00 pm to 10:00 pm, to cover the southern part of the loop, starting and ending at Ray's. Route 12 in the evening ends at Lakeshore and Old Highway 53.

Routes 5, 10, 11, and 12 replaced former routes 5 and 6 in September 2013.

Lake County Average Weekday Boarding

Figure 1-1

Lakeport Local Route

Route 8 is a local bus route that provides service from the Sutter Lakeside Hospital to the north and to Mendocino College to the south. The Route 8 schedule has service every two hours between 7:28 am and 5:18 pm, with an additional run at 4:17 pm that enables hourly service between 3:17 pm and 5:18 pm from Sutter Lakeside Hospital to the City of Lakeport. The main transfer location is from 3rd and Main St., and the last bus departs at 5:46 pm. The Route 1 bus from Clearlake to Sutter Lakeside Hospital turns into the Route 8 after it departs Sutter Lakeside Hospital. Passengers from the North Shore have a one-seat ride from Lucerne to downtown Lakeport, for example. From Lakeport, the Route 8 bus becomes the Route 1 bus when it departs Sutter Lakeside Hospital.

Regional Routes

Route 1 is the only Lake Transit Regional Route. Route 1 currently provides service approximately every two hours from 6:10 am until 2:00 pm and then hourly from 2:00 - 5:30 pm in the westbound direction from Clearlake to Lakeport. Other communities served include Clearlake Oaks, Glenhaven, Lucerne, Nice, and Upper Lake. Eastbound from Lakeport to Clearlake, the route operates from 7:07 am until 7:51 pm. Eastbound service operates every two hours except for the last three runs that start at Sutter Lakeside Hospital at 4:21 pm, 5:31 pm and the last bus departing at 6:31 pm. It's important to note that at Sutter Lakeside Hospital, the Route 1 bus becomes the Route 8 bus. Route 1 has Flex Stop available up to 1 mile from the route with a 1-day advanced reservation.

In January 2015, Lake Transit expanded service on Routes 1 and 8 with additional runs and expanded evening service to 11:20 pm.

Intercity Routes

Routes 3, 4 and 7 is essentially one route with three route segments. A passenger can travel from Calistoga to Ukiah on Routes 3, 4,and 7 with a single $5.00 fare. Intercity Routes do not have Flex Stops.

Route 3 is an Intercity Route between Clearlake and Napa County destinations Calistoga and Deer Park. St. Helena Hospital at Deer Park is served twice daily. Free connections are available to the Napa VINE transit routes at Calistoga and to the St. Helena Shuttle. Route 3 Southbound from Clearlake currently provides service approximately every two hours from 6:10 am until 12:45 pm and then again at 4:45 pm. Two runs (7:55am and 12:45 pm) go all the way to the final stop at Deer Park. Another two runs (6:10 am and 4:45 pm) terminate at the second to last stop, Calistoga. The 10:00 am run terminates in Middletown. Northbound, the route operates from 7:25 am until 5:50 pm. Northbound service begins approximately 5-10 minutes after the Route 3 Southbound arrives in station, except for the 12:19 pm service from Middleton which has an approximately two hour gap.

Route 4 connects Clearlake, Kit's Corner, Kelseyville and Lakeport along the Highway 29 corridor. In the westbound direction, service is provided from 6:20 am with the last run leaving Ray's at 5:10 pm and arriving at 3rd and Main at 6:00 pm. In the eastbound, service begins at 6:10 am from 3rd and Main in Lakeport to Clearlake, and the last bus departs 3rd and Main at 7:50 pm. In general, service is every two hours with additional trips in the morning and afternoon to provide hourly service at certain times of the day.

Route 7 is a regional route between Lakeport and Ukiah, serving the communities of Robinson Rancheria, Upper Lake, Blue Lakes, and Ukiah (including Mendocino College, the Veterans Clinic and Ukiah Airport). It provides connections to Mendocino Transit Authority, Amtrak and Greyhound. Route 7 currently makes four runs per day, with a decreasing gap between the runs throughout the day. Service runs about four hours apart initially in the morning, and narrows to about two hours apart in the late afternoon. Westbound, the route operates from 8:00 am to 5:15 pm. The bus stops westbound at the VA Clinic at 9:25 a.m. and 4:10 p.m., and then continues on eastbound schedule back to Lakeport. Eastbound, the route operates from 9:35 am to 6:35 pm.

Rural Routes

Rural routes provide minimum fixed route service to an area in order to provide basic mobility in an area or corridor. Routes 2 and 4A are considered rural routes. These routes currently provide a feeder route function to the Regional and Intercity Routes. The rural routes also have Flex Stops up to 1 mile from the route with a 1-day advanced reservation.

Route 2 is a rural bus route that provides service from the Kits Corner transfer point on Soda Bay Road, to the Hwy 29 and Young transfer center in Middletown to the south.

The Route 2 Southbound schedule has service every three to four hours between 7:40 am and 6:03 pm. The Northbound service runs approximately every two hours from 6:45 AM to 10:26 am, then again at 3:36 pm.

Route 4A provides service from Kit's Corner, Riviera Shopping Center, Soda Bay, Kelseyville, and Konocti Vista Casino to Lakeport. The service has three trips in each direction. From Kit's Corner, service is provided at 9:16 am, 11:20 am and 4:33 pm. From 3rd and Main in Lakeport, service is provided at 10:15 am, 1:35 pm, and 5:25 pm.

Dial-a-Ride Services

Lake Transit offers Clearlake/Lower Lake Dial-A-Ride and Lakeport Dial-A-Ride during the same days and hours as the local bus routes. Dial-A-Ride provides curb-to-curb service. Passengers certified as eligible for Americans with Disabilities Act (ADA) paratransit receive reservation priority when calling one day or more in advance.

In May 2014, Nite Rider service was initiated in the greater Lakeport area. Dial-a-Ride service is offered on weekdays from 6:00 pm to 9:30 pm. Riders can set up a regular subscription trip, make an advanced reservation or call the day they need a ride.

Recent Systemwide Performance

Figure 1-2 provides an overall systemwide performance profile between FY 2010/11 and what is projected for FY 2014/15 based on first quarter results.

Figure 1-2 Systemwide Lake Transit Authority Performance

	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15*
Base Statistics (Annual)	Actual	Actual	Actual	Actual	Projected
Ridership	326,874	395,013	362,217	294,761	335,328
Service Hours	38,566	38,897	38,530	40,900	46,704
Service Miles	827,853	837,584	825,967	824,040	917,392
Fare Revenue	$ 462,095	$ 558,762	$ 581,060	$ 512,638	$ 562,328
Operating Costs	$ 2,307,731	$ 2,443,883	$ 2,464,431	$ 2,595,824	$ 2,932,772
Performance					
Passengers/Service Hour	8.48	10.16	9.40	7.21	7.18
Passenger/Service Mile	0.395	0.472	0.439	0.358	0.366
Average Fare/Passenger	$ 1.41	$ 1.41	$ 1.60	$ 1.74	$ 1.68
Farebox Recovery	20.0%	22.9%	23.6%	19.7%	19.2%
Cost/Service Hour	$ 59.84	$ 62.83	$ 63.96	$ 63.47	$ 62.79
Cost/Passenger Trip	$ 7.06	$ 6.19	$ 6.80	$ 8.81	$ 8.75
Subsidy/Passenger Trip	$ 5.65	$ 4.77	$ 5.20	$ 7.07	$ 7.07

*Annualized based on Ist quarter 2014/15 statistics

With overall gas prices high, and with fare increases not occurring until late in the fiscal year, overall ridership peaked in FY 2011/12 at 395,013. Overall productivity measured in passengers per vehicle service hour also peaked at 10.16 passengers per vehicle service hour. A vehicle service hour is an hour that a Lake Transit bus was in passenger service available to collect fares.

The good news over the five year period is that overall cost measured by the cost per vehicle hour was very stable and is quite low compared to other Northern California rural transit systems. This is discussed in more detail in Chapter 3 on Goals and Performance Standards.

With the fare increase in February 2012, overall fare revenues and the farebox recovery ratio increased to a high of 23.6% in FY 2012/13. The average fare increased from $1.41 per passenger to $1.60 per passenger.

The fare increase, coupled with a gradual decline in gas prices, resulted in a decline in ridership and overall productivity FY 2012/13. The labor dispute, the disruption of service for an entire month in August 2013, and poor schedule adherence were some of the contributing factors to a

decline in ridership from 362,217 in FY 2012/13 to 294,761 in FY 2013/14. Late evening service in Clearlake, introduced as part of the JARC grant in September 2013, has lower productivity than normal daytime service and this also contributed to the decline in systemwide productivity from 9.40 passengers per hour in FY 2012/13 to 7.21 in FY 2013/14.

Another key factor of recent performance has been schedule adherence. In the 2009 TDP, a performance standard was set such that buses should be on time at 95% of the timepoints. A bus was considered on-time up to five minutes late or one minute early. Based on a week-long sample in February 2014 from RouteMatch data, Figure 1-3 shows the actual systemwide schedule adherence. Overall schedule adherence is well below the 95% standard at 66% of the buses being on time at their timepoints. A troubling statistic is that 7% of buses were actually early to the timepoint, meaning that if a passenger shows up on time to the bus stop, the bus may have already passed them up. According to stakeholders and the consulting team observations in riding the buses in early May 2013, schedule adherence was much worse in Clearlake before the schedule changes were made in September 2013. Despite improvements in Clearlake, the overall finding is that there is significant work to be done in making Lake Transit a reliable service that passengers can count on to be on time for their trips to work, school, or appointments. Schedule adherence issues are discussed in significantly more detail in subsequent chapters on fixed route services.

Figure 1-3 Systemwide Schedule Adherence

ON-TIME PERFORMANCE	SYSTEMWIDE TOTAL	SYSTEMWIDE %
Total Sampled	3,550	100%
On Time (1 min. before to 5 min. after)	2,347	66%
Early (>1 minute)	247	7%
Late (>5 minutes and <= 15 minutes)	906	26%
Missed (>15 minutes)	47	1%

Source: February 2014 RouteMatch Data

Based on the performance results of the first quarter of FY 2014/15, it appears that ridership will partially recover in FY 2014/15. If the first quarter is indicative of the rest of this fiscal year, ridership will increase systemwide to 335,000 in FY 2014/15.

Key Implementation Milestones During TDP Process

The Transit Development Plan process provided concurrent planning and marketing implementation support during the planning process as well as the development of the five-year plan. The consulting team worked with Lake Transit management in a support capacity in the following efforts:

1. Initial stakeholder interviews were held from April 30 to May 2, 2013 as part of the project kick-off meeting. The consulting team discussed routing options for Clearlake with Lake Transit management. The timing for conducting the onboard survey was discussed.

2. Labor strife issues led to the disruption of Lake Transit service in August 2013 and service resumed on September 3rd, 2013, delaying the onboard survey.

3. Lake Transit management developed Routes 5, 10, 11, and 12 as well as corresponding routes and implemented the service on September 23, 2013. Chapter 4 includes an evaluation of the effectiveness of the September 2013 route and schedule changes in Clearlake.

4. The onboard survey of passengers was delayed due to the labor strife as well as a desire not to conduct the onboard passenger survey until the September 2013 Clearlake route changes had been in effect for a full month. Additional stakeholder interviews and the onboard survey of passengers were conducted from November 4-6, 2013.

5. Fares were increased in February 2012 toward the end of FY 2011/12. The overall base local fare was increased to $1.25 and the regional fares for seniors and disabled individuals were increased to $2.25. In November and December 2013, the consulting team conducted a detailed evaluation of fares and provided the results in a working paper "Lake Transit Development and Marketing Plans, Fare Analysis Working Paper," dated January 2, 2014. The working paper evaluated the ridership and revenue impact of the fare increase. It also reported on the market research effort (reported in more detail in Chapter 2) relevant to the fare increase. The working paper provided alternatives and recommended changes to the February 2012 fare levels in order to address some important issues articulated by both Lake Transit Management as well as stakeholder input during the November 2013 site visit. A primary concern was the impact of regional and rural route fares for seniors and disabled which increased from $1.50 to $2.25 in 2012. The potential fare level changes were presented by the Transit Manager to the LTA Board on January 8, 2014 and a public hearing was held on February 12, 2014. After a public hearing on February 12, 2014, the 2014 fare changes were approved by the LTA Board. One of the key changes was the reduction of the regional and rural route fares from $2.25 to $1.50. Appendix A includes the Fare Analysis Working Paper.

6. In February and March 2014, there were discussions about providing evening service in the greater Lakeport area similar to the evening services on Routes 5 and 12 in Clearlake. Lake Transit received a JARC grant that would provide funding to provide greater opportunity for access to evening jobs as well as evening education at Mendocino College. After discussing potential options with the Transit Manager, it was decided to provide evening Dial-A-Ride service in the greater Lakeport area. The consulting team assisted in developing the service guidelines and fares, as well as the branding (Nite Rider) and promotion materials. The Nite Rider was presented to the LTA Board at its April 9, 2014 meeting and approved and the service was implemented in May 2014.

7. In April and May 2014, as part of the Phase II report on Service Alternatives and Preliminary recommendations for the Transit Development Plan, a working paper was prepared entitled "Lakeport Analysis," dated May 2014. The primary purpose of the working paper was to provide preliminary recommendations for services to and from Lakeport based on the results of the market research and analysis of schedule adherence and existing boarding patterns. Improvements to Lakeport, similar to the improvements implemented in September 2013 in Clearlake, are funded with JARC funds, approved in a grant application to Caltrans submitted in April 2013. The working paper provided service alternatives and preliminary recommendations for services to Lakeport. The preliminary recommendation was to combine Routes 1 and 8 into a new Route 1. Streamlined routing recommendations were provided with options to Mendocino College or Konocti Vista Casino as the terminus. A new Lakeport circulator route was recommended.

8. In July 2014, based on RouteMatch schedule data, a potential schedule for the new Route 1 and local Lakeport circulator schedule was drafted for review by the Transit Manager. Due to difficulties in the report outputs of the schedule adherence data, only a five-day sample was available. In late August 2014, the consulting team was asked to compile data for May 2014 in order to refine the schedule for revised Routes 1 and 8. This includes improved service and evening service to the North Shore. Marketing support in terms of graphics and promotion were outlined in July 2014. Implementation of the revised routes 1 and 8 are scheduled for implementation on January 12, 2015.

Overview of Transit Development Plan Chapters

Chapter 2 is the Transit Needs Assessment which provides the results of the public outreach effort, the passenger survey, Census demographic information, and population projections for Lake County.

Chapter 3 Goals and Performance Standards provides recommended Lake Transit goals and reviews performance standards that are required by the Transportation Development Act, Title VI, and discretionary performance standards that would be useful in monitoring Lake Transit performance. Minimum and target performance standards are recommended.

Chapter 4 to 7 are organized in a similar manner. Each of the four chapters includes a description of the existing routes, market research input from the onboard survey and stakeholder interviews on current utilization and demographics of the ridership, issues that need to be addressed, and desired improvements. A section on recent performance provides performance measures between FY 2012/13 to projections for FY 2014/15. Each route is evaluated in terms of schedule adherence and boarding and alighting activity. Implications of the analysis on the five year-service plan are discussed and where appropriate, service alternatives are discussed and analyzed. The final section provides recommendations for service level priorities that will need to be considered in the financial plan for feasibility and sustainability.

Chapter 4 Local Routes

Chapter 5 Regional Route

Chapter 6 Rural Routes

Chapter 7 Intercity Routes

Chapter 8 Dial-A-Ride is organized slightly differently from the four fixed route chapters above. This chapter describes existing services, provides findings from stakeholder input, and discusses alternatives in concert with the Coordinated Public Transit-Human Services Transportation Plan that the consulting team collaborated on with AMMA Transit Planning during the market research phase of the project. The Clearlake Dial-A-Ride, Lakeport Dial-A-Ride and the new Nite Rider services did not have an onboard survey, and data was not compiled from RouteMatch on schedule adherence and boarding activity.

Chapter 9 is the Marketing Plan. It includes a Marketing Assessment of Lake Transit past efforts at community visibility, image and marketing presence. It establishes four specific marketing goals. The chapter then evaluates the target market that marketing efforts should reach. It then recommends specific marketing strategies for marketing Lake Transit services. Finally, the last section discusses the necessary resources for implementation.

Chapter 10 is titled Transit Management Considerations and provides alternatives for transit management, particularly succession planning. During the time frame of the five-year Transit Development Plan, it is possible that the existing Transit Manager of Lake Transit Authority will retire. There is a need for a transition plan from the existing arrangement with the contract Transit Manager when he retires or is no longer available to provide the transit management services. This chapter provide an overview of the existing transit management contract, stakeholder and peer transit system input on succession planning, a discussion of key issues and variables that the Lake Transit Authority Board should consider, and the pros and cons of viable organizational options. No recommendations are provided as this chapter is meant to be a resource for the LTA Board when it is necessary to move forward with succession plans for a new Transit Manager.

Chapter 11 is the operating and capital financial plan. The chapter starts with a discussion of the three financial scenarios that help to bracket the potential financial outcomes over the next five years. It provides guidance from the Best Estimate Scenario on how many vehicle service hours can be provided over the next five years. The next section compiles the priority improvements from Chapters 4 to 8 and provides recommendations system wide on the service that can be provided with known available financial resources over a five-year period. It also provides guidance on priority actions that would necessary if the pessimistic scenario does not provide the financial resources to operate the current system. A fare analysis was completed in January 2014. Operating cost and revenues will be provided over a five-year period. The capital plan considers the bus replacement, facility and equipment needs of Lake Transit over a five-year period. The capital plan provides the capital costs and revenues over a five-year period.

2. Transit Needs Assessment

Chapter Organization

This chapter on transit needs assessment is organized into the following distinct sections:

- Overview of Public Outreach
- Passenger Survey
- Public Outreach Findings
- Census Review
- Population Projections

Overview of Public Outreach

In early May 2013, an initial round of outreach to inform the Transit Development Plan and Marketing Plan was conducted. This included interviews with Lake Transit front line staff, several key stakeholders interviews, field observations and informal discussions with passengers on buses. This initial work set the stage for the primary data collection and outreach effort.

During the week of November 4, 2013, the consulting team conducted an intensive 4-day outreach and data collection effort. The consulting team supervised an on-board survey of 363 Lake Transit riders. Four team members conducted stakeholder interviews throughout Lake County.

The team also conducted focus groups with transit users and potential users including:

- Yuba College students
- Mendocino College students
- Welfare to Work participants
- People Services Independent Living clients

The information collected has provide input to the Transit Development Plan, the Marketing Plan Chapter 9 and the

Stakeholder Interview Participants

Marymount College

Yuba College

Healthy Start

Lake County Office of Education

Lake County Probation Dept

Lake County Department of Social Services

Lake County Child Welfare

Lake County Housing

Welfare to Work Program

Area Agency on Aging

Lake County Department of Rehabilitation

Family Resource Center

People Services

Saint Helena Hospital, Clearlake

Lake County Health Service

Lake County International Charter School

Fire Department Battalion Chief

Veterans Services

Lucerne Alpine Senior Center

Lakeport Senior Center

Middletown Senior Center

Highland Senior Center

HSA Outdoor

Lakeport City Council - Stacey Mattina

Clearlake City Council - Gina Fortino Dickson

Lakeport City Council – Martin Scheel

Coordinated Public Transportation-Human Services Transportation Plan (separate document). This chapter provides an analysis of findings from the on-board survey and a summary of the input received during the outreach efforts.

The results of the survey findings and outreach has been utilized by the consulting team in assisting Lake Transit with several planning and marketing efforts during the Transit Development Plan process. This included commenting on changes to Clearlake routes, the fare analysis that led to fare changes in February 2014, the Nite Rider service in May 2014, and the planned consolidation of Routes 1 and 8 and a local Lakeport Circulator route recommended for future consideration.

The market research is also being utilized to inform further service planning and marketing recommendations in Chapters 4 through 7.

Passenger Survey

An on-board survey of Lake Transit riders was conducted during the week of November 4, 2013. Bilingual, self-administered questionnaires were distributed and collected by trained surveyors on board all Lake Transit routes. Passengers were provided with a pencil to complete the survey and were given a free single-ride pass as a thank you for participating.

A total sample of 363 completed questionnaires was collected. The chart at the right shows the number of participants on each route.

This section of the report will provide an analysis of the data for the overall sample and by individual route. Note that on some of the routes the sample sizes are quite small and would not generally be considered statistically valid. However they represent a significant proportion of the riders on the survey days and hence likely provide a reasonable picture of the individuals using that route.

Route	Sample
1	71
2	12
3	36
4	29
4A	15
5, 10, 11, 12	149
7	20
8	31
Total	**363**

This summary of findings is organized into five sections:

- Demographics
- Usage Characteristics
- Communications
- Satisfaction with Existing Service
- Service Improvement Priorities

Demographics

Figure 2-1 Community of Residence

Community of Residence

	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Clearlake	24%	0%	50%	54%	0%	10%	10%	86%	51%
Clearlake Oaks	23%	0%	3%	0%	0%	5%	0%	5%	7%
Cobb	0%	45%	9%	0%	0%	0%	0%	1%	3%
Glenhaven	1%	0%	0%	0%	0%	0%	0%	0%	0%
Kelseyville (town)	0%	0%	3%	7%	0%	0%	3%	0%	1%
Kelseyville (Rivieras)	0%	36%	0%	7%	71%	0%	0%	0%	5%
Lower Lake	0%	0%	3%	7%	0%	0%	0%	1%	1%
Lucerne	29%	0%	0%	0%	0%	0%	23%	3%	9%
Lakeport	3%	0%	3%	21%	29%	25%	42%	0%	9%
Middletown	0%	18%	21%	0%	0%	5%	0%	1%	3%
Nice	14%	0%	3%	0%	0%	5%	16%	1%	5%
Twin Lakes	0%	0%	0%	0%	0%	0%	0%	1%	0%
Upper Lake	3%	0%	0%	0%	0%	20%	3%	0%	2%
Calistoga	0%	0%	3%	0%	0%	0%	0%	0%	0%
Ukiah	1%	0%	0%	0%	0%	15%	0%	0%	1%
Other	1%	0%	3%	4%	0%	15%	3%	1%	2%

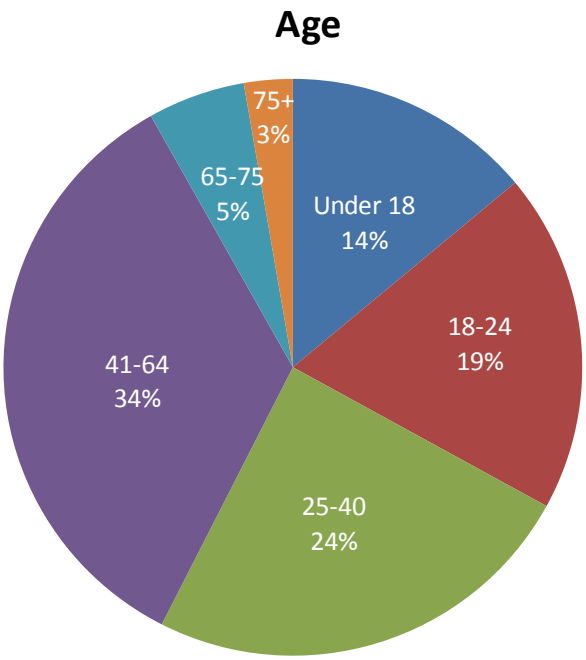
Where Lake Transit Riders Live

Figure 2-1 above shows the community where Lake Transit riders say they live. The column on the far right represents the total sample of 363, while the other columns represent the riders on specific routes.

About half of riders surveyed say they live in Clearlake (51%) or Lower Lake (1%). The other half live in communities throughout Lake County and even in neighboring counties.

The largest concentrations outside of Clearlake are in Lucerne (9%), Lakeport (9%) and Clearlake Oaks (7%).

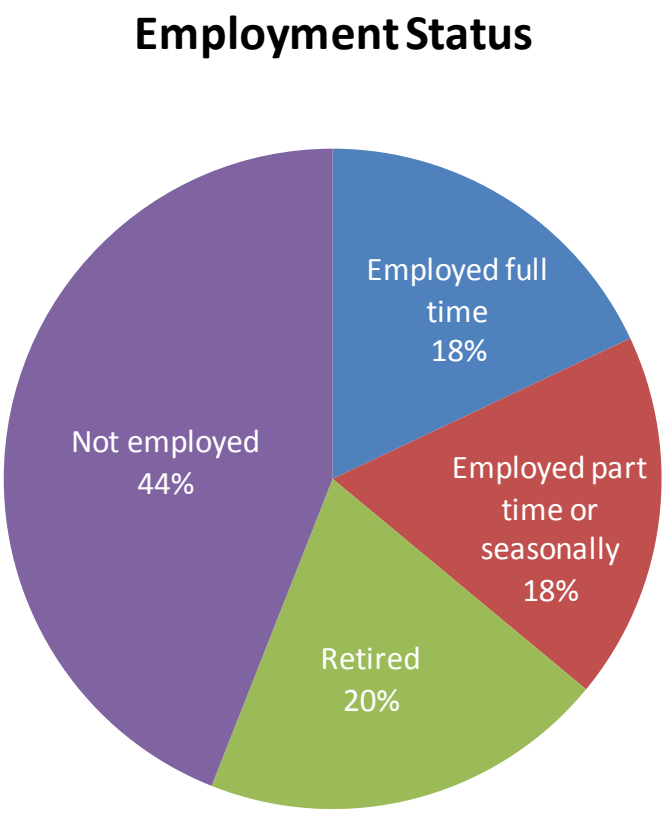
Figure 2-2 Age



Age

Lake Transit's ridership includes individuals throughout the age spectrum as shown in Figure 2-2. The majority of riders are adults between 18 and 64 (77%), however there are significant minorities of youth under 18 (14%) and of older adults over 65 (8%).

Figure 2-3 Employment Status



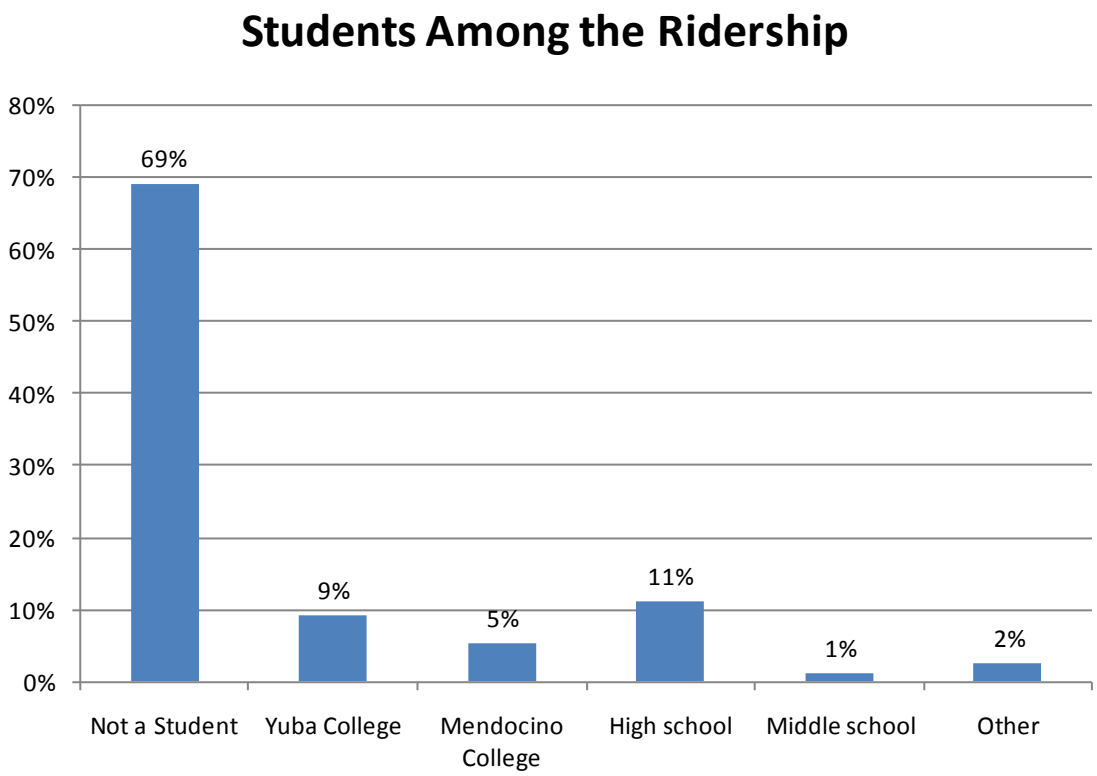
Employment Status

As shown in Figure 2-3 above, only 36% of Lake Transit Riders are employed – 18% full time and 18% part time or seasonally. Forty-four percent (44%) are not employed and another 20% are retired.

ROUTE	Employed full time	Employed part time or seasonally	Retired	Not employed
1	16%	19%	20%	45%
2	9%	9%	45%	36%
3	12%	33%	15%	39%
4	15%	19%	7%	59%
4A	7%	36%	7%	50%
7	11%	33%	0%	56%
8	14%	14%	17%	55%
Clearlake	23%	11%	27%	39%
Total	18%	18%	20%	44%

The Clearlake routes have a higher percentage of persons employed full time (23%) than the other routes, but fewer employed part time. Route 2 has the lowest level of employment among its riders.

Figure 2-4 Student Status

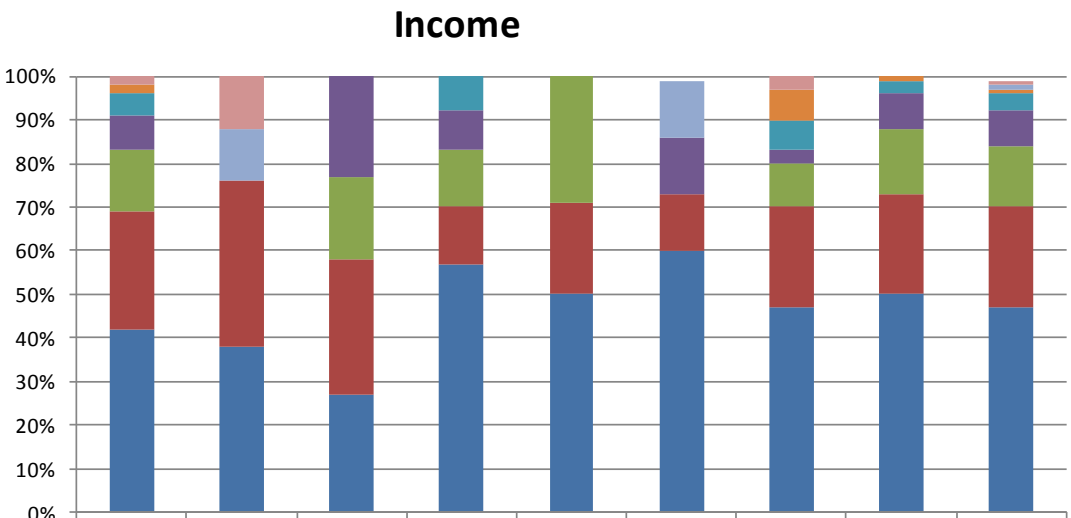


Student Status

Thirty-one percent (31%) of riders say they are students. As Figure 2-4 above illustrates, this group includes a mix of college, secondary and other students. The routes with the highest proportion of students among the ridership are routes 7, 4A and 3.

ROUTE	Students	Non-Students
1	32%	68%
2	22%	78%
3	45%	55%
4	29%	71%
4A	54%	46%
7	63%	37%
8	18%	82%
Clearlake	22%	78%
Total	31%	69%

Figure 2-5 Income



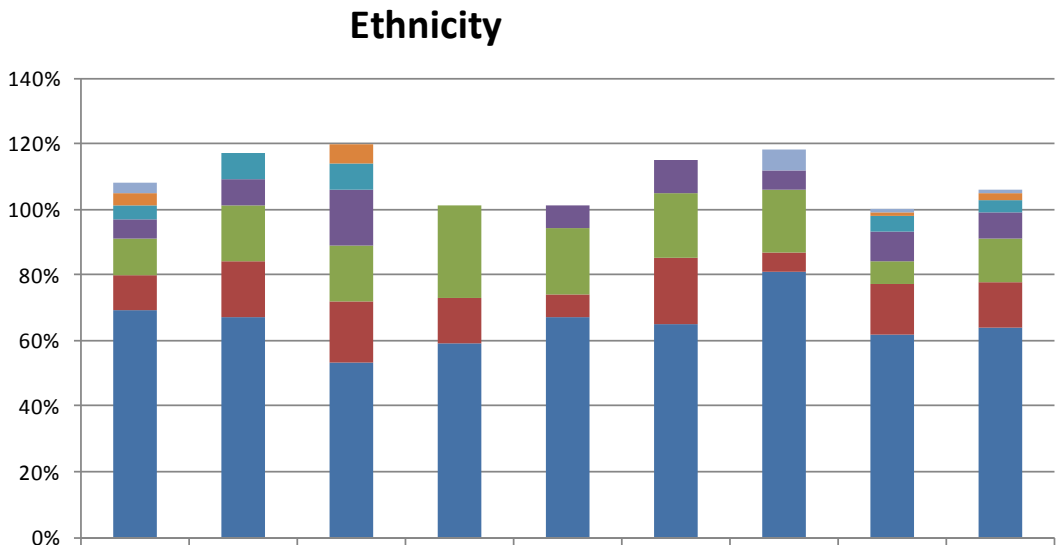
	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
$75,000 to $99,999	2%	12%	0%	0%	0%	0%	3%	1%	1%
$55,000 to $74,999	0%	12%	0%	0%	0%	13%	0%	0%	1%
$45,000 to $54,999	2%	0%	0%	0%	0%	0%	7%	1%	1%
$35,000 to $44,999	5%	0%	0%	9%	0%	0%	7%	3%	4%
$25,000 to $34,999	8%	0%	23%	9%	0%	13%	3%	8%	8%
$15,000 to $24,999	14%	0%	19%	13%	29%	0%	10%	15%	14%
$10,000 to $14,999	27%	38%	31%	13%	21%	13%	23%	23%	23%
Less than $10,000	42%	38%	27%	57%	50%	60%	47%	50%	47%

Income

As indicated in Figure 2-5, the majority of riders are quite low income, citing annual household income of less than $15,000 (70%). In fact, nearly half of riders (47%) say their household income is less than $10,000. A small number of riders (15%) say they have household incomes of $25,000 or more.

Note about charts: *Throughout this chapter, there are charts similar to the one above. The first seven columns represent the distribution of responses for the individual route indicated at the top of the column. The eighth column represents the combined responses for the Clearlake routes (5, 10, 11 and 12). The final column represents the total sample including all routes.*

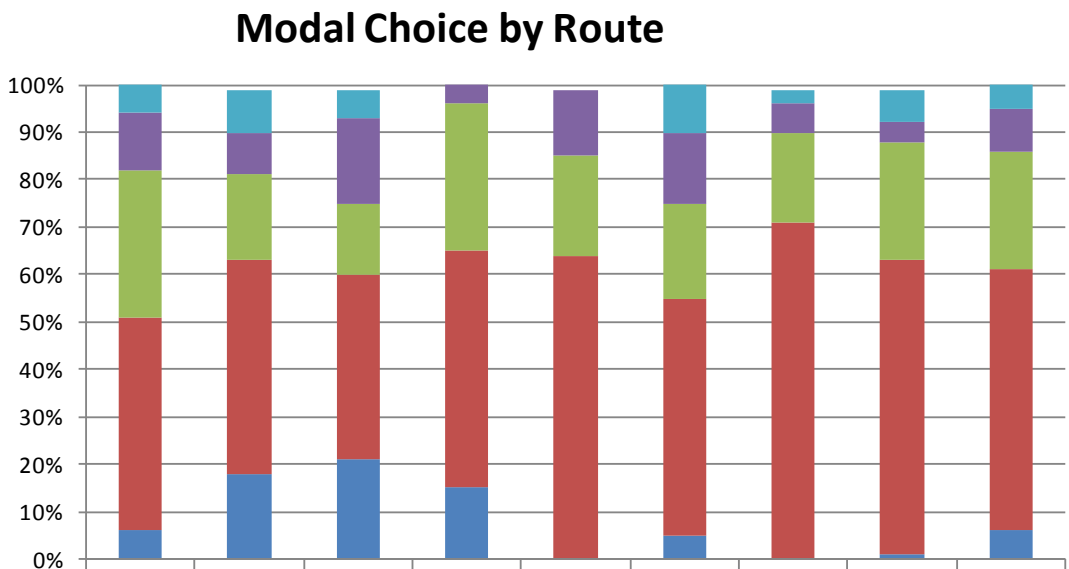
Figure 2-2 Ethnicity



	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Hawaiian/Pacific Islander	3%	0%	0%	0%	0%	0%	6%	1%	1%
Asian	4%	0%	6%	0%	0%	0%	0%	1%	2%
Other	4%	8%	8%	0%	0%	0%	0%	5%	4%
African-American/Black	6%	8%	17%	0%	7%	10%	6%	9%	8%
Native American	11%	17%	17%	28%	20%	20%	19%	7%	13%
Hispanic or Latino	11%	17%	19%	14%	7%	20%	6%	15%	14%
Caucasian/White	69%	67%	53%	59%	67%	65%	81%	62%	64%

Ethnicity

Nearly two-thirds (64%) of Lake Transit riders say they are Caucasian/White, while 14% are Hispanic/Latino and 13% are Native American. In Figure 2-6, please note that the percentages sum to over 100% because riders were asked to check all that apply.



	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Both license and car	6%	9%	6%	0%	0%	10%	3%	7%	6%
Car, no lic.	12%	9%	18%	4%	14%	15%	6%	4%	9%
Lic, no car	31%	18%	15%	31%	21%	20%	19%	25%	25%
No licence, no car	45%	45%	39%	50%	64%	50%	71%	62%	55%
Under age of 16	6%	18%	21%	15%	0%	5%	0%	1%	6%

Modal Choice

Several factors determine the level of modal choice that a person has. The survey asked about age, having a driver's license and having a vehicle available. Figure 2-7 combines these three factors to estimate the level of modal choice which Lake Transit riders have.

Six percent of riders have both a driver's license and vehicle available – thus having the option of driving rather than riding the bus. The percentage ranges from a low of 3% on Rt. 8 to a high of 10% on Route 7. The majority of riders (55%) have neither a driver's license nor a vehicle.

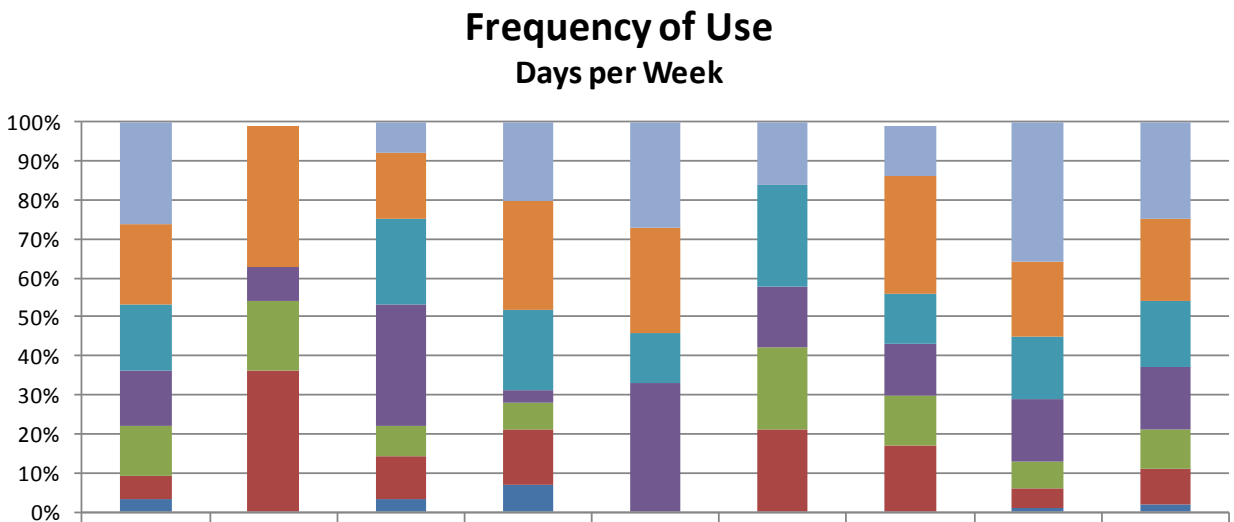
Usage Characteristics

Frequency of Use

Riders were asked how many days per week they ride the bus. As shown in Figure 2-8, the majority ride regularly – 79% ride three or more days a week. Nearly half (46%) use the bus intensively – 5 or 6 days a week. Two percent of those intercepted said it was their first time riding.

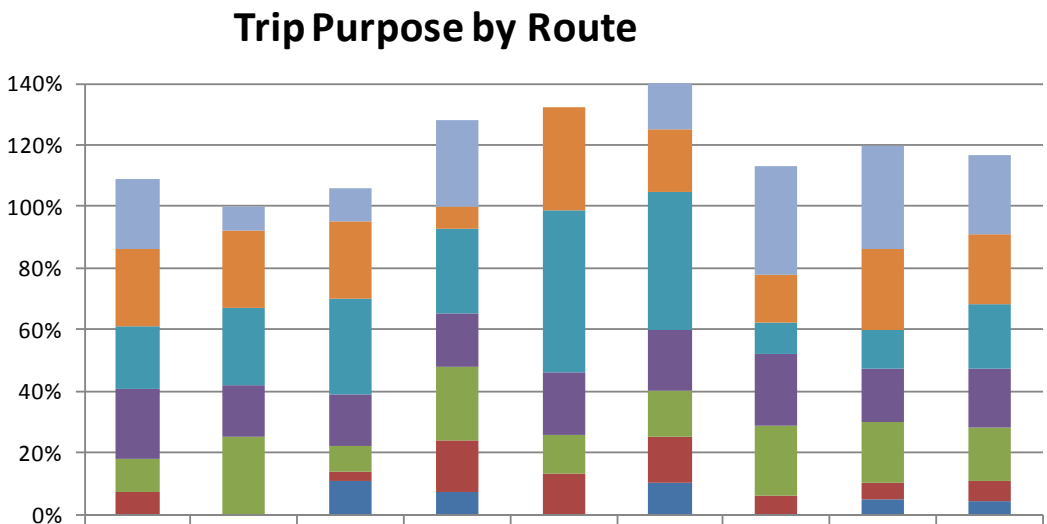
Route 2 has the most occasional riders – 54% or respondents said they ride only one or two days a week.

Figure 2-3 Frequency of Use



	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
6	26%	0%	8%	21%	27%	16%	13%	36%	25%
5	21%	36%	17%	28%	27%	0%	30%	19%	21%
4	17%	0%	22%	21%	13%	26%	13%	16%	17%
3	14%	9%	31%	3%	33%	16%	13%	16%	16%
2	13%	18%	8%	7%	0%	21%	13%	7%	10%
1	6%	36%	11%	14%	0%	21%	17%	5%	9%
0	3%	0%	3%	7%	0%	0%	0%	1%	2%

Figure 2-9 Trip Purpose



	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Shopping	23%	8%	11%	28%	0%	15%	35%	34%	26%
Work	25%	25%	25%	7%	33%	20%	16%	26%	23%
School/College	20%	25%	31%	28%	53%	45%	10%	13%	21%
Recreation	23%	17%	17%	17%	20%	20%	23%	17%	19%
Medical Appt.	11%	25%	8%	24%	13%	15%	23%	20%	17%
Social Service Appt	7%	0%	3%	17%	13%	15%	6%	5%	7%
Long Distance Travel	0%	0%	11%	7%	0%	10%	0%	5%	4%

Trip Purpose

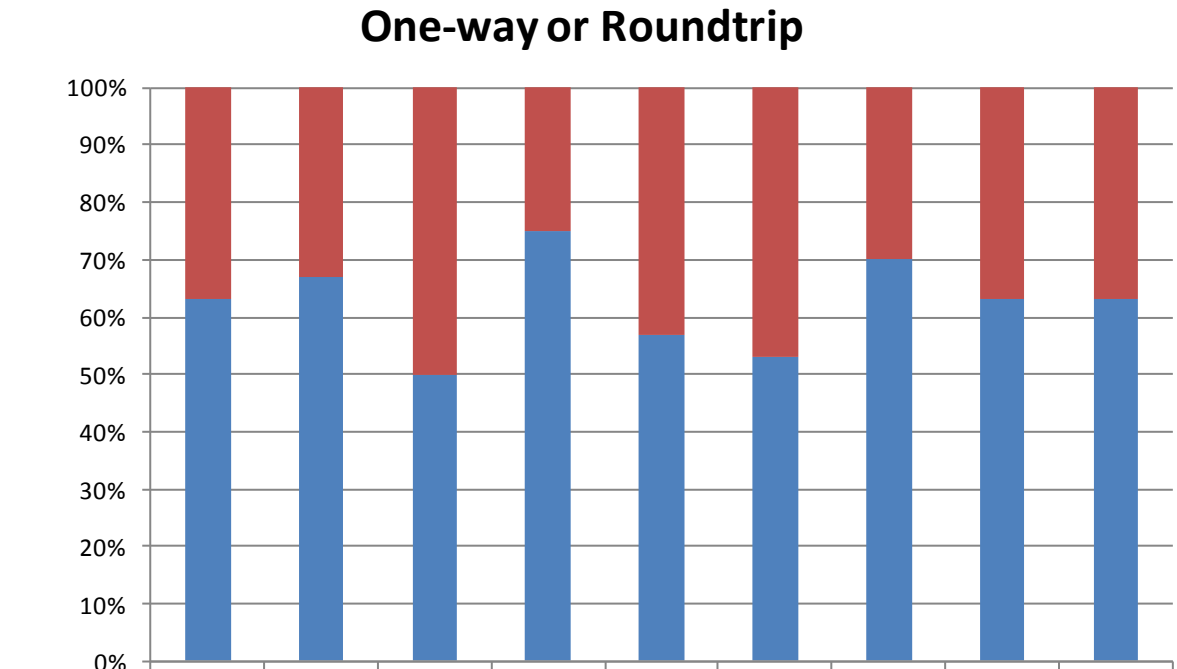
Respondents were asked "what is the main purpose of your trip today?" Many gave multiple answers, likely indicating that they were combining stops on a single trip. Hence the columns in Figure 2-9 sum to greater than 100%.

Lake Transit riders use the bus for a diverse set of trip purposes. When intercepted for the survey, 44% of riders were commuting to or from work (23%) or school (21%). About a quarter of respondents (26%) were shopping, 19% were traveling for recreation, 17% were going to medical appointments, 7% to social service appointments and 4% making long distance trips.

There are distinct variations in the distribution of trip purposes on specific routes:

- The Clearlake routes had the highest percentage of shopping trips, while route 4A had the highest percentage of work or school trips (keeping in mind that the Route 4A sample is only 15 people).
- On Route 7 which serves Ukiah and the main Mendocino College campus, 45% of riders were making school/college trips.
- As would be expected, Routes 7 (Ukiah) and 3 (Calistoga and St. Helena) have higher percentages of long distance travelers.

Figure 2-10 One-way or Roundtrip



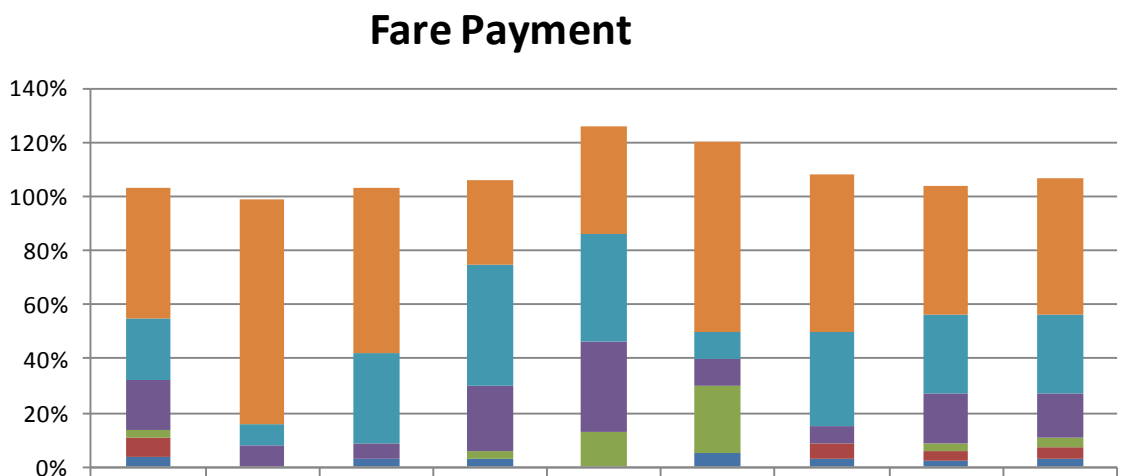
	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Oneway	37%	33%	50%	25%	43%	47%	30%	37%	37%
Roundtrip	63%	67%	50%	75%	57%	53%	70%	63%	63%

One-way or Roundtrip Travel

Riders were asked "Will you be making a round trip on Lake Transit today or just traveling in one direction?" The results are shown by route in Figure 2-10.

More than a third (37%) of riders said they were traveling only one-way. One-way travel is particularly common on 3 and 7, as might be expected due to their connections to intercity services. However, on every route, 25% or more of riders said they were traveling only one-way.

Figure 2-11 Fare Payment Method



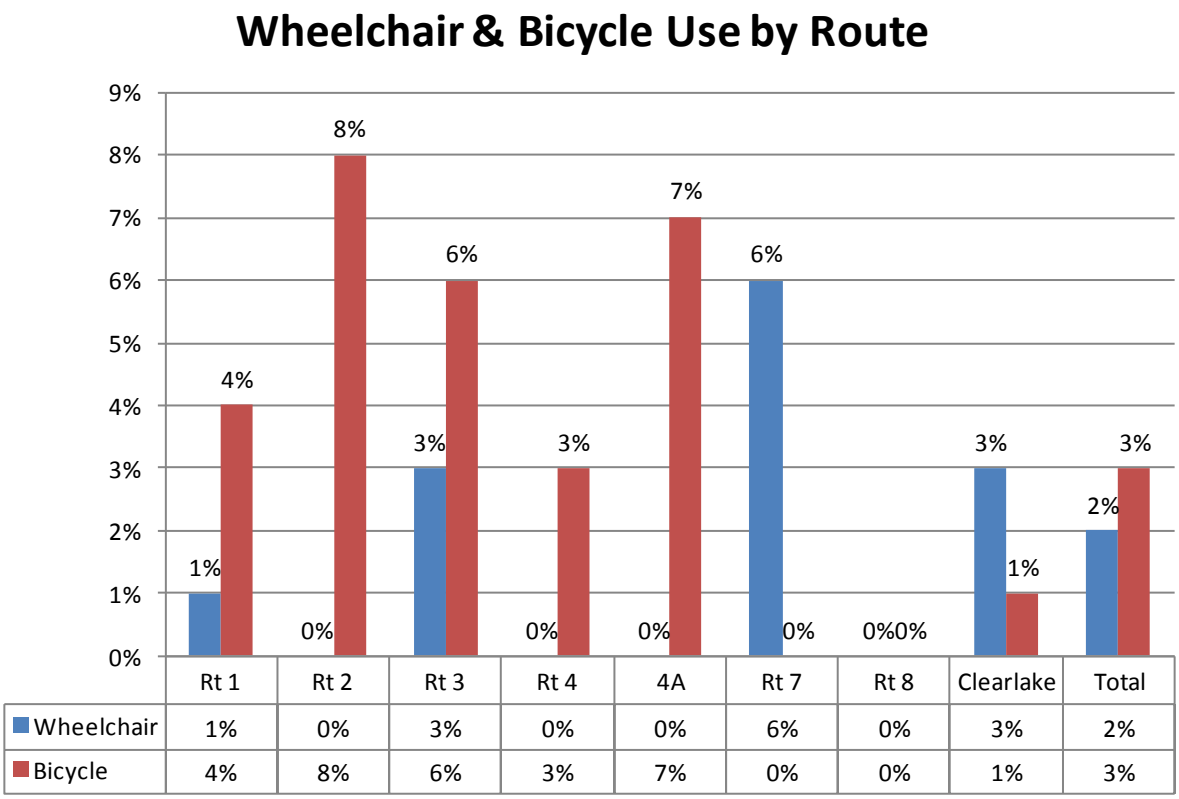
	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Cash	48%	83%	61%	31%	40%	70%	58%	48%	51%
Monthly Pass	23%	8%	33%	45%	40%	10%	35%	29%	29%
Punch Pass	18%	8%	6%	24%	33%	10%	6%	18%	16%
Weekly Pass	3%	0%	0%	3%	13%	25%	0%	3%	4%
Soc Serv Ticket	7%	0%	0%	0%	0%	0%	6%	4%	4%
Transfer	4%	0%	3%	3%	0%	5%	3%	2%	3%

Fare Payment

As shown in Figure 2-11, half of riders (51%) said they pay their fare in cash, while 29% use monthly passes and 16% use punch passes. Much smaller numbers use weekly passes, social service tickets or transfers.

The highest levels of cash usage are on Routes 2 (which has many occasional riders) and Routes 7 and 3 which have many one-way riders.

Figure 2-12 Wheelchair & Bicycle Use



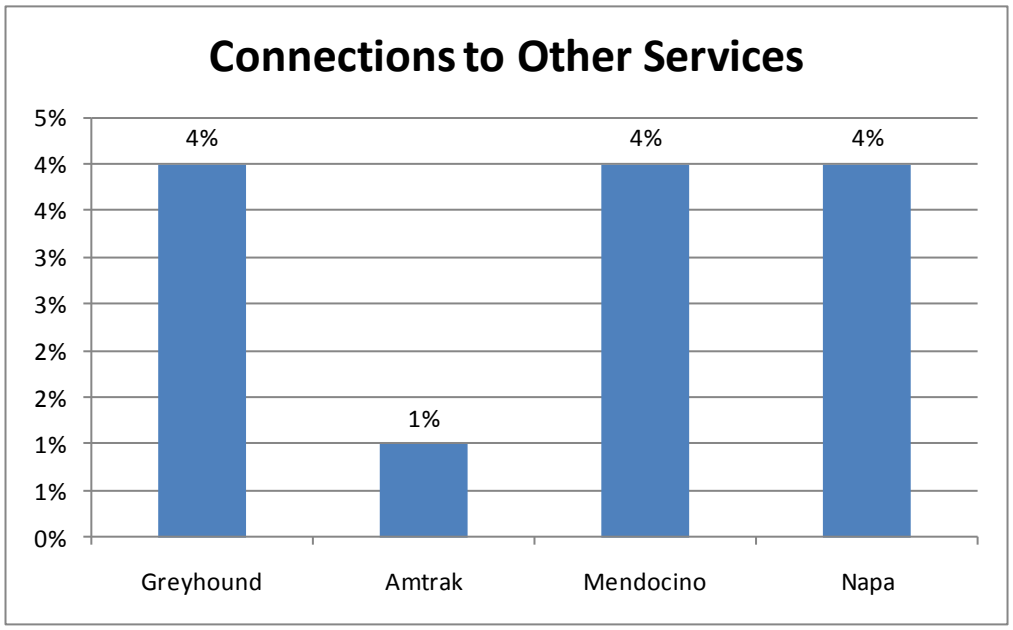
	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Wheelchair	1%	0%	3%	0%	0%	6%	0%	3%	2%
Bicycle	4%	8%	6%	3%	7%	0%	0%	1%	3%

Wheelchair and Bicycle Use

Riders were asked if they boarded in a wheelchair or brought a bicycle on the bus. Overall 2% of riders boarded in a wheelchair and 3% brought a bicycle along. As shown in Figure 2-12, some routes have much higher usage by customers in wheelchairs or with bicycles.

Bicycles are most used on Routes 2, 3 and 4A. Route 7 appears to be used by a higher proportion of persons in wheelchairs than the other routes.

Figure 2-13 Connections to Other Services

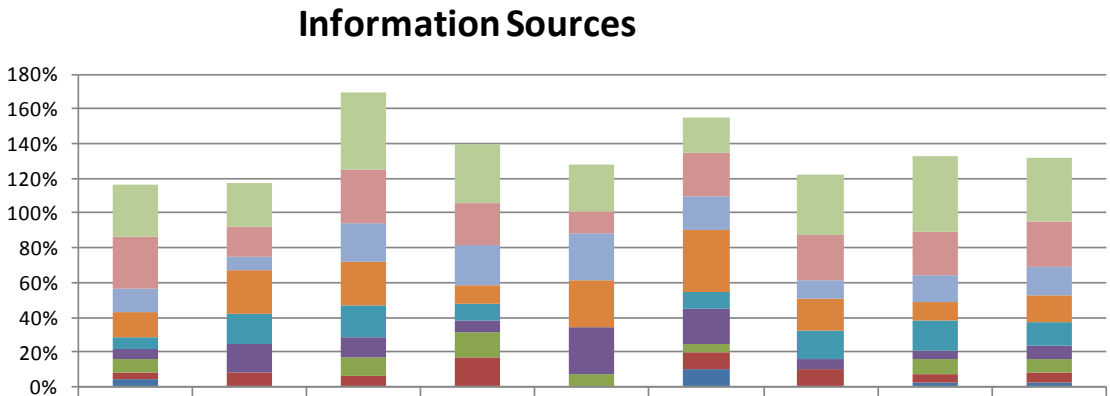


Connections

The questionnaire asked the rider about what Lake Transit routes they would use to complete their one way trip and if they would transfer to other services.

These connections will be explored in details as part of the route level service analysis. However, Figure 2-13 provides an overview of the connections to other systems. Small, but significant minorities of riders transfer from Lake Transit to intercity services and to neighboring systems in Mendocino and Napa Counties.

Figure 2-14 Information Sources



	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Printed Passenger Info	30%	25%	44%	34%	27%	20%	35%	44%	37%
Phone	30%	17%	31%	24%	13%	25%	26%	25%	26%
Family or Friends	13%	8%	22%	24%	27%	20%	10%	15%	16%
Website	15%	25%	25%	10%	27%	35%	19%	11%	16%
Bus Operator	6%	17%	19%	10%	0%	10%	16%	17%	13%
School or College	6%	17%	11%	7%	27%	20%	6%	5%	8%
Bus Stop Display	8%	0%	11%	14%	7%	5%	0%	9%	8%
Other	4%	8%	6%	17%	0%	10%	10%	5%	6%
Soc Srv Agn	4%	0%	0%	0%	0%	10%	0%	2%	2%

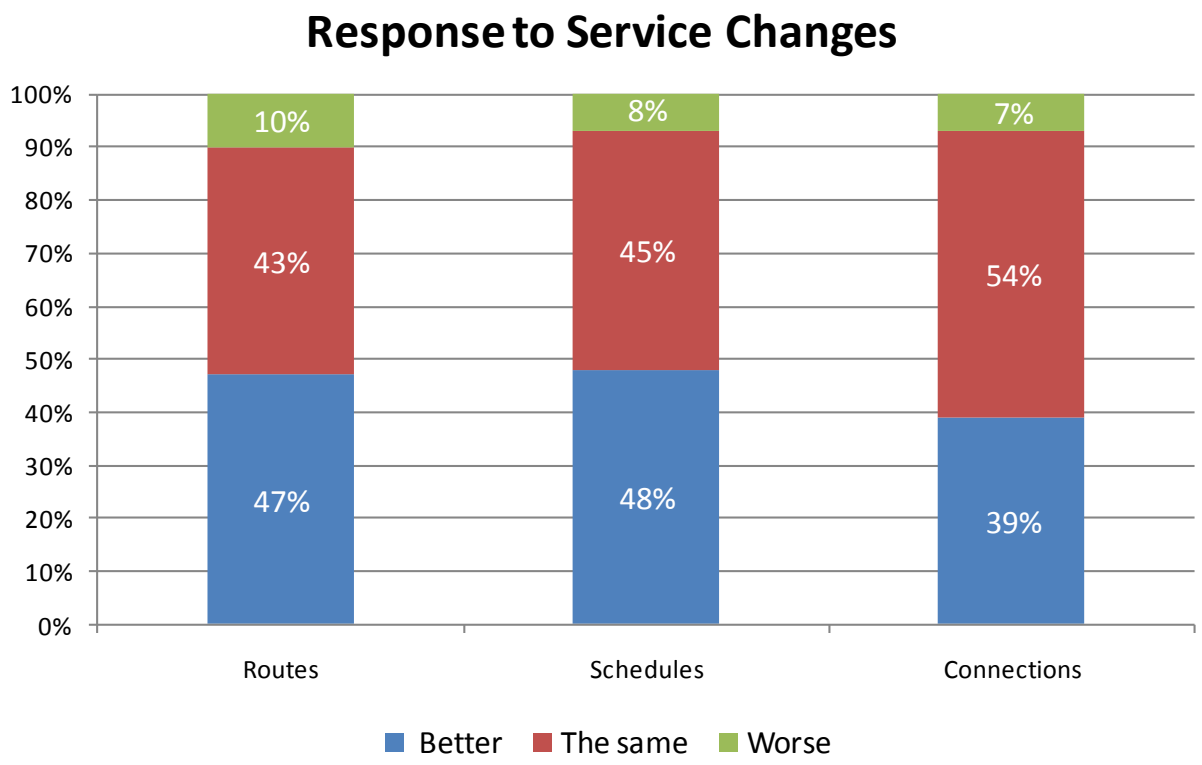
Information Sources

Lake Transit passengers use a variety of information sources to learn about the service. As shown in Figure 2-14, printed passenger guides are used by the largest segment (37%) of respondents, followed by the telephone (26%) and website (16%). Many riders rely on less formal sources – family and friends (16%) or the bus operator (13%). About 10% say they get information from an institution – school, college or social service agency.

Information sources vary among the riders of the different routes. For example, the riders on intercity routes 7 and 3, as well as 2 and 4A, are much more likely to use the website as a source of information.

Satisfaction with Lake Transit Services

Figure 2-15 Response to Service Changes

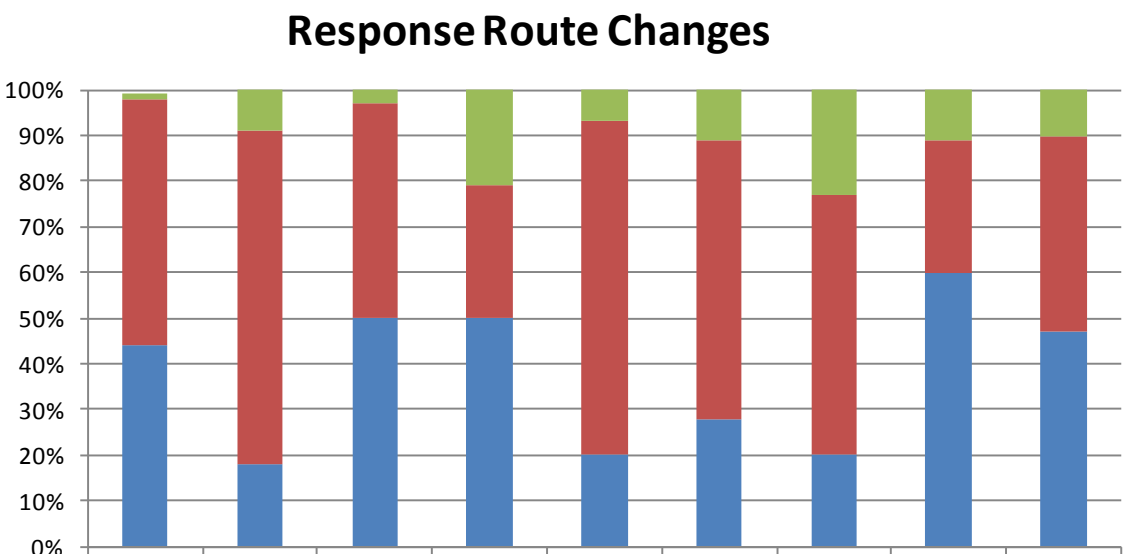


Response to Service Changes

Respondents were asked whether they thought the recent service changes (implemented within the month before the survey) had made things better, the same or worse in the areas of routes, schedules and connections. Figure 2-15 summarizes the findings for the total sample. The charts on the next three pages look at each issue on a route-by-route basis.

Many riders feel that the changes have improved the services – particularly routes and schedules - while a similar number feel that they have stayed the same. Ten percent or less of riders believe that the changes were detrimental.

Figure 2-16 Response to Route Changes



	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Worse	1%	9%	3%	21%	7%	11%	23%	11%	10%
The same	54%	73%	47%	29%	73%	61%	57%	29%	43%
Better	44%	18%	50%	50%	20%	28%	20%	60%	47%

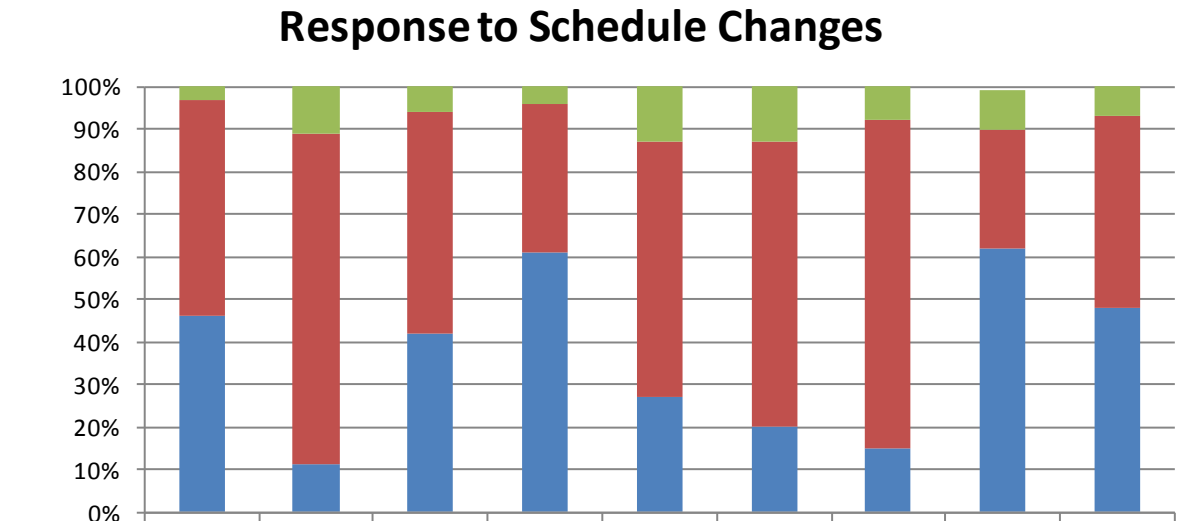
Response to Route Changes by Route

Response to the changes varies significantly by route – as would be expected since most of the changes were concentrated in Clearlake. As indicate in Figure 2-16, riders on the Clearlake Routes (5, 10, 11 and 12) and Route 4 were the most likely to perceive a change in the routes.

Sixty percent of riders on the four Clearlake routes feel that the changes made the routes better, while only 11% feel they got worse.

The response was more mixed on Route 4 where 50% said the routes got better and 21% said worse.

Figure 2-17 Response to Schedule Changes



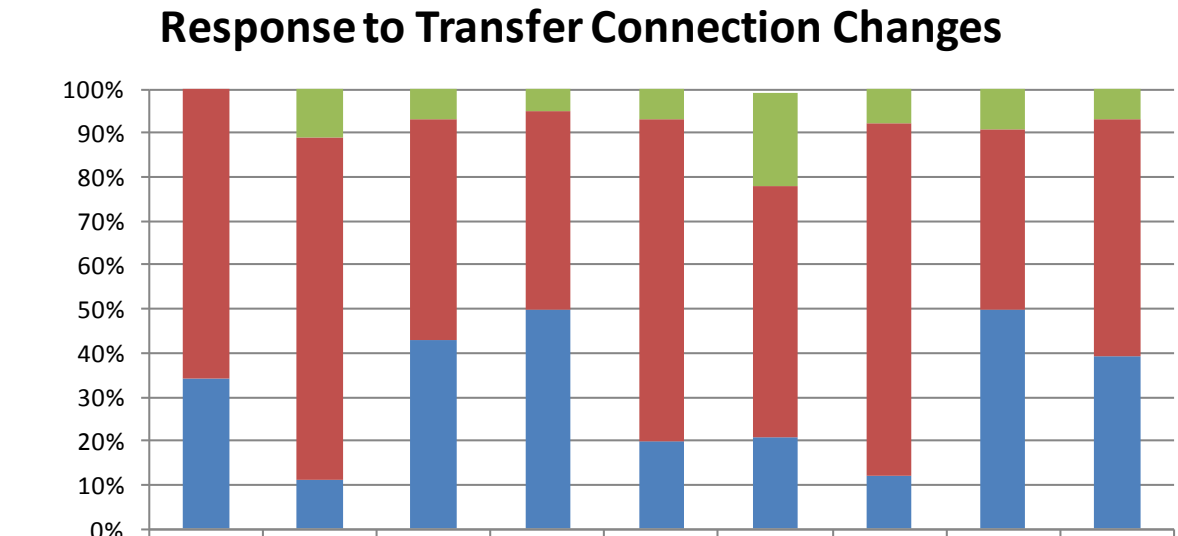
	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Worse	3%	11%	6%	4%	13%	13%	8%	9%	8%
The same	51%	78%	52%	35%	60%	67%	77%	28%	45%
Better	46%	11%	42%	61%	27%	20%	15%	62%	48%

Response to Schedule Changes by Route

Sixty-two percent of Clearlake riders felt that the changes made the schedules better and only 9% felt they were made worse.

On Route 4, 61% said schedules are now better and only 4% said worse.

Figure 2-18 Response to Transfer Connection Changes



	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Worse	0%	11%	7%	5%	7%	21%	8%	9%	7%
The same	66%	78%	50%	45%	73%	57%	80%	41%	54%
Better	34%	11%	43%	50%	20%	21%	12%	50%	39%

Response to Connection Changes by Route

Improvement to transfer connections was perceived, but not as strongly as for routes and schedules. As shown in Figure 2-18, half of Clearlake riders perceived an improvement, while 41% said they stayed the same and 9% said they got worse. Route 4's results were similar.

Figure 2-19 Satisfaction Ratings

	Courtesy of Drivers	Safety with other passengers	Comfort of vehicles	On-time perfor-mance	Ease of getting info	Connections within Lake Transit	Connections to other services	Cost of fares	Overall
5 Excellent	44%	44%	31%	19%	44%	32%	33%	34%	32%
4	28%	30%	23%	27%	29%	27%	23%	22%	38%
3	21%	19%	28%	30%	18%	28%	30%	29%	22%
2	5%	4%	12%	17%	7%	10%	9%	9%	7%
1 Poor	3%	2%	6%	8%	1%	3%	4%	5%	1%

Satisfaction Ratings

Riders were asked to rate various aspects of Lake Transit service on a 5-point scale from Poor (1) to Excellent (5). Figure 2-19 shows the distribution of responses for the total sample.

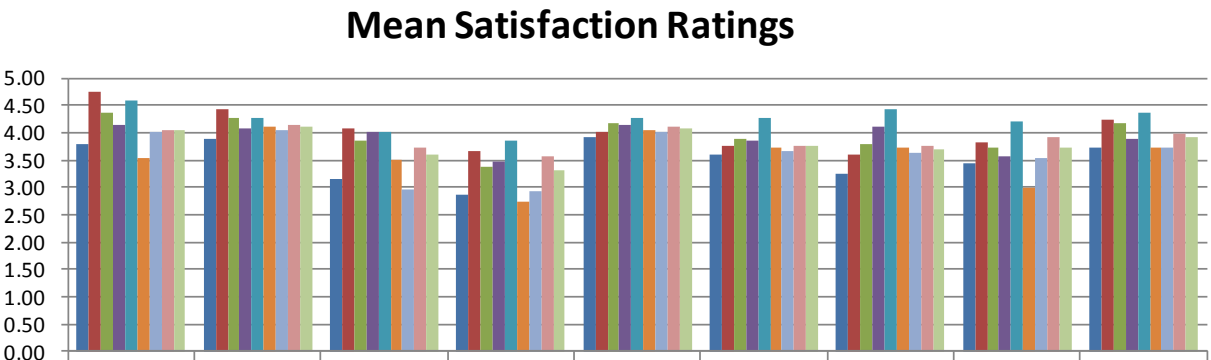
Overall, 32% rated the system as excellent (5) and 38% as good (4). Only 8% gave the system an overall rating below neutral.

The most positively rated aspects of service are safety with other passengers, courtesy of drivers and ease of getting information – each was rated excellent (5) by 44% of the respondents and good (4) by about 30% more.

For most aspects of service, the majority gave Lake Transit a rating of 4 or 5. The notable exception is on-time performance. Only 19% rated this aspect of service as excellent and 27% as good. Thirty percent gave it a neutral rating and a full 25% rated is as poor (1 or 2).

Other aspects of service which were rated poorly (1 or 2) by more than 10% of riders are comfort of the vehicles (18%), cost of fares (14%) and connections within Lake Transit and to other services (13%).

Figure 2-20 Mean Satisfaction Ratings



	Courtesy of Drivers	Safety with other passengers	Comfort of vehicles	On-time perfor-mance	Ease of getting info	Connections within Lake Transit	Connections to other services	Cost of fares	Overall
Rt 1	3.78	3.90	3.16	2.87	3.93	3.59	3.26	3.46	3.72
Rt 2	4.75	4.42	4.08	3.67	4.00	3.75	3.60	3.83	4.25
Rt 3	4.36	4.27	3.86	3.37	4.18	3.88	3.81	3.74	4.17
Rt 4	4.14	4.07	4.00	3.46	4.15	3.86	4.12	3.57	3.89
4A	4.60	4.27	4.00	3.87	4.27	4.29	4.42	4.21	4.36
Rt 7	3.55	4.10	3.50	2.75	4.05	3.72	3.73	3.00	3.74
Rt 8	4.00	4.03	2.97	2.93	4.00	3.67	3.62	3.55	3.74
Clearlake	4.03	4.16	3.74	3.57	4.12	3.76	3.77	3.92	3.97
Total	4.04	4.11	3.60	3.32	4.08	3.76	3.71	3.71	3.93

Mean Satisfaction Ratings by Route

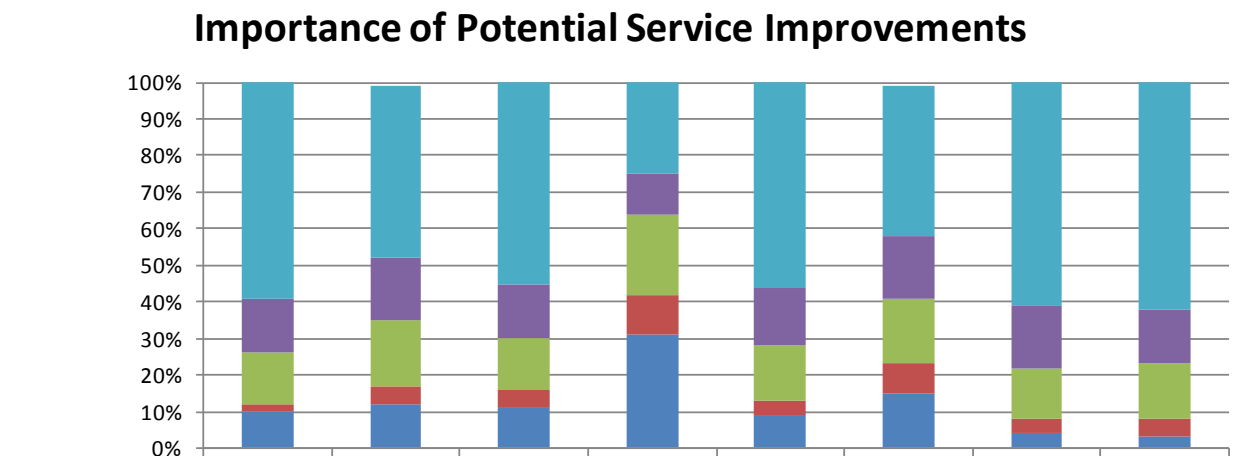
Figure 2-20 shows the mean satisfaction ratings for each aspect of service by route. There are relatively large differences in the ratings given by riders on different routes.

For overall service, the highest ratings were given by riders on Routes 4A, 2 and 3 – with overall ratings of 4.17 to 4.36. All other overall ratings were in the 3.72 to 3.93 range.

The lowest ratings for any aspect of service were for on time performance on Route 7 (2.75), Route 1 (2.87) and Route 8 (2.93).

Improvement Priorities

Figure 2-21 Improvement Importance Ratings



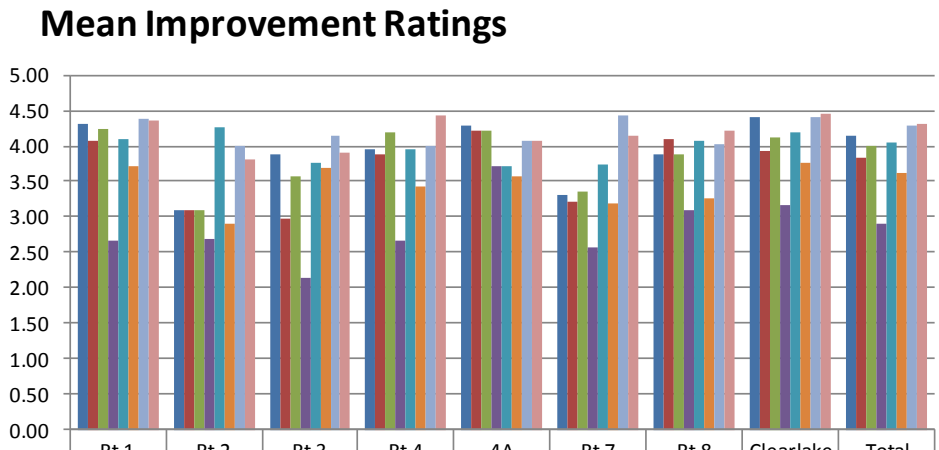
	Bus service on Sundays	Hourly circulator route in Lakeport	AM service to Lakeport or Clearlake by 8 AM	Expanded service to Konocti Casino & Resort	Unlimited ride Day Pass	Real-information	Bus stop signs with information	Shelters at more bus stops
5 Very important	60%	47%	56%	26%	56%	41%	61%	63%
4	15%	17%	15%	11%	16%	17%	17%	15%
3	14%	18%	14%	22%	15%	18%	14%	15%
2	2%	5%	5%	11%	4%	8%	4%	5%
1 Not important	10%	12%	11%	31%	9%	15%	4%	3%

Improvement Importance Ratings

Riders were asked to rate the importance to them personally of various service improvements. A five-point scale was used from 1–not important to 5–very important. They were then asked to indicate which one improvement would be most important to them. Figure 2-21 provides the results of the importance ratings

All of the potential improvements were rated as very important (5) by 40% or more of the respondents except expanded service to Konocti Casino and Resort. Those with the highest "very important" ratings were shelters at more bus stops (63%), bus stop signs with information (61%) and bus service on Sundays (60%).

Figure 2-22 Mean Improvement Ratings

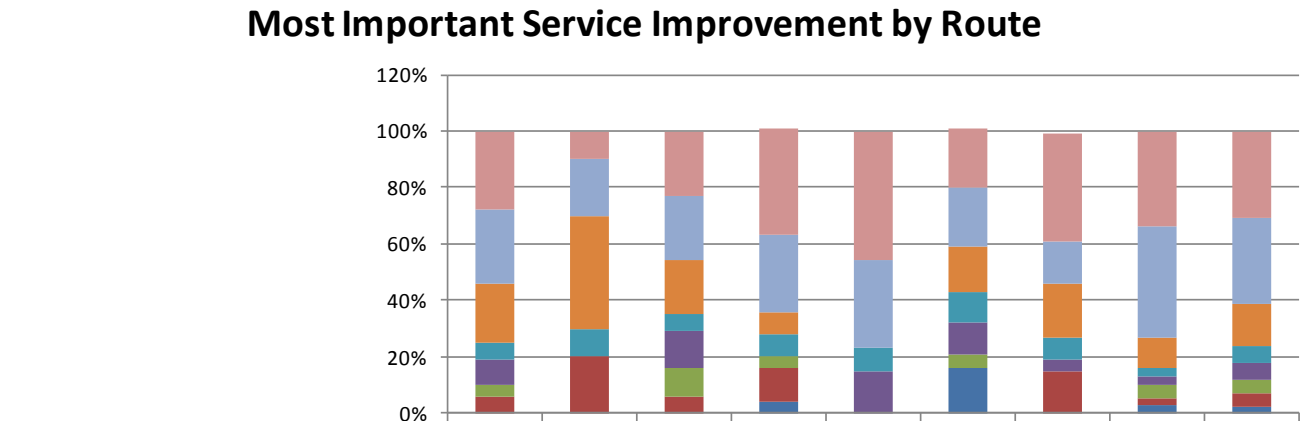


	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Bus service on Sundays	4.30	3.09	3.88	3.96	4.29	3.32	3.87	4.41	4.15
Hourly circulator route in Lakeport	4.07	3.10	2.97	3.89	4.21	3.21	4.10	3.93	3.83
AM service to Lakeport or Clearlake by 8 AM	4.25	3.10	3.58	4.19	4.21	3.35	3.87	4.13	4.01
Expanded service to Konocti Casino & Resort	2.68	2.70	2.13	2.67	3.71	2.58	3.10	3.16	2.90
Unlimited ride Day Pass	4.10	4.27	3.76	3.96	3.71	3.75	4.06	4.18	4.06
Real-information	3.71	2.90	3.70	3.43	3.57	3.20	3.26	3.77	3.61
Bus stop signs with information	4.39	4.00	4.15	4.00	4.07	4.42	4.03	4.40	4.28
Shelters at more bus stops	4.36	3.82	3.91	4.43	4.07	4.15	4.21	4.46	4.31

Mean Improvement Ratings by Route

Figure 2-22 shows mean importance ratings given to each potential improvement by the riders on each route and begins to illustrate the differing priorities of different groups of riders. For example, riders on Route 7 are less interested in Sunday service than the overall sample (3.32 vs 4.15), but more interested in bus stop signs with information (4.42 vs 4.28).

Figure 2-23 Most Important Improvement



	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Bus service on Sundays	28%	10%	23%	38%	46%	21%	38%	34%	31%
Shelters at more bus stops	26%	20%	23%	27%	31%	21%	15%	39%	30%
Unlimited ride Day Pass	21%	40%	19%	8%	0%	16%	19%	11%	15%
Bus stop signs with information	6%	10%	6%	8%	8%	11%	8%	3%	6%
AM service to Lakeport or Clearlake by 8 AM	9%	0%	13%	0%	15%	11%	4%	3%	6%
Real-information	4%	0%	10%	4%	0%	5%	0%	5%	5%
Hourly circulator route in Lakeport	6%	20%	6%	12%	0%	0%	15%	2%	5%
Expanded service to Konocti Casino & Resort	0%	0%	0%	4%	0%	16%	0%	3%	2%

Most Important Service Improvement by Route

Figure 2-23 shows the percent of riders on each route and for the overall sample who said that a specific service improvement would be most important to them, if they could choose only one. When looked at in this way, priorities shift somewhat. Sunday service was chosen by 31% of respondents and shelters at more bus stops by 30%. Signage at bus stops was rated as highly as these two in the core ratings, but if riders can have only one they opted for Sunday service and shelters at more bus stops.

Priorities also vary significantly by route. For example, while the unlimited ride day pass is the most important improvement for only 15% overall, it was chosen by 40% of riders on Route 2 (a sample of only 12).

Outreach Summary

Unless otherwise noted, the following are perceptions of stakeholders. When necessary, additional context is added in *italics* to provide an appropriate response to the stakeholder comment.

Awareness and Image of Lake Transit

There is generally good awareness of Lake Transit services and how to access them, among those with a "need" for transit. As in most communities, non-users are less aware of the specifics of the service but generally aware of Lake Transit's role and say they would "Google" the system if they needed information.

Stakeholders at social services, medical facilities and educational institutions were well aware of how their constituents depend on the transit system for mobility and had significant knowledge about the services and their limitations. However, many were unaware of the recent service improvements in Clearlake. There was interest among the social service agencies in having their staffs better "trained" in the specifics of Lake Transit service.

Among users and potential users in focus groups, there is a high level of familiarity with the service. However, many were unaware of the new late night service in Clearlake. Those who were aware of and using the extended service were very appreciative.

Lake Transit has a generally positive image and there is high satisfaction, particularly with service in Clearlake. Services to outlying communities while highly appreciated are more problematic due to long distances and limited frequencies.

One social service manager said "You don't hear bad things about Lake Transit" and an elected official commented, "Outside of the strike, my constituents are very pleased with the service." However, there are a wide variety of specific "issues" which were raised by both stakeholders and users regarding how the service could be improved.

Stakeholders within the community, while generally very complimentary of Lake Transit as an organization, had mixed reviews about Lake Transit's responsiveness to their needs. The International Charter School was very pleased with the re-location of a bus stop to improve student safety, while the St. Helena Hospital has been frustrated with the lack of improvements to the bus stop serving the hospital.

The bus stop improvement at St. Helena Hospital needs to be a partnership between St. Helena Hospital and Lake Transit. There are expensive improvements required to both the bus stop itself as well as an ADA compliant path from the bus stop to the entrance of the Hospital.

High Level of Transit Need in Lake County

Stakeholders said that there is a great need for public transit services within Lake County due to high levels of poverty and disability among the population. Specific comments which illustrated this need:

- One third of the County's population is on MediCal; other low income families don't qualify. ((Lake County Health Services)
- At St. Helena Hospital about 45% of patients are on MediCal and 45% on Medicare. With the Affordable Care Act, 1800 new people are expected to access health care services in Lake County. (St. Helena Hospital)
- There is a high percentage of persons with disabilities in Lake County – some estimates say 40%. (St. Helena Hospital)
- There are many indigent families with no cars and money for gas. (Social Services)
- The Probation program has 200 clients, 70 under active supervision meaning they must report to the center in Lakeport regularly. Most live in Clearlake. (Probation Department)
- Department of Rehabilitation has 100 clients in Lake County, 60% without access to a vehicle. (Department of Rehabilitation)

Non-Emergency Medical Transportation Needs

Among both older adult and disability populations, the greatest unmet transportation need is for non-emergency medical transportation both within Lake County and to out-of-county medical facilities. The Information and Referral service at Lakeport Senior Center says it is the biggest need among their callers.

Within the County, Lake Transit provides service to all of the major medical facilities, however, according to stakeholders, a number of factors make it difficult for elderly persons and those with disabilities to utilize the service:

- In some areas, particularly Lucerne and Cobb Mountain, seniors cannot get from their homes to the bus stop.
- Once they arrive in Clearlake, they will need to transfer buses at the Rays stop– not a location considered safe by most seniors.
- While deviations are available on some routes, this is not something most people are aware of or utilize.
- Dial-a-Ride service, where available, is considered too expensive for many low income persons, which includes older adult and persons with disabilities.
- County Fire District ambulances make some non-emergency medical trips, called in as 9-1-1 emergencies for older adults or others without transport to local medical facilities. The number of

inappropriate calls, e.g. not true emergency calls, is difficult to pinpoint but remains a concern of the Fire District.

- Lake County residents are referred to a wide variety of out-of-county medical facilities for specialty care. These include St. Helena Hospital in St. Helena, various facilities in Ukiah and Willits, MediCal dentists outside the county (only two located in Lake County) and more distant facilities such as UCSF and UC Davis. In addition to the Clearlake Veterans Outpatient Clinic, the VA Medical Centers in San Francisco and in Sacramento, as well as the VA Clinic in Santa Rosa are destinations to which veterans travel for various health care services. Specialty dental care referrals to Santa Rosa and to Windsor facilities can require multiple trips, often at six-week intervals for some patients and these can be difficult for some Lake County individuals. Sutter Adventist Hospital in Willets has both pediatric and obstetrics clinics, each of which require multiple visits for patients and can be difficult for some. *Non-Emergency Medical Transportation is addressed in the 2015 Coordinated Public Transit-Human Services Coordination Plan. One of the recommended strategies is:*
  "3.1 Develop near and long-term non-emergency medical transportation (NEMT) alternatives that will address NEMT trip needs both within Lake County and to out-of-county destinations, including enhanced transit connections, special shuttle or life-line services, brokered trip provision across multiple providers, use of targeted mileage reimbursement and other such initiatives."

Lake Transit's intercity routes can be used to access medical facilities in Mendocino and Napa Counties. However, these present the same difficulties for seniors and persons with disabilities as described above.

St. Helena Hospital operates a single 8-passenger van which they use to provide transportation to services at their own facilities and those of other medical providers, when no other option is available. They would prefer to contract with Lake Transit or another transportation provider for the service.

Other Needs Not Currently Met

Lake Transit does a good job of covering most of the communities in Lake County. Two areas of concern were raised repeatedly by multiple stakeholders

North Shore

- The level of service along the north shore is seen as insufficient for the need. The latest bus returning to Lucerne from Clearlake leaves at 4 pm, making it impossible for riders to return home from jobs (e.g. Walmart) or Yuba College.
- Within Lucerne, many people live in the hills, making it difficult to get to the bus stop. There is no demand response service to connect them to Lake Transit. A local Dial-a-Ride service, possibly operated by the senior center with the new 5310 vehicle was suggested.

Spring Valley

- The Spring Valley population is isolated with no service at all. Need for lifeline service to connect them to medical and shopping was expressed, as well as service to bring seniors to a senior center.

The Live Oak Senior Center provides some service using a Lake Transit CTSA vehicle, but is not well known.

- Lake County Health Services estimates that there may be 800 older adults living in Spring Valley – though some are likely part time residents. The Fire Protection District gets calls from older adults in that area for assistance.

Other

Other unserved or underserved locations mentioned during the stakeholder interviews included:

- Elem Indian Community off of Highway 20 and Sulfur Bank – 40 to 50 people live there.
- Scott's Valley Ranches (past Safeway and 11th St.) – isolated elderly who can no longer drive.

Bus Stops and Signage

An issue which was raised in every interview and focus group, as well as being a high priority in the on-board survey, is the need for improvements to Lake Transit bus stops. Comments focused around the following themes.

- Many bus stops are not signed at all, leading to confusion about where to wait (among the passengers) and where to stop (among new drivers). One rider said that even a stripe painted on the curb to indicate the bus stop location would be helpful…otherwise it is a complete crapshoot for the new rider.
- There is no schedule information, even at major bus stops and transfer points. Posting of route destinations and departure times would be very helpful to riders.
- Benches and shelters need to be provided at more high volume stops – particularly on the intercity routes. The additional shelters in Clearlake are much appreciated.
- Bus stop spacing and access is a problem in some areas. Too much space between bus stops can make it difficult for seniors or persons with limited mobility. Lack of sidewalks makes getting to bus stops difficult for many – seniors, persons with disabilities, people with strollers.
- The transfer center at Ray's is a significant deterrent for some riders. It presents a very poor image, feels unsafe – particularly to seniors, and offers no information.
- Some highly used bus stops are particularly problematic for specific populations:
  - Bus stop at Clearlake St. Helena Hospital - at 18th St. and 53rd – is just off of hospital grounds. The bus stop is just a patch of dirt with

no pad, bench or shelter. There is just a broken sign. The hospital has asked LTA to improve the stop – pave area, provide path of travel to hospital entrance. They have a shelter they would provide for installation. *As cited above, improvements to the bus stop at St. Helena Hospital will need to be negotiated between Lake Transit and St. Helena Hospital. In addition to the bus stop improvements, there is a need for access improvements from the bus stop to the door at St. Helena Hospital.*

- Bus stop at St. Helena Clinic in Clearlake. The bus stops right in front of shopping center on street. Dr. Shapiro would like bus to enter the parking lot and come to the door of clinic.
- Job Zone bus stop. Many low income persons with children use the stop. This stop is located on the edge of Hwy 53 with no amenities or protection from traffic.
- Lucerne Senior Center. Eastbound Route 1 stops in front of the Senior Center, turning onto Country Club Drive and then turning back down to Hwy 20. Westbound, the bus doesn't stop at the Senior Center, but only on Hwy 20. This limits the utility of the service to senior center visitors or staff.

Desired Service Improvements

Despite the generally high regard for Lake Transit and appreciation for the services provided, stakeholders and focus group participants had a wide variety of suggestions for how the system needs to be improved – primarily through expansion of hours and frequency, as well as the previously discussed bus stop improvements. Specific suggestions included:

- Improved service between Clearlake and Lakeport, earlier, later, and more frequent. *Much of this desired improvement was made on Routes 1/8 with JARC funding in January 2015*
- Later night service to Mendocino College – expected to be provided with grant.
- Later night service within Lakeport - would help in a number of ways, including access to jobs at Sutter Lakeside Hospital and KMART. *Implemented In January 2015*
- Later bus from Ukiah to Lakeport, leaving Ukiah at 9:00 or 9:30 PM.
- Routes 1 and 4 need to run more often. As previously noted, the last bus from Clearlake to Lucerne leaves at 4:10 pm, too early for work trip purposes. *Route 1 frequencies improved in January 2015*
- Improved timing of Route 10-11-12 connections at Austin Park in Clearlake.
- Improvement of Route 3 to better service International Charter School in afternoon, (school is out at 2:30 pm, bus arrives at 3:20 pm)
- Sunday service to get to and from church
- To be useful to seniors for medical trips, buses would need to go directly to medical offices without a transfer. (Senior Centers and Hospital).

- Better access to library and One-Stop Center in Lakeport.
- More routes serving jails (Probation Department).
- Better connections to Amtrak and Greyhound in Ukiah – bus is frequently running late and has trouble making connections.
- More recovery time on routes. Too little recovery time results in buses frequently running late.

Fare Issues

The February 2012 Lake Transit fare increase had the greatest impact on seniors and disabled riders because of the elimination of the discount fare on intercity routes. We heard many comments about this but no comments about the fare increase from the general public.

More specifically, the fares for regional and rural routes increased from $1.50 to $2.25 for seniors and disabled individuals. The consulting prepared a working paper on fares in January 2014 that resulted in change to the fares for seniors and disabled riders. The discount fares for regional and rural route trips are now back to $1.50 for seniors and disabled individuals.

Medical providers and senior center representatives both said that DAR fares are perceived as too expensive by many seniors.

There were a number of suggestions for discount fare media such as:

- A family-pass for those with multiple children. *Impllemented*
- Additional ADA fare media discounts.
- A discounted year-round pass for students.
- A discounted semester pass for Yuba College students – could be sold through Yuba College. This was a highly popular idea with students in the Yuba College focus group. (Potentially a similar program for Mendocino College – in conjunction with MTA.)
- Seniors at the Clearlake senior center asked for a DayPass for use within Clearlake.

Bus Operators and the Strike

According to social service agencies, the strike during the summer of 2013 had significant impact on riders, but according to stakeholders, there has been a return to operating normalcy with the resumption of service. In a few cases, the stakeholders said they had only heard complaints about LTA during the strike. *As discussed above, the labor strife and service disruption was a contributing factor to the 25% drop in ridership between FY 2011/12 and FY 2013/14.*

Mobility Management

Existing Strategies

There are a variety of mobility management efforts already in place within Lake County. These are transportation programs which meet specialized needs through other than general public transit. Those identified during the outreach include:

- Many of the stakeholder organizations purchase passes for their low income constituents – Welfare to Work, Child Welfare, Probation Department, Health Services, St. Helena Hospital and International Charter School.
- There is a lot of carpooling among senior center participants.
- Lake Transit is getting two 5310 vans for 2 senior centers. One was designated for Middletown, but they don't want to fund operations so it will go to Lucerne. Lucerne is interested in using it to establish a local DAR which will bring seniors (and others) to the senior center or to connect with Lake Transit.
- Lucerne Senior Center has one van to provide medical transportation from the greater Lucerne area to medical appointments around the County.
- St. Helena Hospital has an 8-passenger van, that is wheelchair accessible (2 wheelchair positions), operated by a pool of three paid drivers. They take patients to a variety of medical facilities including their own rural health clinic and hospital, but also to competing facilities in and out of the county. They are not "allowed" to use the service to promote use of their own facilities. The service is funded from their general fund – "not reimbursable."
- The Lakeside Health Center and the Clearlake Family Health Center each have one van, used almost exclusively for trips within the county.
- Family Resource Center, which works with Head Start kids, teen moms and others has 2 vans they utilize as needed.
- The Tribal Consortium has one van that is used to provide Tribal members with trips for both in-county and out-of-county non-emergency medical transportation.
- The County Behavioral Health Department's inter-agency committee provides a forum for discussion on various issues that include the transportation of seriously mentally ill individuals which sometimes involves the Fire District's non-emergency medical transportation services. This committee is exploring field-based service delivery which would decrease the need for expensive out-of-county transportation for clients of the Behavioral Health Dept.
- CCS (California Children's Services) has is a mileage reimbursement program, budgeted at as much as $20,000 annually to pay for transportation.
- IHHS is paying for transportation provided by worker to client. The amounts are limited.

Potential New Strategies

A number of opportunities for additional mobility management efforts surfaced during the outreach discussions.

- There was positive reception to the idea of travel training, particularly for seniors. It does not appear that there has been any such programs at senior centers in the past.
- There was interest in a case manager-focused One-Call/One Click capability whereby case workers could readily determine whether or not, and how, a trip could be made on Lake Transit or on other transportation resources.
- One stakeholder noted that they would like to see ambassadors on the bus to assist new riders who are unfamiliar with the system.
- Area Agency on Aging would consider buying passes for seniors if they had funding. They are willing to explore possibilities.
- Dept. of Health representatives expressed interest in an "agency pass" whereby the transit subsidy funds available to several human service agencies could be used to easily purchase bus tickets and, in some cases, be restricted to certain trip purposes, e.g. non-emergency medical transportation.
- There is receptiveness to idea of Lake County brokerage for NEMT trips – particularly by the hospitals who would prefer not be providing transportation.
- With one-third of the County on Medi-Cal, opportunities may be possible to coordinate with Medi-Cal service providers and the developing managed Medi-Cal entity, Partnership Health Plan.

Role of Senior Centers in Transportation

Our outreach included a number of stakeholders who focus on the senior community. Therefore discussions addressed the role of senior centers in providing or facilitating public transportation. The potential roles are likely to vary widely from community to community.

- Dr. Shapiro at St. Helena has a vision for a network of transit hubs at senior centers in each community. He believes this would provide a more comfortable transfer and waiting experience – particularly for seniors or persons with disabilities who could be helped to and from the bus by senior center staff.
- The Senior Center in Lucerne will be receiving one of the new 5310 vehicles. They are interested in using it to establish a local DAR service that can bring residents from the hill neighborhoods to the senior center, but also to connect to Lake Transit.
- In Middletown, the Senior Center maintains a list of people who provide rides for a small fee. They also pay for these rides for seniors who can't afford them (through a $1000 gift from the local bank). They had the opportunity to receive a 5310 vehicle, but did not want to commit to the cost of operating it.

- Highland Senior Center in Clearlake is served by Routes 11 and 12, with the bus stop located just outside their door. They are also served by Clearlake Dial-A-Ride (DAR). This would be a good venue for travel training. Some of their participants already use the bus – although they say it is difficult for more frail seniors.
- The Lakeport Senior Center has an arrangement with Lake Transit whereby seniors coming to the nutrition program can ride DAR for $.75. They would be interested in a countywide mileage reimbursement program to assist seniors with longer medical trips.

Other Potential Partnerships

- Konocti Unified Is cutting back on school bus service and would like to see more coordination between Lake Transit and school districts to offer alternatives to students.
- One elected official would like to explore a partnership with Wine Growers Association to serve visitors.
- Elected official expressed interest in more recreational access to Cobb Mountain area, perhaps in partnership with Lakeport Economic Development, County Economic Development or Konocti Regional Trails.
- Potential for a coordinated mileage reimbursement program among Lake County Senior Centers to aid low income seniors in accessing medical care and other services.
- Marymount College hopes to have 80 students in Lucerne by Fall 2014. Their 5-year plan is for 500 students with 10% re-locating from Southern California and the rest coming from northern California communities. Their expectation is that most students will live in Lakeport and need to commute to the campus in Lucerne.
- People Services would be interested in contracting to maintain bus stops and shelters.

Passenger Information

There were several comments about the difficulty of reading schedules, knowing where to catch the bus and coordinating between different routes. Some stakeholders said that seniors need a larger print version of the schedules. The Public Health Department would like transit information that can be easily used by caseworkers. Riders said that they preferred having all of the schedules in one booklet as they transfer between Clearlake and regional routes frequently. Over a quarter of riders are calling to get information – possibly because they find it easier than understanding the printed information.

There were a number of comments about the “responsiveness” of Lake Transit. One person complained about not being able to get through on the phone, another about an ADA application that took far too long.

Having Google Transit would be significant benefit for trip planning, including planning trips that involve connections to Mendocino Transit or the Vine. It would be useful both to passengers and stakeholders

who assist clients with transportation. Most of the focus group participants (both college students and Welfare to Work clients) have smartphones and are familiar with Google maps. They thought the idea of a Lake Transit App was a great idea.

While Lake Transit has been conscientious about providing information in print and online, it appears that the information dissemination system can be improved in a number of ways including enhanced printed and on-line information, information at key bus stops and active outreach to educate stakeholders about the system.

One stakeholder suggested sponsorships of local events as a marketing opportunity. He felt the most effective would be to sponsor an event or venue at the Lake County Fair. Fair attendance last year was approximately 38,000.

Transit Manager Succession Planning

The Transit Development Plan has a planning horizon of five years. During this time frame, it is possible that the Transit Manager could retire. Stakeholder interviews were held with several elected officials to receive input on succession planning.

Elected officials believe that the existing management arrangement works well. The Transit Manger, Mark Wall, received very high marks from those interviewed, with one official commenting that his explanation of HR and union issues during the strike were very useful in helping them understand what Lake Transit could and couldn't do. The elected officials expressed a clear consensus in wanting a future Transit Manager to have the type of transit management expertise that the current Transit Manager provides.

The contract between the Lake Transit Authority (LTA) and the Transit Manager is for 1,200 hours. *The Transit Manager often spends more than 1,200 hours annually on Lake Transit business.* Elected officials are uncertain about going to a full time manager. They need to evaluate trade-offs of benefits and costs. One official expressed a desire to have a manager that "lives in Lake County," but understands that that would require providing an "enticement package" to get a qualified manager to move there. Several other elected officials were open to having a contract manager similar to the existing arrangement, where the Transit Manager lives outside Lake County. In order to attract a high quality Transit Manager, there is a need to have an excellent benefits package.

Overall sentiment is that that elected officials would like to better understand what others in similar counties are doing, and based on that lay out options for consideration. While the current system has worked well, they don't really know if this is the best. They need a basis for comparison. Chapter 7 provides a detailed analysis of organization and succession alternatives for the Transit Manager.

Census Review[1]

As described above from the survey results, Lake Transit ridership is mostly low-income adults. Lake Transit provides a mobility option for disabled individuals who are not able to driver. Similarly, it provides mobility for seniors who need transportation for their daily lives. The following discussion shows the demographic trends from the Census on these three key market segments.

Low-Income Adults

There was an increase in the number of adults of low-income as well as an increase in percent of the County's residents from 10.4% to 14.6%, over 3,300 persons between the 2000 Census and the 2012 American Community Survey. Low-income persons are reporting incomes at or below the Federal poverty level that varies by household size.

Adults with Disabilities, 16-64. The U.S. Census has changed the way in which it captures citizens' disability characteristics so that 2000 data cannot be directly compared to 2012. Currently there are over 7,500 adults under age 65 reporting some type of disability (11.7% of the county's population) as shown in Figure 2-24. These adults reporting difficulties with walking are 6.1% of the county's population, almost 4,000 individuals. Among older adults, almost 3,000 report ambulation difficulties – 4.5% of the county's population. In combination, these 7,000 individuals represent over 10% of the county's population. When coupled with other physical disabilities, including hearing or vision impairments, cognitive difficulties, self-care difficulty and independent living difficulty, the overall count of unique individuals is 7,561 adults and 4,683 older adults. These 12,244 persons total almost one-fifth of county residents, with many likely to have some level of transportation dependency, at least for some trips at some times.

[1] Most of this section is repeated from the Lake County 2014=15 Coordinated Public Transit-Human Services Transportation Plan, Final Report, June 2015 prepared by AMMA Transit Planning.

Figure 2-24 Lake County Adult Population with Disabilities Under Age 65

TARGET POPULATIONS for Seniors, Persons w/Disabilities, and Persons of Low-Income					
2000 Census Attribute, Summary File 3 2012 American Community Survey 5-year Estimates	[2000 Census] Lake County People by Category	% of Total County Population	[2012 ACS] Lake County People by Category	% of Total County Population	% Change from 2000 to 2012
TOTAL POPULATION [1]	58,309	100.0%	64,360	100.0%	10.4%
ADULTS 18-64 [2]	33,025	56.6%	39,355	61.1%	19.2%
Low-income Adults, Ages 18-64 - 100% Federal Poverty Levels [3]	6,063	10.4%	9,408	14.6%	55.2%
with % of Adults 18-64	*18.4%*		*23.9%*		
Disability [4] (non-institutionalized) **Ages 16-64** "go-outside-home" disability (2000)	3,175	5.4%	n/a	n/a	
with % of Adults 18-64	*9.6%*				
Disability [4] (non-institutionalized) Ages 18-64 (2010)			7,561	11.7%	
with a hearing difficulty			*1,775*	2.8%	
with a vision difficulty			*1,009*	1.6%	
with a cognitive difficulty			*3,562*	5.5%	
with an ambulatory difficulty			*3,932*	6.1%	
with a self-care difficulty			*1,557*	2.4%	
with an independent living difficulty			*3,218*	5.0%	

[1] Census 2000 Summary File 3, Total Population P001. / B01003 Total Population 2012 American Community Survey 5-year Estimates

[2] Extrapolated from Census 2000 Summary File 3, Sex by Age P008 / B01001 Sex by Age, 2012 American Community Survey 5-year Estimates

[3] Extrapolated from Census 2000 Summary File 3, Poverty Status in 1999 by age P087 / B1701 Poverty Status in the Past 12 Months by Sex by Age 2012 American Community Survey 5-year Estimates

[4] Extrapolated from Census 2000 Summary File 3, Age by types of disability for the civilian non-institutionalized population 5 years & over with disabilities p041 / S1810 Disability Characteristics - 2012 American Community Survey 5-year Estimates

Older Adults

While the County's overall population grew by 19.2% the proportion of persons over the age of 65 grew by .04% between 2000 and 2012. Seniors 65 and older increased from 11,332 persons in 2000 to 11,377 older adults in 2012

With regard to income, the proportion of older adults at 100% of the federal poverty levels increased from 1.4% to 1.8% of the county's overall population, a slight increase given the difficult economic times of this past decade. As shown in Figure 2-25, the raw number of older adults in poverty rose from 816 to almost 1,174 persons, representing 10% of all older adults. While other older adults may be above federal poverty income thresholds, many struggle with modest fixed incomes that can impact their transportation choices. This, coupled with the functional slowing of older adults, can often mean they decrease and sometimes cease driving. Income levels and functional abilities of older residents each have important implications for changes and improvements to Lake County's transportation. It will be important that "senior-friendly" attributes are incorporated into transportation planning.

Figure 2-25 Lake County Adult Population Over Age 65

TARGET POPULATIONS for Seniors, Persons w/Disabilities, and Persons of Low-Income					
2000 Census Attribute, Summary File 3 2012 American Community Survey 5-year Estimates	**[2000 Census] Lake County People by Category**	**% of Total County Population**	**[2012 ACS] Lake County People by Category**	**% of Total County Population**	**% Change from 2000 to 2012**
TOTAL POPULATION [1]	**58,309**	**100.0%**	**64,360**	**100.0%**	**10.4%**
SENIORS [2]	**11,332**	**19.4%**	**11,377**	**17.7%**	**0.4%**
Seniors, ages 65-74	*6,126*		*6,581*		
with % of all seniors	*54.1%*		*57.8%*		
Seniors, ages 75-84	*4,076*		*3,168*		
with % of all seniors	*36.0%*		*27.8%*		
Seniors, ages 85+	*1,130*		*1,628*		
with % of all seniors	*10.0%*		*14.3%*		
Low Income Seniors, Ages 65+ - 100% Federal Poverty Levels [3]	**816**	**1.4%**	**1,174**	**1.8%**	**43.9%**
with % of all seniors	*7.2%*		*10.3%*		
Disability [4] (non-institutionalized) Ages 65+ "go-outside-home" disability (2000)	**2,368**	**4.1%**	n/a	n/a	
with % of all seniors	*20.9%*				
Disability [4] (non-institutionalized) Ages 65+ (2010)			**4,683**	**7.3%**	
with a hearing difficulty			*2,239*	3.5%	
with a vision difficulty			*710*	1.1%	
with a cognitive difficulty			*1,245*	1.9%	
with an ambulatory difficulty			*2,915*	4.5%	
with a self-care difficulty			*1,061*	1.6%	
with an independent living difficulty			*1,550*	2.4%	

[1] Census 2000 Summary File 3, Total Population P001. / B01003 Total Population 2012 American Community Survey 5-year Estimates

[2] Extrapolated from Census 2000 Summary File 3, Sex by Age P008 / B01001 Sex by Age, 2012 American Community Survey 5-year Estimates

[3] Extrapolated from Census 2000 Summary File 3, Poverty Status in 1999 by age P087 / B1701 Poverty Status in the Past 12 Months by Sex by Age 2012 American Community Survey 5-year Estimates

[4] Extrapolated from Census 2000 Summary File 3, Age by types of disability for the civilian non-institutionalized population 5 years & over with disabilities p041 / S1810 Disability Characteristics - 2012 American Community Survey 5-year Estimates

Veterans

As America winds down two wars, and many among the 1.4 million in active military duty make their way to civilian lives, this country's 22.6 million veterans will be of continuing concern to Coordinated Plan processes. In Lake County, there are 7,165 veterans (ACS 2012), representing 11.1% of the total population and 14.1% of the population over age 18. Among these, those of the Vietnam era are the largest group, making up 41.3% of all county veterans. World War II era veterans are still a significant group at almost 12.7% (about 910 individuals) of all veterans.

The US Census Bureau reported a 15.5% veterans' unemployment rate for Lake County, which is over double the national veterans' unemployment rate of 7%. This is eight points higher than the Census report of 15.3% for Lake County's overall unemployment rate. During the past 12 months 1.4% (or 100 individuals) of all veterans were in poverty. Figure 2-26 demonstrates the change in veteran populations in Lake County between 2000 and 2012 according to the American Community Survey

Figure 2-26 Lake County Veterans

TARGET POPULATIONS for Seniors, Persons w/Disabilities, and Persons of Low-Income					
2000 Census Attribute, Summary File 3 2012 American Community Survey 5-year Estimates	**[2000 Census] Lake County People by Category**	**% of Total County Population**	**[2012 ACS] Lake County People by Category**	**% of Total County Population**	**% Change from 2000 to 2012**
TOTAL POPULATION [1]	**58,309**	**100%**	**64,360**	**100%**	**10.4%**
VETERANS [5]	**8,924**	**15.3%**	**7,165**	**11.1%**	***n/a***
Civilian Population 18 years and over			50,696	78.8%	
Veterans Period of Service					
Gulf War (9/2001 or later) veterans			3.8%		
Gulf War (8/1990 to 2001) veterans			5.4%		
Vietname era veterans			41.3%		
Korean War veterans			12.4%		
World War II veterans			12.7%		
Veterans ages 18 to 34 years			201	0.3%	
Veterans age 35 to 54 years			1,261	2.0%	
Veterans age 55 to 64			2,006	3.1%	
Veterans age 65 to 74			1,920	3.0%	
Veterans age 75 years and older			1,770	2.7%	
Veteran population unemplolyment rate			15.5%		
Veteran population poverty status - past 12 months			1.4%		

[1] Census 2000 Summary File 3, Total Population P001. / B01003 Total Population 2012 American Community Survey 5-year Estimates
[5] Extrapolated from S2101 Veteran Status - 2012 American Community Survey 5-year Estimates

Vehicle Access by Lake County Residents

The availability of vehicles within Lake County households is examined in Figure 2-27. While ACS data shows that the majority of households have access to at least one vehicle, seven percent or over 1,700 households do not have a vehicle available. Most of the households with no available vehicle are one-person and two-person occupied households, but the three-person and four-person households that do not have access to a vehicle is significant at 24% of total households with no vehicle. The absence of a vehicle in a household may limit an individual's ability to access employment, medical care, or to complete activities of daily living, especially in areas where public transit or specialized transportation resources are inadequate or inaccessible.

Figure 2-27 Household Vehicle Availability

LAKE COUNTY HOUSEHOLD VEHICLE AVAILABILITY						
	Households (HH)	% of total HH's	1 person HH	2 person HH	3 person HH	4 + person
Total Households in Lake County	26,103	100%	7,619	9,863	3,495	5,126
Households with:						
No vehicle available	1,739	7%	1018	295	189	237
1 vehicle available	8,487	33%	4,410	2,473	706	898
2 vehicles available	9,198	35%	1,550	4,439	1170	2039
3 vehicles available	4,335	17%	439	1,933	881	1082
4 or more vehicles available	2,344	9%	202	723	549	870
2008-2012 American Community Survey 5-Year Estimates, B08201, HOUSEHOLD SIZE BY VEHICLES AVAILABLE						

Figure 2-28 below summarizes the mode of transportation utilized by the working population. The majority (75%) of all workers are driving alone. And while just 1% of persons are traveling to work by public transportation, in combination, a total of 17% are traveling to work through carpool, public transportation, bicycle/motorcycle/taxi, or walking. Workers in households with no vehicles are likely among those using alternative modes of travel to get to work. For some individuals, not owning a vehicle represents a lifestyle choice, but for others, the cost of purchasing and maintaining a vehicle is not affordable.

Figure 2-28 Means of Transportation to Work

MEANS OF TRANSPORTATION TO WORK BY AGE						
	All ages 16+	% of Working Pop. 16+	Ages 16-64	% of Working Pop. 16-64	Ages 65+	% of Working Pop. 65+
Working Population	22,903		21,312		1,591	
Travel to work by:						
Drove alone	17,186	75%	16,147	76%	1,039	65%
Carpool	2,441	11%	2,338	11%	103	6%
Public transportation	125	1%	122	1%	3	0%
Walk	714	3%	628	3%	86	5%
Bike, motorcycle, taxi	357	2%	357	2%	0	0%
Work at home	2,080	9%	1,720	8%	360	23%
2008-2012 American Community Survey 5-Year Estimates, B08101, MEANS OF TRANSPORTATION TO WORK BY AGE						

Population Projections

The California Department of Finance Demographics Unit includes the following projections for overall employment growth between 2010 and 2025. As shown in Figure 2-29, the population of Lake County is projected to grow from 64,599 in 2010 to 78,832.

Figure 2-29
Lake County Population Projections: 2010-2025

Year	Population
2010	64,599
2015	65,392
2020	71,228
2025	78,832

Source: California Department of Finance

Figure 2-30 shows a breakdown of expected population increase by age category between 2010 and 2020. The most significant growth is the age category between 65-75 which is expected to increase from 6,607 in 2010 to 10,472, a 58% increase over the 10 year period. The significant increase is due to the retirement of baby boomers and the lower cost of living and attractive environment of Lake County for retirement. The number of seniors 75-84 are expected to increase by 33% between 2010 and 2020.

Figure 2-30
Lake County Population by Age Category 2010-2020

Age Category	**2010**	**2020**	**% Increase 2010-2020**
0-4	3,621	3,639	0.50%
5-17	9,947	9,565	-3.84%
18-24	4,955	5,162	4.18%
25-64	34,710	36,743	5.86%
65-74	6,607	10,742	62.59%
75-84	3,395	4,520	33.10%
85+	1,364	1,377	0.95%

3. Goals and Performance Standards

This chapter provides goals and performance standards for Lake Transit. It utilizes the goals and performance standards as a foundation and recommends several changes in order to make the performance standards a useful service monitoring tool.

Lake Transit's overall goal is: **Provide mobility to all citizens in Lake County.** This statement in essence is Lake Transit's mission statement. It was reviewed with several elected officials during the stakeholder interview process, and stakeholders felt it accurately portrayed Lake Transit's overall goal.

In the 2008 Transit Development Plan, recommendations for four major goals were reviewed and adopted by the LTA Board:

1. Service efficiency goal: to maximize the level of services that can be provided within the financial resources associated with the provision of transit services.
2. Service effectiveness goal: to maximize the ridership potential of LTA service.
3. Service quality goal: to provide safe, reliable, and convenient transit services.
4. Planning and management goal: to evaluate strategies which help management maximize productivity while meeting the transit needs of the community and develop a transit program that supports comprehensive planning goals.

For each of these goals there were three to fourteen performance measures recommended. However, there has been little or no tracking on most of the performance measures since the 2008 TDP was complete. Title VI regulations have also required some additional performance measure and performance standard requirements.

It is important in the TDP update to relate goals, performance standards, and performance measures to specify how the measures will be tracked and monitored in the future.

The rest of the chapter provides the following sections:

- Current performance monitoring
- Title VI requirements for performance standards
- Recommended framework for future performance monitoring
- Recommending performance measures and standards by goals by monitoring requirement

Current Performance Monitoring

Lake Transit has three major types of performance monitoring.

1. Quarterly reports
2. Annual reports
3. Triennial performance audits

The quarterly and annual performance reports prepared by the Transit Manager are intended to provide the Lake Transit Authority Board a progress report on key performance measures. Reports are typically provided on a systemwide basis as well as more limited set of performance measures on a route-by-route basis.

Quarterly Report

The quarterly reports are intended to provide a snapshot of the LTA performance with comparisons systemwide to the same quarter over the past five years.. The quarterly reports include spreadsheets for each route that also show vehicle service hours, total hours, vehicle service miles, total miles, and performance in terms of passengers per vehicle service hour and revenue miles per passenger boarding.

The quarterly reports typically include the following information:

Systemwide Performance Measures

- Ridership by quarter compared to same quarter over past five years
- Vehicle revenue hours compared to same quarter over past five years
- Passengers per hour compared to same quarter over past five years
- Cost per passenger compared to same quarter over past five years (preliminary, not audited)
- Cost per vehicle revenue hour compared to same quarter over past five years (preliminary, not audited)

Route by Route Performance Measures

- Quarterly ridership by route compared to same quarter over past three years

A narrative summary is included for these performance measures on both positive and negative trends. There is no correlation of the performance standards adopted in the 2008 TDP performance measures.

Annual Reports

The annual report provides an annual profile of performance with a comparison systemwide over a five-year period and route by route performance over the past three years.

The annual report provides a summary of service levels changes, such as increases or decreases in vehicle revenue hours and vehicle revenue miles. It also provides the context of circumstances such as gasoline prices, labor issues, or other factors that might have an impact on overall performance. A summary narrative and charts are provided for both systemwide and route-by-route performance.

Systemwide Performance Measures

- Ridership month to month compared to previous fiscal year
- Ridership compared over past five years
- Vehicle revenue hours compared over past five years
- Passengers per hour compared over past five years
- Cost per passenger over past five years (audited)
- Cost per vehicle revenue hours over past five years (audited)

Route-By-Route Performance Measures

- Comparison of annual ridership by route over past three years
- Comparison of annual vehicle revenue hours by route over past three years
- Comparison of passengers per hour over past three years

Detailed month-by-month profiles by individual route are included in the annual reports as well as a summary of annual unaudited financial performance.

Similar to the quarterly reports, while performance trends are reported, performance is not correlated to the 2008 performance standards adopted in the 2008 TDP.

All of the information in the quarterly reports is also included in the State Controllers Report.

Triennial Performance Audit

Every three years, the Transportation Development Act requires a performance audit of Lake Transit. During the three year audit period, the following performance measures are required to be shown at the systemwide level:

- Farebox recovery ratio (fare revenues/operating costs with some exceptions)
- Operating cost per passenger
- Operating cost per vehicle service hour
- Passengers per vehicle service hour
- Passengers per vehicle service mile

- Vehicle service hours per employee

As noted above, Lake Transit's annual report includes operating cost per vehicle service hour, operating cost per passenger, and passengers per vehicle service hour. It does not annually report on the other three performance indicators. The above performance measures are also included in the Annual State Controllers Report.

Recommended Performance Monitoring Framework

The existing quarterly and annual reports are a good mechanism in reporting the progress of Lake Transit in comparing key performance measures over a five-year period systemwide and on a route level over a three year period.

The following are recommended enhancements for consideration.

1. The 2008 TDP had a very long list of performance standards and measures. The Title VI program adopted by LTA In May 2014 required the adoption of five performance standards, many of which were not included in the TDP. There could be a smaller number of performance measures that are regularly reported on in quarterly reports, annual reports or the triennial performance audit.

   The following provides the performance measures that are required by either Title VI or the Transportation Development Act. The parenthesis indicates the recommendation on the whether performance standard should be reported systemwide or by route, and the frequency of reporting.

   Required by Transportation Development Act In Triennial Performance Audit:

   - Farebox recovery ratio (systemwide, annual report)
   - Operating cost per passenger (systemwide, quarterly and annual report)
   - Operating cost per vehicle service hour (systemwide, annual report)
   - Passengers per vehicle service hour (systemwide and by route, quarterly and annual report)
   - Passenger per vehicle service mile (systemwide, every three years)
   - Vehicle service hours per employee (systemwide, every three years)

   Required by Title VI Program:

   - Vehicle load (systemwide and route, every three years)
   - Vehicle headways (by route, annual report)
   - On-time performance (by route, annual report)
   - Service availability standard (systemwide, every three years)
   - Vehicle assignment policy (systemwide, every three years)

Optional and Recommended:

- Miles between Roadcalls (systemwide only, annual report)
- Miles between Preventable Accidents (systemwide only, annual report)
- Fare revenue per passenger (systemwide and by route, annual report)

2. The 2008 TDP provided a single measure for a performance standard. It is recommended that the adopted 2015 TDP include a minimum performance standard and a target performance standard. A target performance standard is what Lake Transit would strive to achieve over a five year period. A minimum standard is the floor of what would be considered acceptable performance. For example, a systemwide target standard for passenger per vehicle service hours might be 9 passengers per hour when considering less productive evening service. A minimum standard might be 6 passengers per hour. This framework provides a range of performance between the minimum and target standard. The chart below illustrates how the minimum and target standard could be incorporated into the quarterly report, utilizing figures from the FY 2014/15 first quarterly report. The minimum and target performance standards were recommended and adopted as part of the Title VI Program. Adjustments to on-time performance standard are recommended below.

3. The 2008 TDP provided four types of service categories: local fixed routes, regional fixed routes, county-to-county routes, and demand response services. For regional routes, there is a significant difference in Routes 1, 4, and 8 and Routes 2 and 4A. Routes 2 and 4A are essentially lifeline rural routes with minimal daily service. A new category of Rural Routes is recommended. Routes 3,4, and 7 is single route with three route segments and the three routes are recommended as Intercity Routes. Route 8 provides local service to Lakeport and is a Local Route. Route 1 is therefore the only remaining existing Regional Route. Chapter 7 recommended pairing Route 1 with Route 3 and would become an Intercity Route.

4. Lake Transit Authority provides the LTA board with significant information and tables at the route level. Minor modifications could be made to the report to 1) estimate fares per route and 2) estimate costs per route. A cost model provides a means for allocating operating costs to each fixed route and demand response service. A cost model was developed and employed to allocate fixed costs, hourly costs (mostly driver costs) and fuel costs for each route and Dial-A-Ride for FY 2012/13, FY 2013/14, and FY 2014/15.

TDA Performance Standards

Every three years, the triennial performance audit will provide trend performance data on six performance measures. In the annual and quarterly reports, it is recommended that Lake Transit monitor and track the following four TDA performance measures.

Operating Cost Per Vehicle Service Hour

The operating cost per vehicle service hour is a good measure of overall cost efficiency.

Definition: LTA annual operating costs divided by the annual vehicle service hours.

2008 TDP Standard: "Considering overall inflation in general, recent changes in personnel and fuel costs in particular, and costs incurred by similar transit programs in Northern California, the recommended cost per vehicle hour criteria is $40.00, to be adjusted annually to account for inflation and fuel costs."

Current Monitoring and Reporting: The cost per vehicle service hour is reported both quarterly and annually at the systemwide level.

Recent Performance:

The overall California Consumer Price Index has increased by 9.5%, including fuel costs, over the past five years. The operating cost per vehicle service hour has been less than the California Consumer Price Index. Figure 3-1 shows that the cost per vehicle service hour has increased from $59.84 per vehicle service hour to $62.79, an increase of just under 5% over a five year period. Lake Transit has been exemplary in cost containment.

Figure 3-1 Lake Transit Cost Per Vehicle Service Hour Historical Performance

	FY 2010/11	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15*
Cost/Vehicle Service Hour	$ 59.84	$ 62.83	$ 63.96	$ 63.47	$ 62.79

*Annualized based on Ist quarter 2014/15 statistics

Discussion: The $40 per hour performance standard in the 2008 TDP is extremely low when adjusted for inflation and fuel costs. Adjusting for the California CPI, the increase in the operating cost per hour would be from $40.00 per hour to $43.80 per year. The $40 per vehicle hour standard of the 2008 TDP, adjusted for inflation, is not an appropriate performance standard and needs to be adjusted.

For two recent Transit Development Plans, the consulting teams conducted a comparison of ten California rural transit systems, with FY 2012/13 being the base year of comparison. Figure 3-2 indicates that Lake Transit is substantially below the cost per vehicle service of other California rural transit systems.

Figure 3-2 Peer System Cost Per Vehicle Service Hour

Rural Transit Agency	Cost per Vehicle Service Hour
Lake Transit Authority	$63.96
Lassen Transit (Lassen County)	$65.53
Sage Stage (Modoc County)	$70.72
Mountain Area Regional Transit Authority (Big Bear Lake)	$78.52
Siskiyou Stage (Siskiyou County)	$85.89
Tuolumne Transit (Tuolumne County)	$91.55
Trinity Transit (Trinity County)	$107.19
Amador Transit (Amador County)	$107.86
Calaveras Transit (Calaveras County)	$114.51

Lake Transit Authority is the lowest cost per vehicle hour for the systems compared. This enables Lake Transit to operate significantly more vehicle service hours than comparable systems with an equivalent budget.

The operating cost per vehicle hour can fluctuate for reasons that are both in the control of Lake Transit and outside the control of Lake Transit. Two factors that are under the partial control of the Lake Transit Authority that will likely influence the cost per vehicle service hour over the next five years are 1) procurement for operations and maintenance contracts and 2) procurement and operational options for the potential succession of the Lake Transit Manager (discussed in Chapter 10). The procurements cited above are subject to market conditions, and therefore the word partial control is utilized to recognize the fact the market conditions can influence the prices provided by procurement competitors. One factor outside the control of Lake Transit Authority that could have the most impact on cost per vehicle service hour is the cost of fuel, which has seen significant fluctuation over the past five years.

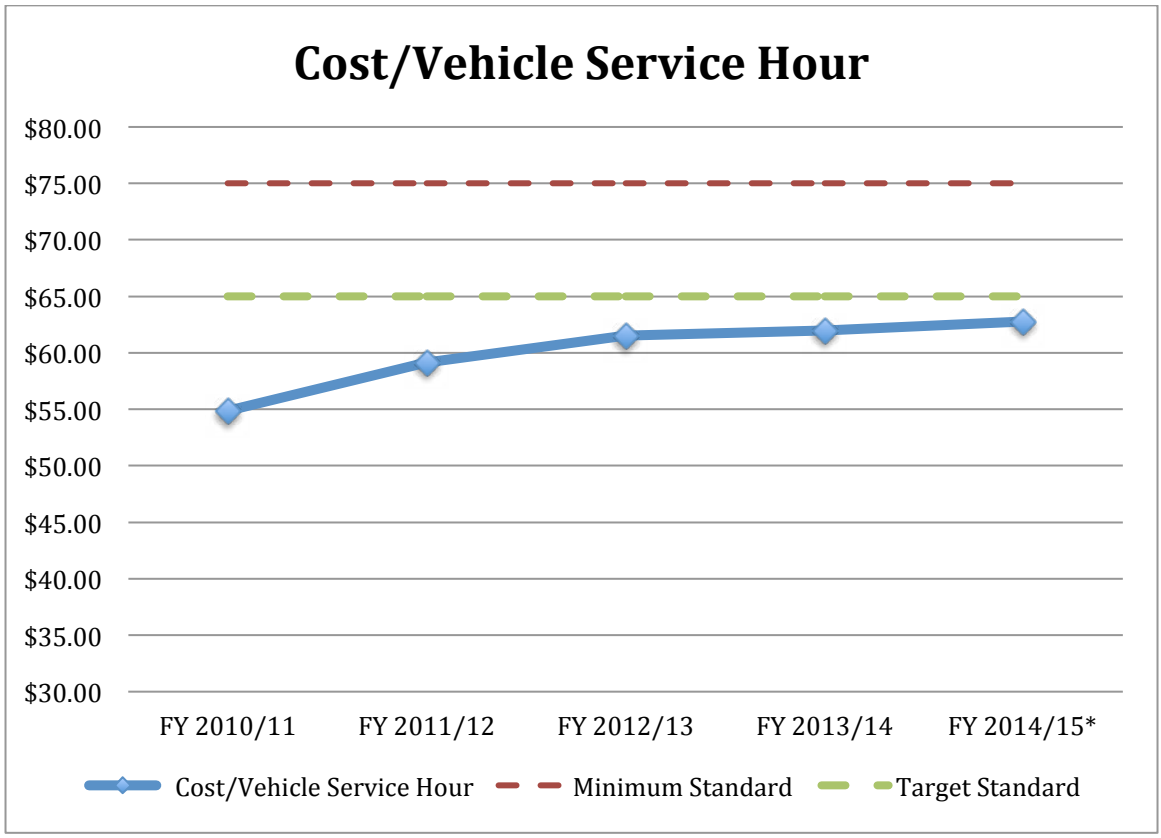
Recommended Performance Standard: The recommended target standard is $65.00 per hour with a minimum standard of $75.00 per hour. Each year, these figures should be adjusted to the California CPI. The reason that recent performance is below the cost/vehicle hour is that overall costs for Lake Transit Authority are expected to increase in the next several years. This includes the cost of the mobility manager, increased marketing costs, increased security costs and unknown costs for the procurement of the operations and maintenance contract.

As shown in Figure 3-3 below, the cost per vehicle hour is currently below the target standard of $65.00 per hour. At present, based on the peer evaluation above, Lake Transit is a very cost

efficient system. An updated version of this chart should be included in the Annual Report, with the minimum and target standards adjusted to the California CPI.

An important key to being able to maintain a high farebox recovery while keeping fares affordable with a base fare of just $1.25 for local trip is controlling costs.

Figure 3-3 Cost per Vehicle Service Hour Minimum and Target Standards



Farebox Recovery Ratio

Definition: Proportion of fare revenues to operating costs, expressed in percentages.

2008 TDP: 20% systemwide, 25% for local routes, and 15% for Regional, County-To-County, and DAR.

TDA Requirement: The Transportation Development Act only requires the calculation of the farebox recovery ratio at the systemwide level. There are no requirements at the route level.

Data Source: The annual fiscal audit provides the actual farebox recovery ratio systemwide. In order to accurately calculate the farebox recovery ratio by routes, there would need to be an accurate means of allocating costs by route and demand response services. Lake Transit

Authority has not adopted a cost model that would be required to estimate costs by route and demand response services.

A cost model methodology has been developed for the purposes of the Transit Development Plan, with a methodology for allocating costs and fare revenues to routes.

Recent Performance: Figure 3-4 provides a summary of farebox recovery ratios systemwide and by route type. [1]

Figure 3-4 Recent Farebox Recovery Ratios By Service Type

Farebox Recovery Ratio	FY 2012/13	FY 2013/14	FY 2014/15*
Systemwide	23.6%	19.7%	19.2%
Clearlake Local Routes	50.4%	32.5%	25.0%
Lakeport Local Route (8)	26.2%	21.5%	20.9%
Regional Route	24.7%	20.4%	20.8%
Intercity Routes	18.5%	17.2%	15.2%
Rural Routes	10.7%	10.1%	9.2%
Dial-A-Ride	9.0%	4.3%	5.2%
* Based on First Quarter 2014/15 performance			

Discussion: The Transportation Development Act has a minimum requirement of a 10% farebox recovery ratio. LTA has historically exceeded the minimum requirement and was as high as 23.6% systemwide in FY 2012/13. This is the reason that the 2008 TDP recommended a 20% systemwide farebox recovery, which is also the minimum requirement for small-urbanized areas with a population of 50,000 or more. It is important to note that the current performance standard of 20% is twice than what is required.

LTA has a higher than normal farebox recovery ratio due to several key factors. The first is the cost effective service delivery that was discussed above. A second reason is that Lake Transit sells a significant volume of monthly transit passes but in FY 2012/13, on average, they were utilized an average of 20 times per month. Lake Transit has done an exemplary job of establishing a partnership with the Department of Social Services. The high sales of monthly passes and higher average fare of monthly passes helps to explain why the Clearlake Local Routes had such a high farebox recovery ratio of 50.4% in FY 2012/13. On the Clearlake Local

[1] Both the cost allocation and revenue allocations are approximations utilizing average fares for passenger boardings by route from LTA ridership compilations by route.

Routes, monthly pass and punch pass use represented 50% of the ridership on old Route 6 in FY 2012/13

The reason that Clearlake local routes dropped significantly in farebox recovery ratio is that the cost of the Clearlake routes increased from $425,000 in FY 2012/13 to an expected $826,000 in FY 2014/15. This was due to the expansion of the Clearlake routes with significant late evening service. Unfortunately the ridership levels and corresponding fare revenue generation have been relatively flat in the range of 140,000 annual passengers.

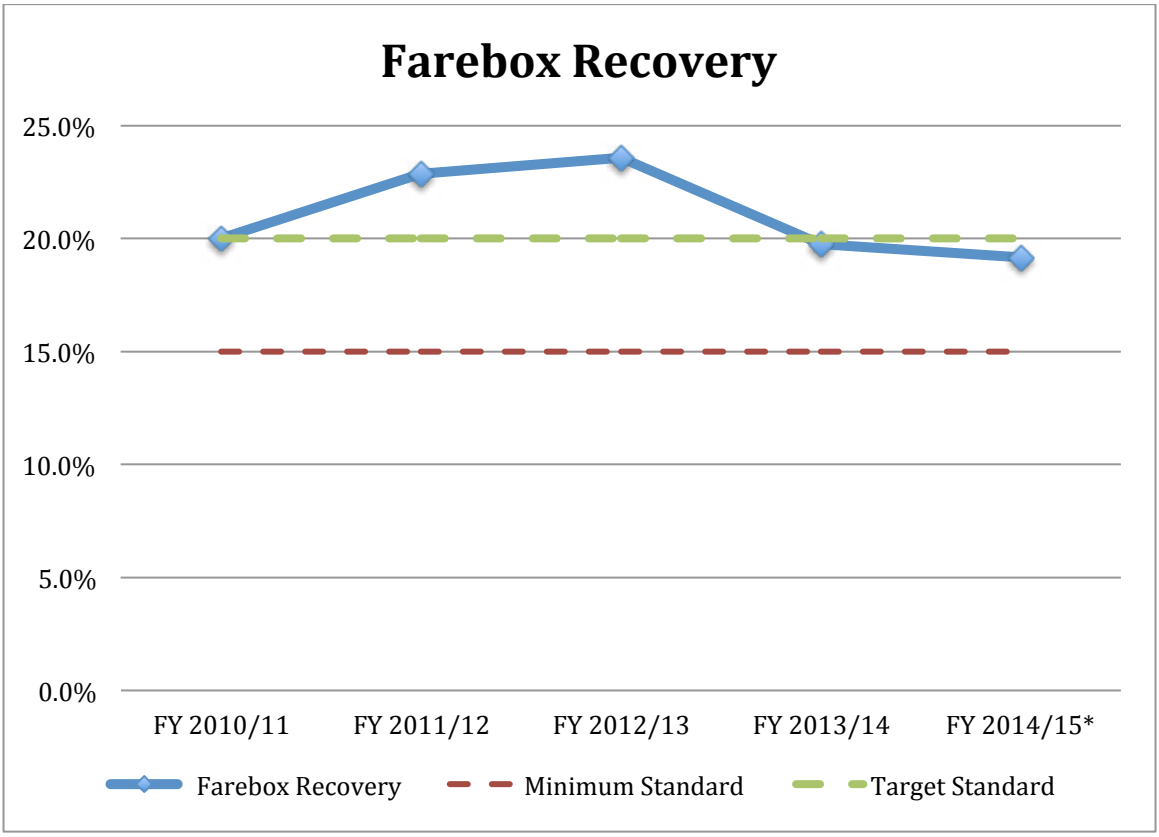
Recommended Performance Measures: The following table in Figure 3-5 provides recommendations for minimum and target standards for farebox recovery for systemwide and route and service type categories.

Figure 3-5 Farebox Recovery Ratio Recommendations

Farebox Recovery Ratio	Minimum Standard	Target Standard
Systemwide	15%	20%
Local Routes	20%	25%
Regional Routes	15%	20%
Intercity Routes	10%	14%
Rural Routes	8%	12%
Dial-A-Ride	7%	10%

As Figure 3-6 below indicates, the systemwide farebox recovery ratio was above the target farebox recovery ratio of 20% in FY 2012/13. Overall, there is not a need to consider another fare increase until the systemwide farebox recovery ratio is below 15%, the minimum LTA standard. This provides significant cushion, since the TDA requirement for farebox recovery ratio is 10%. It is recommended that a similar chart be updated in the LTA Annual report each year. It provides an easy to understand graphic portrayal of where systemwide farebox recovery is relative to the minimum and target standard.

Figure 3-6 Systemwide Farebox Recovery



A contributing factor to the recent decline in the farebox recovery ratio is a decline in overall productivity at the systemwide and route level. Passengers per vehicle service hour is a very important measure to track and understand, as it is highly correlated to both farebox recovery ratio and the operating cost per passenger.

Passengers per Vehicle Service Hour

Definition: The number of passengers divided by vehicle service hours. A vehicle service hour is when a bus is operating in revenue service, when the vehicle is available for passengers to pay a fare.

2008 TDP Standard: 12.0 passengers per vehicle service hour for local routes; 4.0 for Regional Routes, 3.0 for County routes and 2.5 for Dial-A-Ride services.

Data Requirements and Sources: Ridership and vehicle service hours are regularly compiled and reported by LTA by route and by Dial-A-Ride in its regular reports.

Recent Performance: Figure 3-7 provides passengers per vehicle service hour performance between FY 2012/13 and FY 2014/15. The overall ridership decrease in FY 2013/14, coupled with the Clearlake route expansion, led to a systemwide drop in passengers per vehicle service

hour from 9.40 in FY 2012/13 to a projected 7.18 passengers per vehicle service hour in FY 2014/15.

Figure 3-7 Passenger Per Vehicle Service Hour Recent Performance

Passengers per Vehicle Service Hour	FY 2012/13	FY 2013/14	FY 2014/15*
Systemwide	9.40	7.21	7.18
Clearlake Local Routes	19.68	10.98	10.75
Lakeport Local Routes	12.48	9.78	10.97
Regional Routes	11.25	9.27	9.75
Intercity Routes	7.57	6.42	6.14
Rural Routes	4.88	4.26	4.12
Dial-A-Ride	2.05	1.51	1.61
* Based on First Quarter 2014/15 performance			

The most pronounced decline in productivity was with the Clearlake local routes, with a decline from 19.7 passengers per vehicle service to 10.75 projected in FY 2014/15. The recent decline is due to several factors, but the extension of evening service in Clearlake has played a significant role. A further decline in productivity is expected since Route 1/8 hours were extended to the evening hours. The Dial-A-Ride productivity is particularly low compared to industry norms. The desired productivity of Dial-A-Ride is between 3 and 4 passengers per vehicle service hour. The LTA Dial-A-Ride was 1.51 passenger per hour. The Nite Rider service has not attracted much ridership and this is a factor in the decline in the Dial-A-Ride productivity.

Recommended: Figure 3-8 is the recommended passengers per vehicle service hour systemwide and for each route and service type.

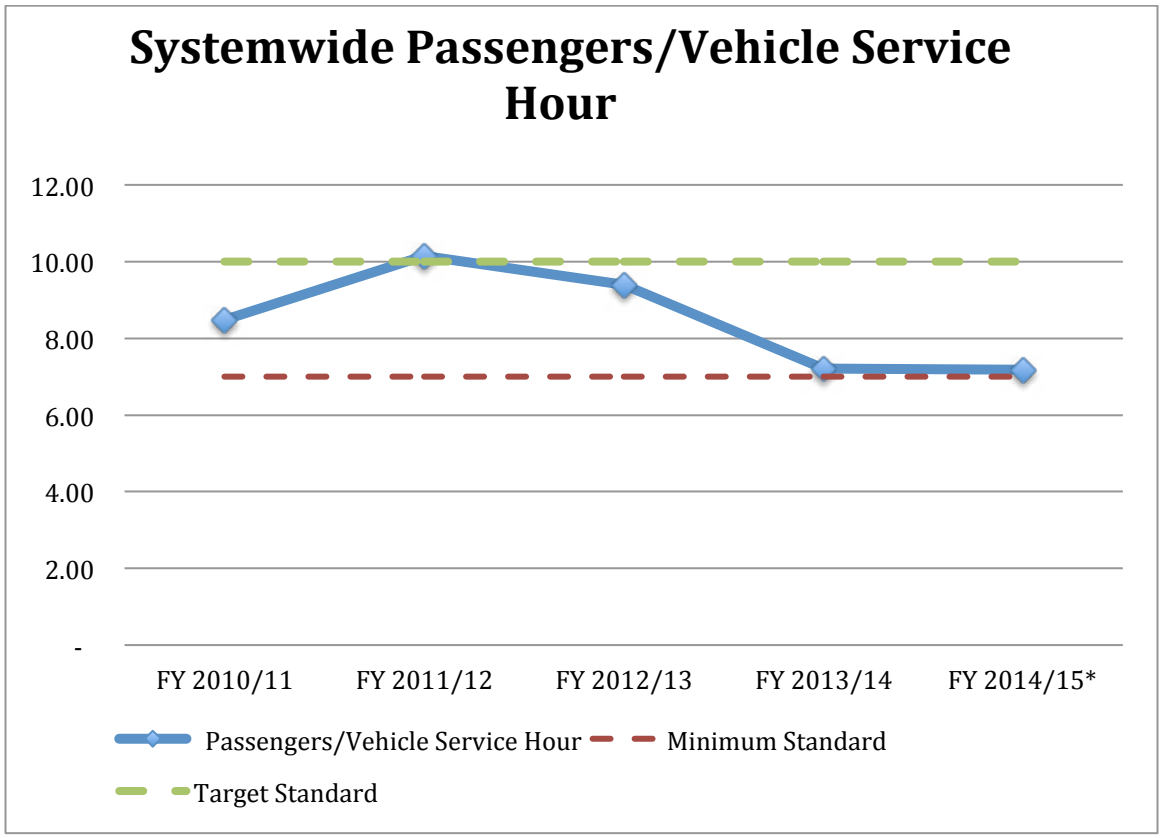
Figure 3-8 Recommended Performance Standard for Passengers Per Vehicle Service Hour

Passengers Per Vehicle Service Hour	Minimum Standard	Target Standard
Systemwide	7.0	10.0
Clearlake Local Routes	10.0	15.0
Regional Routes	9.0	12.0
Intercity Routes	4.0	6.0
Rural Routes	4.0	7.0
Dial-A-Ride	2.50	4.00

Figure 3-9 shows the systemwide trend of passengers per vehicle hour with the minimum and target standard shown. In FY 2011/12, when gas prices were high and ridership levels were at a

peak, the target systemwide standard was being met. The recent decline in productivity has brought passengers per vehicle service hour to the minimum standard. TDP recommendations are being made to improve systemwide passengers per vehicle service hour on a trend toward the target standard of 10.0 passengers per hour.

Figure 3-9 Systemwide Passengers Per Vehicle Service Hour Minimum and Target Standards



It is important to note that the January 2015 additional of late evening service to Routes 1 and 8 will likely deteriorate the passengers per vehicle hour below the minimum standard of 7 passenger per hour in the short-term, unless ridership response is higher than expected

Taking actions to improve the systemwide passengers per vehicle service hour will help to improve the farebox recovery ratio and reduce the operating cost per passenger.

Operating Cost per Passenger

Definition: Total operating costs divided by total passengers

2008 TDP: "The fully allocated operating cost per passenger trip should not exceed $3.00 on the Local Routes, $8.00 on Regional Routes, and $10.00 on DAR. The operating cost per passenger trip should remain at $15.00 on County to County service."

Current Monitoring and Reporting: Cost per passenger is reported on a systemwide annual and quarterly basis utilizing unaudited financial figures. The operating cost per passenger is not reported at the route level.

Data Requirements and Source: LTA produces an unaudited financial summary to date as part of the quarterly report. Individual route reports provide the vehicle service hours, vehicle service miles, and passengers that would be needed to estimate the cost per passenger trip if a cost model were available to estimate costs per passenger. When audited financial figures are available, the actual cost per passenger systemwide can be calculated. Utilizing a cost allocation model, the cost per passenger trip by route can be calculated and is reported below for the type of route.

Recent Performance: Figure 3-10 is a summary of the cost per passenger trip performance between FY 2012/13 and FY 2014/15. It should be stressed that FY 2013/14 and FY 2014/15 are not audited figures and could change. The allocation of costs by routes are approximations based on a cost model. Overall, the costs per passenger trip have climbed substantially over the past three years. For the Clearlake Routes, the cost per passenger trip has increased from an estimated $3.04 in FY 2012/13 to $6.96 in FY 2014/15. The cost for one passenger trip on Dial-A-Ride is almost $40.00 per trip

Figure 3-10 Cost Per Passenger Trip Performance FY 2012/13 to FY 2014/15

Cost Per Passenger Trip	FY 2012/13	FY 2013/14	FY 2014/15*
Systemwide	$6.80	$8.81	$8.75
Clearlake Local Routes	$3.04	$5.59	$6.44
Lakeport Local Route	$4.89	$6.46	$6.46
Regional Routes	$5.96	$7.32	$7.79
Intercity Routes	$9.53	$10.93	$12.65
Rural Routes	$13.57	$15.88	$18.21
Dial-A-Ride	$27.96	$38.55	$40.99
* Based on First Quarter 2014/15 performance			

Discussion: Operating cost per passenger is a good relative measure of the cost of providing the trip among different categories of trips.

The 2008 TDP performance standard of keeping the cost per passenger trip below $3.00 per passenger trip for local trips, even when adjusted for inflation is very unrealistic. This is particularly true with the implementation of evening service. In FY 2014/15, the cost per passenger trip is expected to be approximately $6 per passenger trip, almost double the 2009 recommended performance standard. In fact, compared to peer transit systems, $6.00 per passenger trip for a rural transit system is actually exemplary.

The reason that the cost per passenger on the Clearlake Local Routes is so much less than the County-to-County routes is that the Clearlake Local Routes have a much higher density of demand, almost 20 passenger trips per vehicle service hour in FY 2012/13 compared to the longer trips with less demand on County-to-County routes which had just 5.4 passengers per vehicle service hour. Being longer distance, the fuel costs, for example, are much higher for a County-to-County trip than a shorter local trip in Clearlake.

The Dial-A-Ride costs on a per passenger basis are the highest because Dial-A-Ride only served 2 passengers per hour in FY 2012/13.

Recommendation: Include operating costs per passenger on a systemwide basis in the quarterly reports and at the route level in the annual reports. Figure 3-11 includes the recommended performance standard systemwide and by category of route.

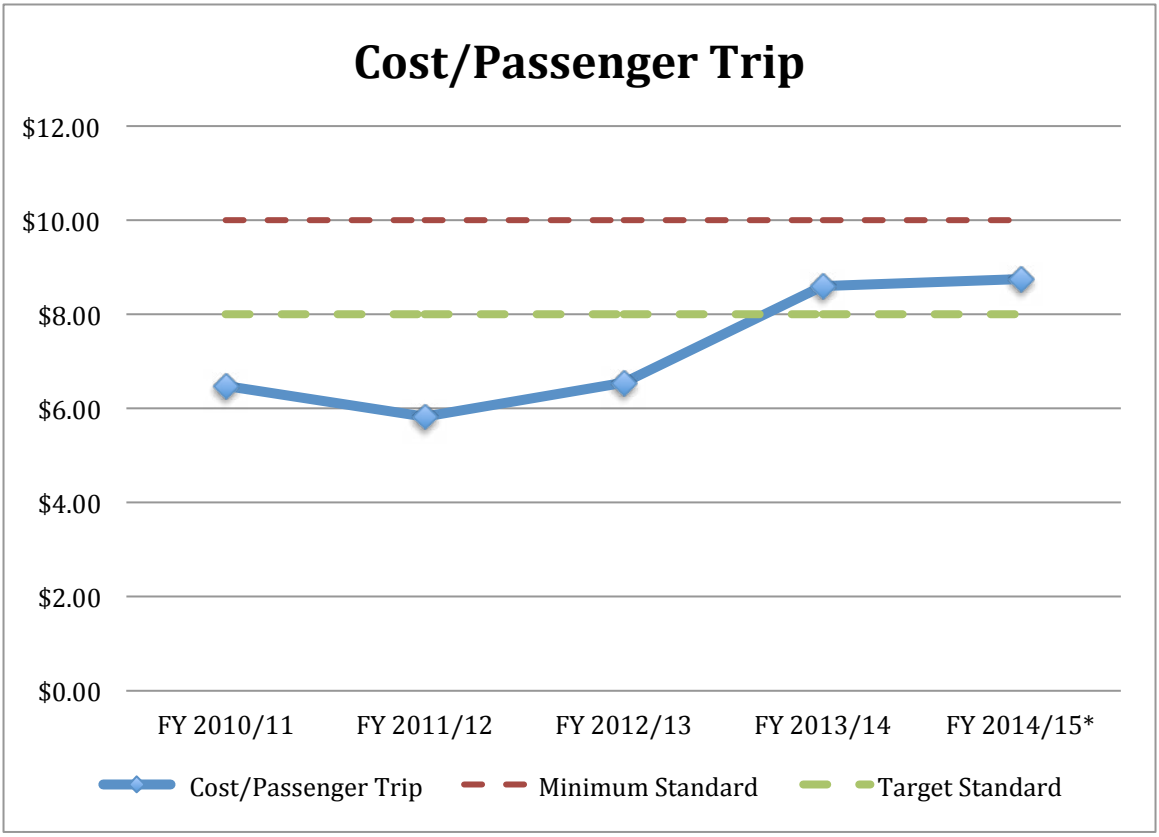
Figure 3-11 Cost Per Passenger Trip Performance Standard Recommendations

Cost Per Passenger Trip	Minimum Standard	Target Standard
Systemwide	$10.00	$8.00
Local Routes	$9.00	$6.00
Regional Routes	$10,00	$7.50
Intercity Routes	$20.00	$14.00
Rural Routes	$20.00	$14
Dial-A-Ride	$26.00	$21.00

The recommended minimum and target standards should be adjusted by the California CPI in order to account for normal cost inflation.

Figure 3-12 below shows the average cost per passenger trip systemwide since FY 2010/11. The systemwide minimum standard and target standard are shown. From FY 2010/11 to FY 2012/13, the systemwide cost per passenger was in the $6.00 range, well below the target standard of $8.00 per passenger trip.

Figure 3-12 Cost Per Passenger Trip



Title VI Required Performance Standards

In May 2014, Lake Transit Authority adopted a Title VI Program. As part of the federal requirement, the following performance standards were developed by the TDP consulting team in coordination with AMMA Transit Planning and were adopted as part of the Title VI Program in May 2014. The following performance standards are required by the Title VI regulations and were adopted as part of the Title VI Program in May 2014.

On-Time Performance Standard

Definition: The definition of on-time performance is when a bus is from one minute early to five minutes late at a scheduled timepoint in the schedule. A late bus is from 6 minutes late to 14 minutes late at a timepoint. A missed run is when the bus is 15 minutes or more late at a timepoint.

2008 Performance Standard: 95% of the timepoints are considered on-time up to five minutes late. Missed trips are limited to 0.5%.

Data Requirements and Source Data: The GPS system with RouteMatch provides data for each stop and timepoint. The data is readily available to both help refine the scheduled intervals between timepoints and monitor schedule adherence.

Recent Performance: Based on a week-long sample in February 2014, Figure 3-13 shows that 66% of the time buses are on-time at the respective scheduled timepoint. 26% of the time the bus is between 6 and 15 minutes late at the scheduled timepoint. The number of early trips is 7%. Missed trips are 1%. As will be discussed in more detail in subsequent chapters, there is a need for adjustments to a number of timepoints.

Figure 3-13 Systemwide On-Time Performance

ON-TIME PERFORMANCE	SYSTEMWIDE TOTAL	SYSTEMWIDE %
Total Sampled	3,550	100%
On Time (1 min. before to 5 min. after)	2,347	66%
Early (>1 minute)	247	7%
Late (>5 minutes and <= 15 minutes)	906	26%
Missed (>15 minutes)	47	1%

Recommended Performance Standards: This is a very important performance standard to regularly measure and report on in the LTA Annual Report at minimum. However, Paratransit Services and the LTA Transit Manager need to regularly monitor schedule adherence on a monthly basis, and take steps as necessary to improve system reliability.

Intercity Routes: *Minimum Standard:* 95% of all runs are within 10 minutes. *Target Standard: 90%* within 5 minutes. There should be liquidated damages for the contract if a bus leaves early.

All Other Fixed Routes: *Minimum Standard:* 90% of all runs are on time at route timepoints (defined as from one minute early to 5 minutes late). *Target Standard:* 95% of all buses are on-time at timepoints. Less than 0.5% of schedule checks at timepoints should leave early.

Demand Response: *Minimum Standard:* Ninety percent (90%) of reservation trips will be served within a 30 minute window (plus or minus 15 minutes from the recorded reservation time). *Target Standard:* Ninety Five percent (95%) of reservations will be served within a 30 minute window (plus or minus 15 minutes from the recorded reservation time).

Vehicle Load Standard

Definition: The average of all loads during the peak operating period should not exceed the following load factors for that type of service.

2008 TDP Performance Standard: None

Data Requirements and Source Data: LTA does not regularly track this data. The RouteMatch data system could be set up to compile the information, but would need to incorporate the vehicle capacity into the data collection system.

Recommended Performance Standards: LTA should work with RouteMatch to create a report that can be utilized to monitor vehicle loads. The results should be reported in the Annual Report by route and route category.

Local Routes 5, 10, 11, 12 and 8*: Minimum Standard:* Loads not to exceed 1.25 passengers/seat 95% of the time. *Target Standard:* Loads not to exceed 1.1 passengers/seat 99% of the time.

Regional Route 1: *Minimum Standard:* Loads not to exceed 1.10 passengers/seat 95% of the time. *Target Standard:* Loads not to exceed 1.0 passengers/seat 99% of time.

Rural Routes 2 and 4A: *Minimum Standard:* Loads not to exceed 1.0 passenger/seat 95% of the time. *Target Standard:* Loads not to exceed 1.0 passenger/seat 100% of time.

Intercity Routes 3, 4 and 7: *Minimum Standard:* Loads not to exceed 1.0 passenger/seat 95% of the time. *Target Standard:* Loads not to exceed 1.0 passenger/seat 100% of time.

Vehicle Headway Standards

Definition: The frequency of service expressed in minutes or trip per day.

2008 TDP Performance Standard: "Service Headway Criteria have been set at 60 minutes minimum for Local Routes, 2 to 4 hours for Regional Routes and less than an hour for DAR service. It is recommended that LTA also establish a criterion of providing County-to-County service at a minimum of 3 trips per day."

Recent Performance:

- City-based routes, the Clearlake routes, are operated every 60 minutes on Routes 5, 10, 11, 12.
- Regional routes are provided mostly with 120 minute headways, but during peak times can operate as frequently as hourly.
- The County-to-County routes have between 4 and 6 daily trips in each direction on Routes 3 and 7.
- The Lifeline routes have 3 to 4 daily trips in each direction.

Recommended Performance Standards: This is primarily a standard that should be considered when the Transit Development Plan is updated.

Local Routes 5, 10, 11, 12 and 8: *Minimum Standard:* Service frequency of 60 minutes or better.

Rural and Regional Routes 1, 2,and 4A: *Minimum Standard:* Three round trips daily. *Target Standard:* Service frequency based on ridership demand, distanced of trip, and transfer opportunities.

Intercity Routes 3, 4 and 7: *Target Standard:* Service frequency based on ridership demand, distance of trip, and transfer opportunities. Connections with Greyhound and external transit systems should receive priority consideration.

Service Availability Standard

Definition: The percentage of the population that is within a designated distance from a Lake Transit bus route.

2008 TDP Performance Standard: 80% of the population should be within one mile of a LTA bus stop.

Data Requirements and Source Data: The primary data source is the decennial Census. A GIS analysis can determine the percentage of the population living both within a designated distance of a Lake Transit route or a bus stop.

2010 Census Status: According to an analysis by AMMA Transit Planning for the Coordinated Public Transit-Human Services Transportation Plan, 82% of the population of Lake County lives within ¾ mile of a Lake Transit bus route.

Recommended Performance Standard:

All Fixed Routes: *Minimum Standard:* Throughout the County, 80 percent of the population should be within one mile of a bus stop. *Target Standard:* Throughout the County, 80 percent of the population should be within ¾ of a bus stop.

Demand Response: *Target Standard:* Paratransit service for ADA eligible and certified individuals will be provided within one hour of the requested pickup or drop-off time, as appropriate, in response to a request for service made the previous day or up to seven days in advance.

Vehicle Assignment Policy

Definition: The policy for assigning buses to routes for daily operations.

2008 TDP Standard: None

Current Practice: Bus assignments take into account the operating characteristics of the various buses within the Lake Transit fixed route fleet, which are matched to the operating characteristics of the route. Vehicle assignments are rotated on a three tier priority basis based on the vehicle size, seating capacity, and availability of the vehicle for revenue service.

Recommended Performance Standard:

All Fixed Routes: Vehicle assignments are rotated to ensure equal usage of qualified vehicles for a particular route on a monthly basis based on the route need except for non-availability due to mechanical breakdown.

Demand Response: Except for situations requiring the assignment of a trip to a specific vehicle for reasons such as lift capacity, interior clearance or operating characteristics within the service area, demand response trips shall be assigned so as to ensure that vehicles are randomly operated in these services.

Recommended Discretionary Performance Measures

There are four additional performance measures that are recommended for regular reporting and inclusion in the LTA Annual Report:

- Administrative Cost as Percentage of Total Operating Cost
- Miles between Roadcalls (systemwide only, annual report)
- Miles between Preventable Accidents (systemwide only, annual report)

Administrative Cost as Percentage of Total Operating Costs

Definition: Total administrative costs divided by total administrative costs times 100% in order to provide a percentage of administrative costs.

2008 TDP: Administrative costs should be 15 percent or less of total operating costs.

Recent Performance: Lake Transit has been consistently below industry norms in the administrative cost per vehicle service hours. In the 2008 TDP, it was reported that administrative costs were 6.3% in FY 2006/7 and also 6.3% in 2013/14.

Discussion: The current contractual arrangement for the Transit Manager has worked quite favorably for Lake Transit. Transit management alternatives are discussed in more detail in Chapter 10, including succession planning once the current Transit Manager retires. Keeping the performance standard at 15% as a minimum standard would provide the LTA with flexibility in determining future administrative costs.

Recommendation: Minimum standard of 15% administrative cost as percentage of total operating costs and target standard of 10%. Lake Transit has historically exceeded the target standard.

Miles Between Mechanical Roadcalls

Definition: The vehicle service miles between the time when a bus needs to be taken out of revenue service due to a mechanical roadcall.

2008 TDP: 20,000 miles between roadcalls.

Reporting and Data Source: This information is typically reported in monthly reports by the service contractor. To the consultant's knowledge, this has not been regularly reported to the LTA Board.

Discussion: This is an important service reliability standard and is normally correlated to maintenance practices. While vehicle breakdowns were not an issue that surfaced during stakeholder interviews, if the information is regularly reported, it would provide a good indicator that vehicles are being properly maintained and service is not being disrupted by bus breakdowns. This has been an issue in other rural transit systems.

Recommendation: Retain the 2008 standard of 20,000 miles between roadcalls.

Miles Between Preventable Accidents

Definition: Vehicle service miles between an accident that was preventable by a Lake Transit driver.

2008 TDP: 100,000 miles between preventable accidents

Reporting and Data Source: This information is typically reported in monthly reports by the service contractor. To the consultant's knowledge, this has not been regularly reported to the LTA Board.

Discussion: This is an important asset management standard and is normally correlated to driver training and contractor management. While vehicle accidents were not an issue that surfaced during stakeholder interviews, if the information is regularly reported, it would provide a good indicator that driver training and contractor management is being diligent in avoiding preventable accidents.

Recommendation: Retain the 2008 TDP recommendation of 100,000 miles between preventable accidents.

4. Local Routes

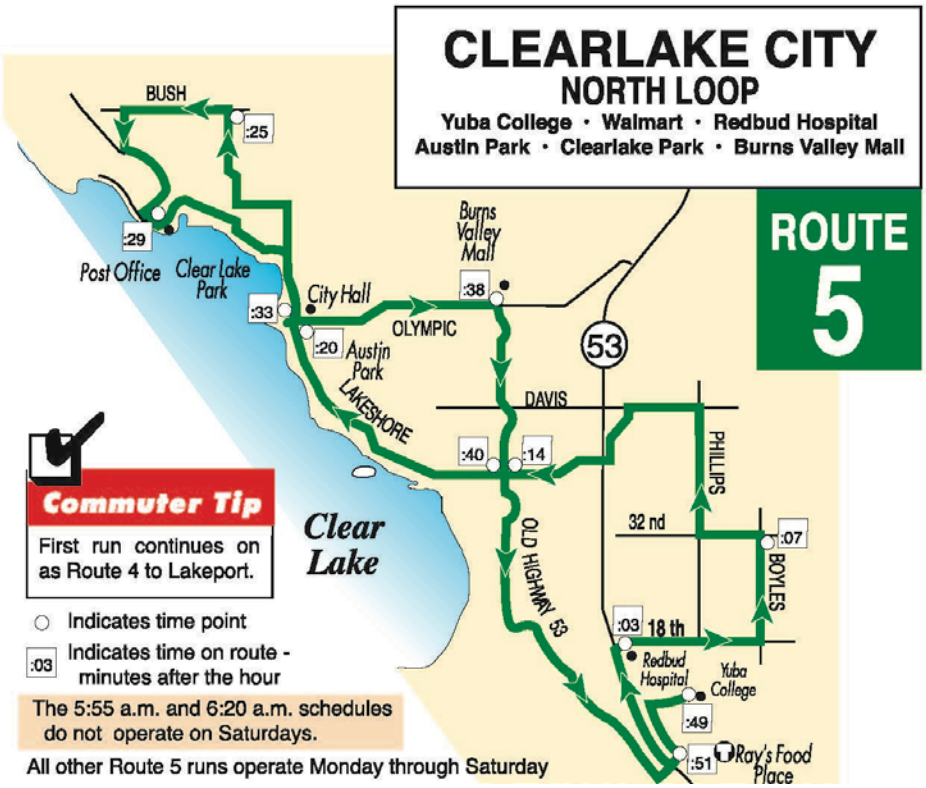
This first section of this chapter provides information on the recent development of new routes in Clearlake, market research input from the onboard survey and stakeholder interviews, recent performance, service alternatives and priority improvements. The second section provides information on Route 8, the local service route the Lakeport area.

I. Clearlake Routes

Local Clearlake Routes prior to September 2013

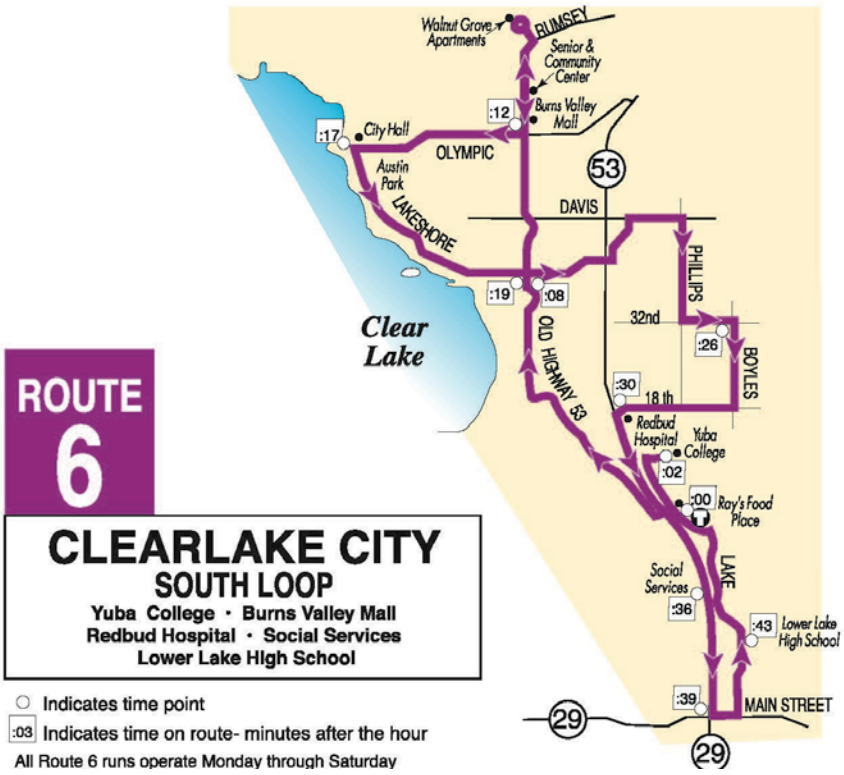
Prior to September 2013, there were two Clearlake routes: Routes 5 and 6. Route 5 is shown in Figure 4-1. It is essentially a one-way Figure 8 route that served Rays, Yuba College Redbud Hospital, the Avenues, Lakeshore corridor, Austin Park, Clearlake Park area, Burns Valley Mall and the Old Highway 53 corridor before returning to Ray's.

Figure 4-1 Clearlake Route (Before September 2013)



Route 6 provided opposite direction service on the figure 8 that served Rays, Yuba College Redbud Hospital, the Avenues, Lakeshore corridor, Austin Park, Burns Valley Mall and the Old Highway 53 corridor. Route 6, as shown below in Figure 4-2 also provided service to County Social Services, Lower Lake, Lower Lake High School to the South, and the Walnut Grove Apartments to the North.

Figure 4-2 Route 6 (Before September 2013)



September 2013 Route Change

Route 5 is the Clearlake Park loop within the City of Clearlake that makes four runs in the evening only, starting and ending at Ray's Food transfer point, at 7:15 pm hourly. The entire loop takes 52 minutes to complete.

Route 10 is a Clearlake North loop within the City of Clearlake. It runs on the hour, from 6 am to 6 pm, starting and ending at Ray's Food transfer point. The entire loop takes 48 minutes to complete. There is a partial run at 5:19 am starting at the Burns Valley Mall, skipping Lake County Social Services, and ending at Ray's Food 5 minutes before the first hourly run.

Route 11 iThe Avenues loop within the City of Clearlake. It runs on the hour, from 6 am to 6 pm, starting and ending at Ray's Food transfer point. The entire loop takes 47 minutes to complete.

There is a partial run at 5:40 am that starts at Moss and Davis near Veteran's Clinic Lakeshore and ends at Ray's Food 5 minutes before the first hourly run.

Route 12 is a Clearlake/Lower Lake - South loop that serves both cities. It runs on the hour, from 7 am to 6 pm, starting and ending at Ray's Food transfer point. It crosses Ray's one more time at the 17th minute, and also connects to the Austin Park transfer point. The entire loop takes 49 minutes to complete. There is a partial run at 6:27 am that starts at Ray's, covers the northern part of the loop, and ends at Ray's Food 6 minutes before the first hourly run. Route 12 allows travel directly from Rays to County Social Services and Lower Lake, something that was not possible in the old Route 5/6 configuration.

In the evening, Route 12 makes four hourly runs from 7 pm to 10 pm, to cover the southern part of the loop, starting and ending at Ray's. These loops run 21 minutes each and skip the Lake County Social Services stop as it is closed when the evening service starts.

Error! Reference source not found. is a map of the four existing routes in Clearlake with boarding volumes shown from the February 2014 RouteMatch data.

Market Research Input

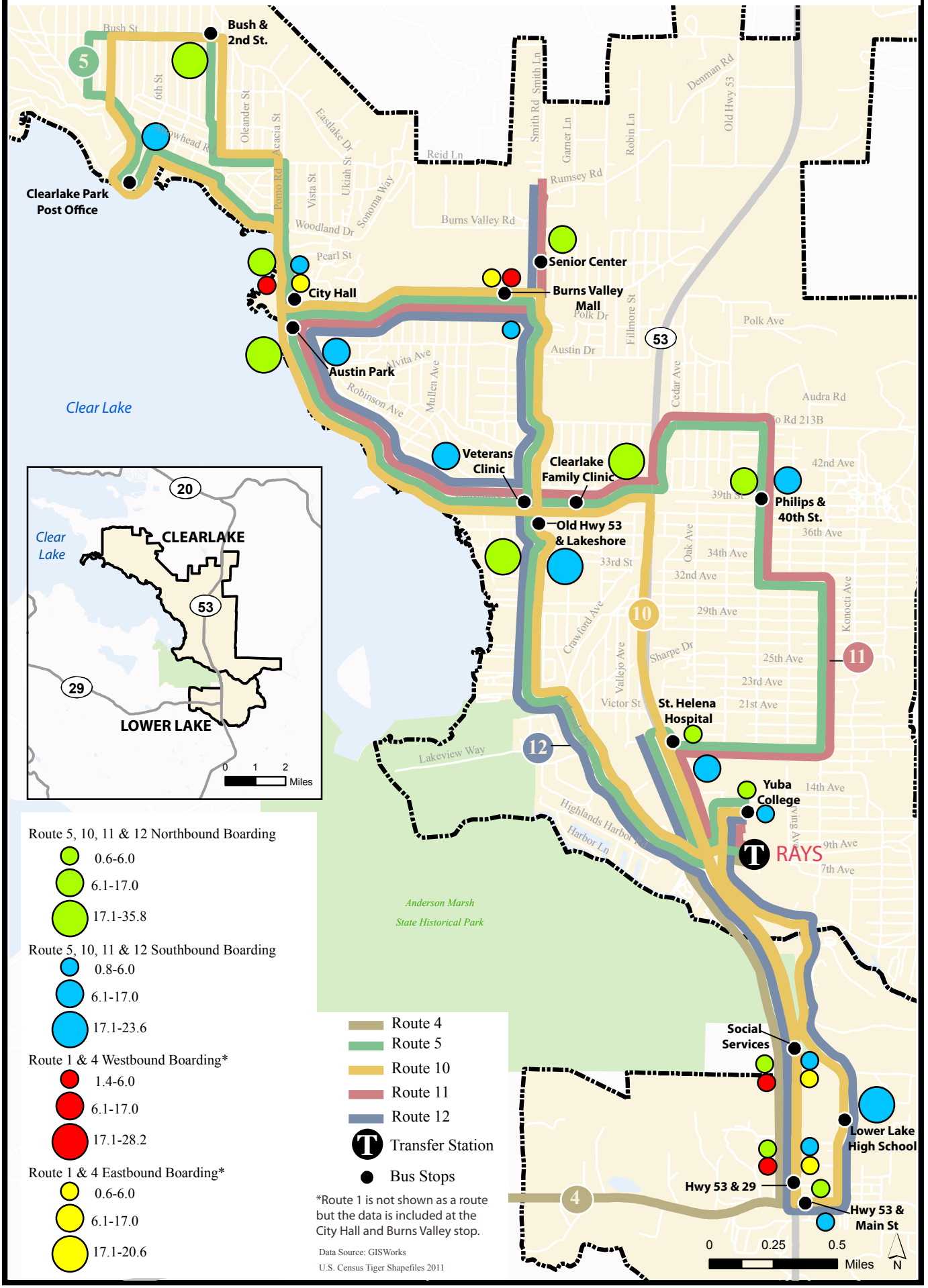
Onboard Survey

It should be noted that the onboard survey was undertaken in early November 2013, after the September 23 route changes had been in place for five weeks.

- The Clearlake routes (Routes 5, 10, 11, and 12) are clearly local routes serving local residents. 86% of riders on the four Clearlake routes also live in Clearlake. 5% of the route ridership lives in Clearlake Oaks and no other community had more than 3% of the ridership riding the Clearlake routes.
- 73% of Clearlake route riders have household incomes of less than $15,000, compared to 70% systemwide.
- Clearlake route riders are frequent users of Lake Transit. 55% of Clearlake riders utilize Lake Transit 5 or 6 days a week compared to 46% systemwide.
- On the Clearlake routes, 23% of patrons surveyed were employed full-time, 11% were employed part time, 27% were retired, while 39% were not employed. Systemwide, the Clearlake routes have the highest percentage of riders employed full-time.
- 22% of riders on the Clearlake routes are students, lower than the average of 31%, although these routes serve Yuba College.
- 62% of riders have no license and no car, higher than the 55% systemwide average. 25% have license but no car, same as the average

Figure 4-3

Clearlake/Lower Lake Average Weekday Boarding



- Clearlake route riders depend more on the printed passenger guide and less from Lake's website. 44% get passenger information from the printed passenger guide compared to 37% systemwide. Only 11% get information from the website, compared to 16% systemwide.
- A significant majority of riders felt the four new Clearlake routes were better than the Route 5/6 configuration.
    - Sixty percent of riders on the four Clearlake routes feel that the changes made the *routes* better, while only 11% feel they got worse.
    - Sixty-two percent of Clearlake riders felt that the changes made the *schedules* better and only 9% felt they were made worse.
    - Half of Clearlake riders perceived an improvement to transfer connections, while 41% said they stayed the same and 9% said they got worse.
- The overall satisfaction rating was 3.97, which is in the middle of the pack. Patrons were least satisfied with on-time performance (3.57) and the comfort of vehicles (3.74).
- The two service improvements desired by Clearlake routes passengers were additional shelters (4.46), and service on Sundays (4.41). In both of these areas, Clearlake routes passengers rated these improvements as most important among all routes.

Origin-Destination Patterns

The onboard survey asked Clearlake passengers the origins and destinations of their trips. Figure 4-4 is a summary of the trip origins and destinations from the onboard survey. The top five origin-destination pairs were:

- Lakeshore-Avenues
- Avenues-Rays
- Burns Valley Mall-Lakeshore
- Lakeshore-Rays
- Burns Valley Mall-Rays

Figure 4-4 Origin and Destination Pattern of Clearlake Riders

Clearklake	Destination							
Origin	Clearlake Park	Lakeshore	Burns Valley Mall	Avenues	Old Hwy 53	Yuba College	Rays	Lower Lake
Clearlake Park	1	1	1		4		7	1
Lakeshore	6	2	1	13			9	
Burns Vally Mall	6	10	1	3			8	
Avenues		7	1	1		1	11	
Old Highway 53	1		3			1	2	2
Yuba College	4			1	2			
Rays	6	6	3	2	6			2
Lower Lake		2	1	1		1	2	

Source: November 2013 On-Board survey (unweighted), valid responses only

Stakeholder Input (November 2013)

- Elderly persons and those with disabilities who need to access non-emergency medical transportation both within Lake County and to out-of-county medical facilities need to transfer at Ray's. However, most seniors do not perceive this as a safe location.
- The level of service from Clearlake to and from the North Shore is seen as insufficient for the need. The latest bus returning to Lucerne from Clearlake leaves at 4 pm, making it impossible for riders to return home from jobs (e.g. Walmart) or Yuba College.
- The additional shelters at Clearlake bus stops are much appreciated.
- Some highly used bus stops are particularly problematic for specific populations:
    - Bus stop at Clearlake St. Helena Hospital – at 18th St. and 53rd – is just off of hospital grounds. The bus stop is just a patch of dirt with no pad, bench or shelter. There is a need for a partnership between St. Helena Hospital and Lake Transit for both access to the hospital and bus shelter and pad improvements.
    - Bus stop at St. Helena Clinic in Clearlake. The bus stops right in front of shopping center on the street. Dr. Shapiro would like the bus to enter the parking lot and come to the door of clinic.
- Seniors at the Clearlake Senior Center asked for a Day Pass for use within Clearlake.
- Routes 11 and 12 serve the Highland Senior Center in Clearlake, with the bus stop located just outside their door. Clearlake Dial-A-Ride (DAR) also serves them. This would be a good venue for travel training. Some of their participants already use the bus – although they say it is difficult for more frail seniors.

Recent Performance

This section provides information on the recent performance of the Clearlake routes, including key performance measures between FY 2012/13 to projections for FY 2014/15. It also provides recent performance on schedule adherence and boarding.

Recent Performance Trends

Figure 4-5 shows the performance of Routes 5 and 6 before the September 23, 2013 route and schedule change in Clearlake. Before the route and schedule changes, Routes 5 and 6 combined had a collective 19.7 passengers per vehicle, considered exemplary for rural transit local routes.

Figure 4-5 FY 2012/13 Clearlake Route Performance

FY 2012/13 Clearlake Before Route Changes

	Route 5	Route 6	Total
Base Statistic			
Operating Cost*	$ 228,690	$ 196,114	$ 424,805
Fare Revenues**	$ 125,666	$ 92,094	$ 217,760
Passenger Trips	80,508	59,099	139,607
Vehicle Service Hours	3,834	3,259	7,093
Vehicle Service Miles	52,232	47,527	99,759
Estimated Performance Statistics			
Passengers/Service Hour	21.00	18.14	19.68
Passenger/Service Mile	1.54	1.24	1.399
Average Fare/Passenger	$ 1.56	$ 1.56	$ 1.56
Farebox Recovery	55%	47%	51.3%
Cost/Passenger Trip	$ 2.84	$ 3.32	$ 3.04
Subsidy/Passenger Trip	$ 1.28	$ 1.76	$ 1.48

*Estimated based on cost model allocation of costs documented in Appendix B

** Estimated based on average fare developed in fare analysis working paper
See Appendix C for average fare documentation applied to FY 2012/13 ridership

Lake Transit does not keep track of operating costs and fare revenues at the route level. However, in order to estimate performance, a cost model was developed to allocate costs among routes for hourly costs (mostly driver wages), mileage costs (mostly fuel) and fixed costs (which includes all other costs).

LTA does track ridership by route by fare category. In January 2014, a working paper of the Transit Development Plan developed estimates of the average fare for each fare category. Clearlake riders utilize monthly and punch passes to a large extent, and the average fare for a monthly pass in the January 2014 was found to $2.00 per passenger trip. On average, monthly passes are purchased for $40.00 a month, but are only utilized 20 times a month. This works

out to be $0.75 more than the cash fare equivalent. Similarly, the punch pass average fare was $1.39 in FY 2012/13, also more than the cash fare equivalent. Therefore, the average fare for the Clearlake Routes was an average of 51.3% in FY 2012/13, with an average subsidy of just $1.48 per passenger trip. The subsidy per passenger is cost per passenger trip of $3.04 minus the $1.56 in average fares.

Figure 4-6 shows the performance of the Clearlake Routes in FY 2013/14, the fiscal year the new routes and schedule was implemented.

Figure 4-6 Clearlake Routes FY 2013/14 Performance

FY 2013/14 September 23, 2013 Route Change
August 2013 Service Disruption due to Labor Dispute

Base Statistic	Route 5	Route 6	Route 10	Route 11	Route 12	Total
Operating Cost*	$ 96,278	$ 41,221	$ 181,555	$ 178,451	$ 197,461	$ 694,967
Fare Revenues**	$ 26,036	$ 16,251	$ 68,241	$ 49,690	$ 82,458	$ 242,675
Passenger Trips	17,044	10,523	43,831	32,481	23,345	127,224
Vehicle Service Hours	1,622	683	2,985	2,990	3,309	11,589
Vehicle Service Miles	20,247	9,780	45,374	39,086	43,239	157,726
Estimated Performance Statistics						
Passengers/Service Hour	10.51	15.41	14.68	10.86	7.06	10.98
Passenger/Service Mile	0.842	1.076	0.966	0.831	0.540	0.807
Average Fare/Passenger	$ 1.53	$ 1.54	$ 1.56	$ 1.53	$ 3.53	$ 1.91
Farebox Recovery	27.0%	39.4%	37.6%	27.8%	41.8%	34.9%
Cost/Passenger Trip	$ 5.65	$ 3.92	$ 4.14	$ 5.49	$ 8.46	$ 5.46
Subsidy/Passenger Trip	$ 4.12	$ 2.37	$ 2.59	$ 3.96	$ 4.93	$ 3.56

*Estimated based on cost model allocation of costs documented in Appendix B
** Estimated based on average fare developed in fare analysis working paper
See Appendix C for average fare documentation applied to FY 2013/14 ridership

In FY 2013/14, the implementation of the JARC grant, including late evening fixed route service on Routes 5 and 12 and the availability of evening ADA Paratransit service with the Route 12 bus, increased the number of vehicle service hours from 7,093 in FY 2012/13 to 11,589 in FY 2013/14. With a corresponding increase in vehicle service miles, this increases the cost of Clearlake service to $694,967.

The average productivity of the new routes was 10.98 passengers per vehicle service hour in FY 2013/14 compared to 19.68 in FY 2012/13. The dramatic drop in productivity is partially due to the drop in ridership overall due to the August 2013 service disruption and labor dispute, and also because significant resources were devoted to improving service levels in Clearlake by increasing the number of routes from two to three and also adding late evening service. The increased service supply was accompanied by a drop in annual passengers from 139,607 in FY 2012/13 to 127,224.

In particular, adding late night evening service has decreased overall productivity of the Clearlake routes. In the first quarter of FY 2012/13, before the route and schedule change, the first quarter statistic of the old Route 5 had a productivity of 20.5 passengers per hour. In the

first quarter of 2014/15, one year after implementation of the Route 5 evening service, the productivity on Route 5 was 6.5 passengers per hour.

The continued high utilization of monthly passes and punch passes with the assumption that the average fare per fare media remained the same as 2012/13, the average farebox recovery drops, but is still at a very healthy 34.9%.

Based on the first quarter results for FY 2014/15, the annualized total for the Clearlake routes of 144,072 would begin to move the number of passenger trips close to the peak Clearlake ridership in FY 2011/12. As shown in Figure 4-7, FY 2014/15 is the first full year of the route and service level improvements and this increased the vehicle service hours to a projected 13,287 in FY 2014/15. This is an 87% increase in service supply from FY 2012/13 level, paid for by the JARC grant. The projection is a total cost of $907,911 in FY 2014/15 with an average farebox recovery ratio of 28.3%. Route 5 only operates from 7:15 pm to 11:07 pm and is an average of 6.48 passengers per hour compared to 14.71 passengers per hour for Route 10 that operates between 5:19 am and 6:48 pm.

Figure 4-7 FY 2014/15 Clearlake Route Performance (Projected)

FY 2014/15 Projected Based on 1st Quarter Performance

Base Statistic	Route 5	Route 10	Route 11	Route 12	Total
Operating Cost	$ 66,165	$ 274,969	$ 269,845	$ 296,932	$ 907,911
Fare Revenues	$ 10,927	$ 105,326	$ 79,681	$ 61,348	$ 257,283
Passenger Trips	6,280	58,540	44,756	34,496	144,072
Vehicle Service Hours	969	3,980	3,969	4,369	13,287
Vehicle Service Miles	13,280	60,852	51,888	56,972	182,992
Estimated Performance Statistics					
Passengers/Service Hour	6.48	14.71	11.28	7.90	10.84
Passenger/Service Mile	0.473	0.962	0.863	0.605	0.787
Average Fare/Passenger	$ 1.74	$ 1.80	$ 1.78	$ 1.78	$ 1.79
Farebox Recovery	16.5%	38.3%	29.5%	20.7%	28.3%
Cost/Passenger Trip	$ 10.54	$ 4.70	$ 6.03	$ 8.61	$ 6.30
Subsidy/Passenger Trip	$ 8.80	$ 2.90	$ 4.25	$ 6.83	$ 4.52

Schedule Adherence

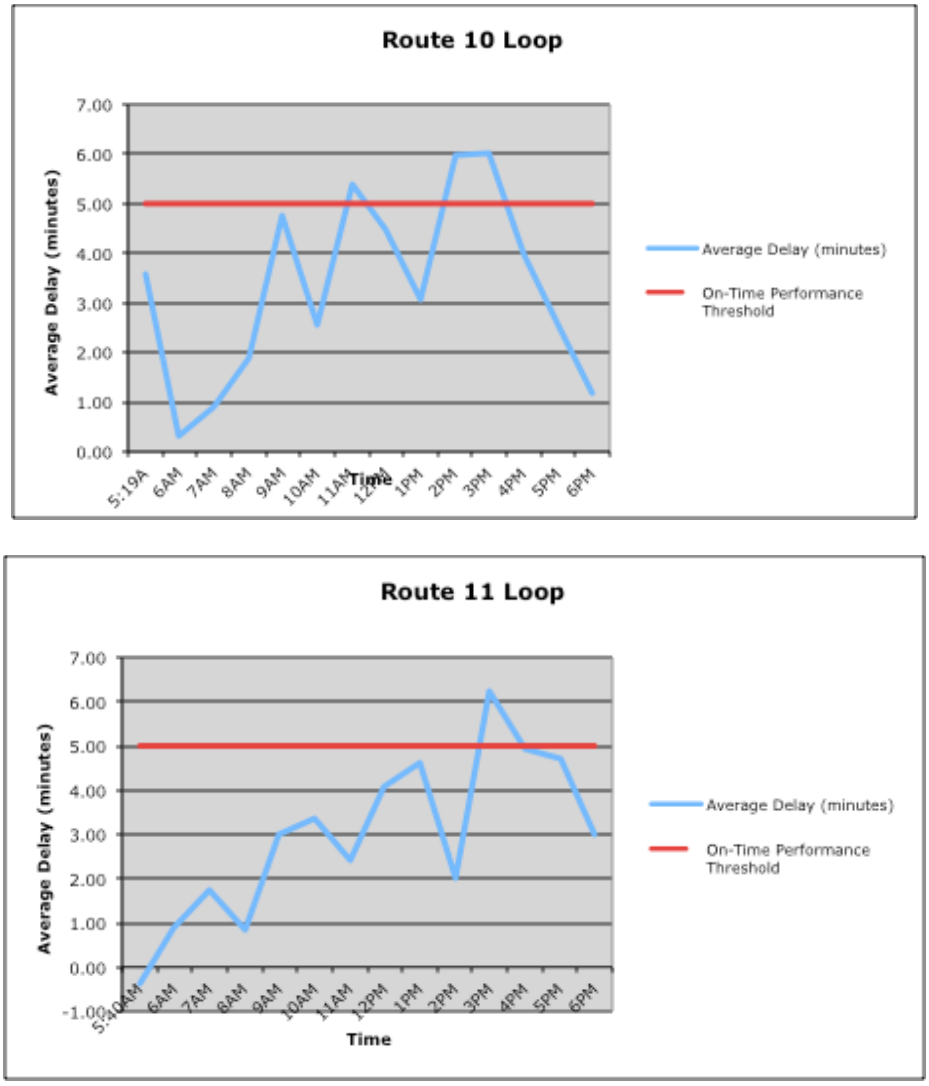
One of the objectives of the route and schedule change in Clearlake was to make the service more reliable. Stakeholders and passengers alike reported chronic problems with the scheduling of the old Routes 5 and 6, with buses often running more than 15 minutes behind, according to some passengers.

As shown in the charts in Figure 4-8 on the next page, when you average the time late by run, Routes 10, 11, and 12 are mostly on-time (less than 5 minutes late). There is a relatively minor problem between 3 and 4 pm and then buses are able to get back on time. The maximum

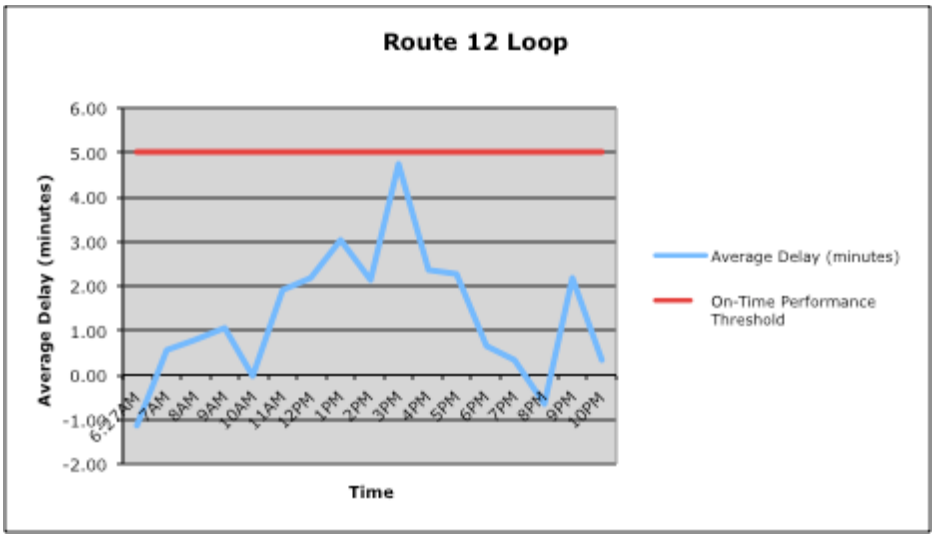
average late time is 6 minutes late which is tolerable. Minor adjustments to the schedule could ameliorate the minor schedule adherence issue.

In looking at the average delay data for the Clearlake routes in Figure 4-8, it is apparent that the September 2013 schedules are working relatively well.

Figure 4-8 Clearlake Routes Average Delay



Source: February 2014 RouteMatch data



The above charts indicate that, on average, the Clearlake routes are mostly on-time. However, when you evaluate the schedule by individual timepoints, there are a few areas for improvement. Figure 4-9 below shows the results of a five day weekday sample in February 2014, for Routes 5, 10, 11, and 12. The top portion of Figure 4-9 is for all routes combined, followed by tables for Routes 5, 10, 11, and 12.

Of the 1,547 timepoints sampled, 79.2% of the time the bus was on time at the timepoint. Impressively there was only one time when the bus was later than 15 minutes, on Route 11. Routes 10 and 11 were most delayed, with 24% and 21% timepoints late. Route 5 was 100% on-time, while Route 12 was 95.5% on-time, as defined a bus arriving at a timepoint more than 1 minute early to up to 5 minutes late. The general conclusion is that 1) there need to be adjustments to the schedule timepoints to better reflect bus running times between timepoints and 2) there needs to be more driver training to avoid early departures from timepoints. In particular, 6% of the time buses are leaving early from the timepoint. In concert with more driver training, adjustments of timepoints will help to reduce the number of timepoints that are reported as late or early.

Figure 4-9 Clearlake Route Schedule Adherence

CLEARLAKE ROUTES SUMMARY	Timepoints	Pct
On Time (1 min. before to 5 min. after)	1225	79.2%
Early (>1 minute)	93	6.0%
Late (>5 minutes and <= 15 minutes)	228	14.7%
Missed (>15 minutes)	1	0.1%
Total Sampled	1547	100%

ROUTE 5 SUMMARY	Timepoints	Pct
On Time (1 min. before to 5 min. after)	158	98.8%
Early (>1 minute)	1	0.6%
Late (>5 minutes and <= 15 minutes)	1	0.6%
Missed (>15 minutes)	0	0.0%
Total Sampled	160	100.0%

ROUTE 10 SUMMARY	Timepoints	Pct
On Time (1 min. before to 5 min. after)	419	72.7%
Early (>1 minute)	17	3.0%
Late (>5 minutes and <= 15 minutes)	140	24.3%
Missed (>15 minutes)	0	0.0%
Total Sampled	576	100%

ROUTE 11 SUMMARY	Timepoints	Pct
On Time (1 min. before to 5 min. after)	219	71.8%
Early (>1 minute)	21	6.9%
Late (>5 minutes and <= 15 minutes)	64	21.0%
Missed (>15 minutes)	1	0.3%
Total Sampled	305	100%

ROUTE 12 SUMMARY	Timepoints	Pct
On Time (1 min. before to 5 min. after)	429	84.8%
Early (>1 minute)	54	10.7%
Late (>5 minutes and <= 15 minutes)	23	4.5%
Missed (>15 minutes)	0	0.0%
Total Sampled	506	100%

Source: February 2014 RouteMatch data

The night service on Route 5 is 98.8% on-time, not surprising with no traffic and lower passenger boarding levels.

Route 12 had almost 11% of its timepoints early which is an unacceptable practice. Looking at the data in more depth reveals that most of the early timepoints are during the late evening hours. The schedule may need to be adjusted in the later evening hours to avoid buses being early, which does not help to build ridership.

On an average weekday, the Clearlake routes have a combined daily total of 460 passenger trips. Figure 4-10 shows the average number of passengers on and off the bus by scheduled timepoint. Data was not available at the individual stop. Boardings between timepoints were included in the next scheduled timepoint.

On Route 5, almost all boardings were at Ray's. Although there is no way to confirm this, at least some of the boardings are likely related to Yuba College students walking to the Ray's stop. This is based on anecdotal information from a focus group at Yuba College. Route 5 makes an inbound stop Yuba College at 7:49 but does not depart Ray's until 8:15 pm.

On Route 10, 11 and 12, there were significant on-boardings at many stops, although Ray's was the busiest. There was also a significant number of alightings at the various stops throughout the system

Figure 4-10 Clearlake On and Off Counts by Scheduled Timepoint

ROUTE 5 CLEARLAKE/CLEARLAKE PARK

BUS STOPS	AVERAGE WEEKDAY	
	ON	OFF
RAYS	15.20	0.00
ST HELENA HOSPITAL	0.00	1.00
PHILLIPS & 40TH	0.00	2.20
CLEARLAKE FAMILY PRACTICE	1.20	3.40
AUSTIN PARK	1.20	2.00
BUSH & 2ND	0.80	3.60
CLEARLAKE PARK POST OFFICE	0.00	1.60
CITY HALL	1.40	0.80
BURNS VALLEY	0.40	2.20
OLD HWY 53 & LAKESHORE	0.80	0.40
YUBA COLLEGE	0.80	0.60
RAYS	0.00	4.00
TOTAL BY RUN	21.80	21.80

ROUTE 10 CLEARLAKE/CLEARLAKE PARK		
BUS STOPS	AVERAGE WEEKDAY	
	ON	OFF
RAYS	56.60	0.20
OLD HWY 53 & LAKESHORE	16.00	18.80
BURNS VALLEY MALL	22.00	22.20
CITY HALL	9.00	12.20
BUSH & 2ND	18.00	17.60
CLEARLAKE PARK POST OFFICE	15.20	15.40
AUSTIN PARK	13.20	10.80
VETERANS CLINIC	13.40	15.40
SOCIAL SERVICES	3.40	4.60
HWY 53 & MAIN ST LOWERLAKE	5.40	9.40
LOWER LAKE HIGH SCHOOL	13.00	5.80
RAYS	0.20	53.00
TOTAL BY RUN	185.40	185.40

ROUTE 11 CLEARLAKE THE AVENUES		
BUS STOPS	AVERAGE WEEKDAY	
	ON	OFF
RAYS	59.40	0.00
ST HELENA HOSPITAL	3.60	3.60
PHILLIPS & 40TH	11.40	15.60
CLEARLAKE FAMILY CLINIC	15.80	16.00
AUSTIN PARK	14.80	10.40
BURNS VALLEY MALL	7.80	11.40
SENIOR CENTER	6.00	6.40
VETERANS CLINIC	1.80	1.00
PHILLIPS & 40TH	13.80	7.40
ST HELENA HOSPITAL	12.40	6.60
YUBA COLLEGE	5.40	15.80
RAYS	0.00	58.00
TOTAL BY RUN	152.20	152.20

ROUTE 12 CLEARLAKE/LOWER LAKE		
BUS STOPS	AVERAGE WEEKDAY	
	ON	OFF
RAYS	33.20	0.20
YUBA COLLEGE	2.40	2.20
SOCIAL SERVICES	3.20	4.20
HWY 53 & MAIN ST	4.20	6.00
LOWER LAKE HIGH	10.60	5.60
RAYS	8.40	12.60
OLD HWY 53 & LAKESHORE	3.20	9.20
AUSTIN PARK	8.00	10.40
BURNS VALLEY MALL	6.00	6.60
SENIOR CENTER	3.60	3.60
OLD HWY 53 & LAKESHORE	16.60	6.00
RAYS	1.00	33.80
TOTAL BY RUN	100.40	100.40

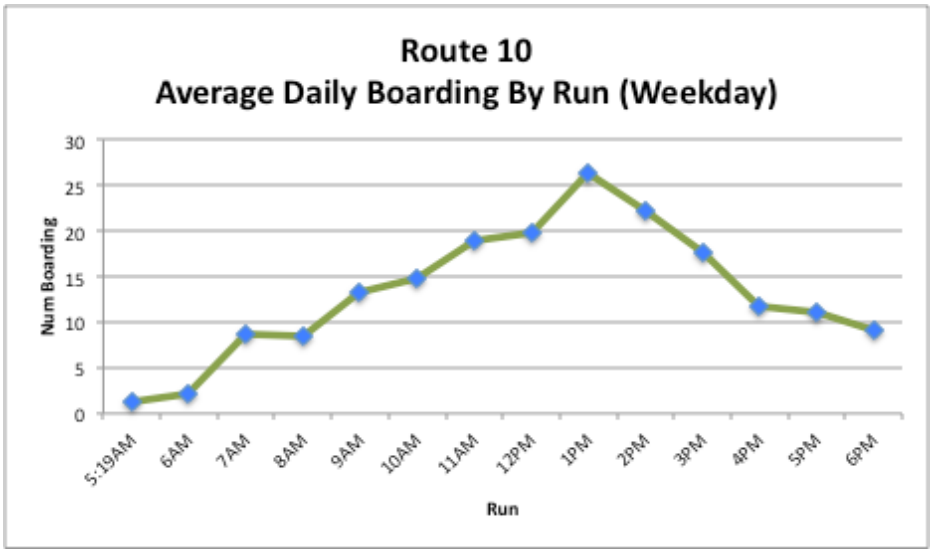
Source: February 2014 RouteMatch data

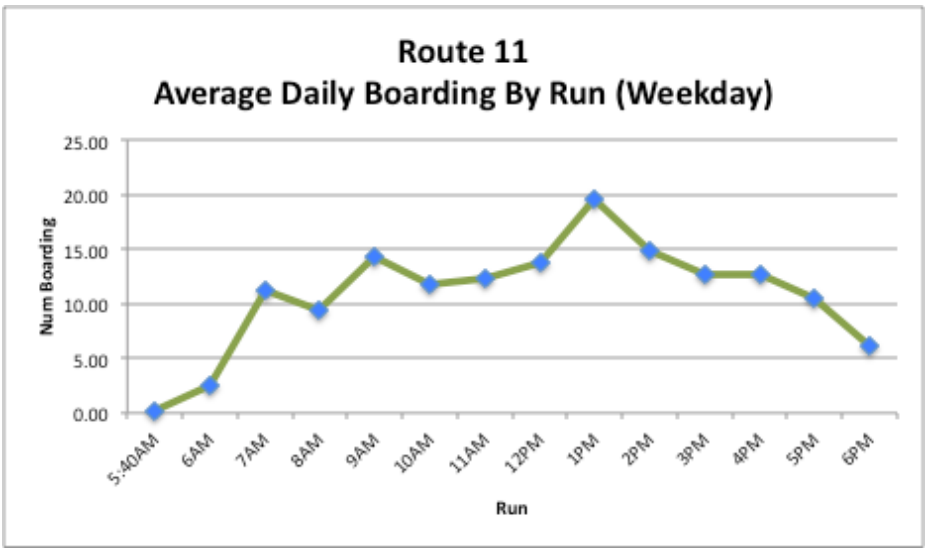
Figure 4-11 shows the average boardings by time of day for Routes 10, 11 and 12. The peak boarding times are during the midday between Noon and 2 pm.

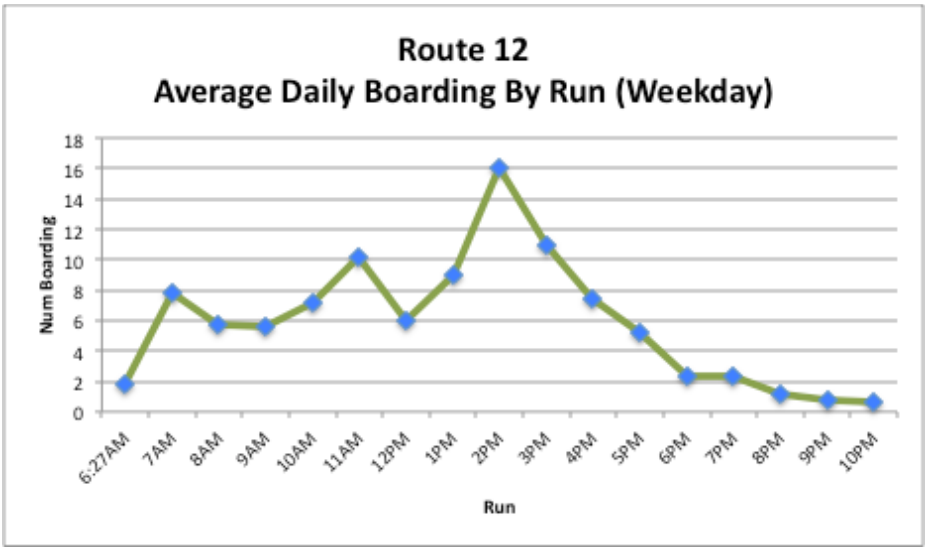
When the ridecheck was conducted in October 2013, the Route 12 runs after 6 pm were very underutilized with 2 or fewer average boardings per run after 6 pm. However, between February and April 2015, there were 10 passengers per hour on 7 pm run, and over 5 passengers on the 8 pm run.

Likewise, from the 2013 ridecheck, the last run on Route 5 has an average of slightly more than 2 boardings per run at 10:15 pm.

Figure 4-11 Average Daily Boardings by Run







Implications for the Service Plan

The JARC grant has enabled LTA to test the feasibility of expanded service with three daytime routes and two routes that operate until 11:07 pm. After the JARC grant funds are exhausted, the LTA Board will need to determine which expanded services can be financially sustained over the next five years. This will need to be done within the context of the financial plan scenarios developed in Chapter 8, as well as the goals and performance standards in Chapter 3.

The following are some of the key findings and implications that will be considered in the next section on service level priorities for the Clearlake Routes.

1. The September 23, 2013 route and schedule for Clearlake has significantly improved schedule adherence. On average, the buses are able to run on time. However, there is a need to make some adjustments to timepoints and improve driver training in order to avoid buses leaving early from the timepoints.

2. The combined Routes 10, 11, and 12 during the daytime hours provide excellent coverage and have improved directness of travel with no more than one transfer to all key destinations in Clearlake. The three route system, however, has created some duplication of some key route segments along Old Highway 53 and the loop along Lakeshore, Olympic and Old Highway 53.

3. Productivity on Route 12 is significantly reduced by retaining the evening service on Route 12 between 9:00 pm and 10:21 pm. This evening fixed route service has built in inefficiencies in order to provide complementary ADA Paratransit service to Route 5. If evening service is to be continued, alternatives need to be explored to make evening service on Routes 5 and 12 more efficient.

4. The sequencing of stops to Yuba College with ongoing consideration of class schedules, particularly in the evening will help to build ridership.

Service Level Priorities

As discussed above, the JARC funding provided for service expansion to the Clearlake routes.

The following are service level priorities and their rationales based on available data from RouteMatch. Unfortunately, only one week of data from February 2014 was available for the analysis.[1] The priorities are based on ridership and productivity potential. These recommended priorities may need to be considered when JARC funding is discontinued and no replacement funding is identified. Chapter 11 discusses financing strategies and alternatives and will provide the necessary context on which priorities to retain.

The priorities could change depending on priorities of the LTA Board as well as potential funding partnerships.

1. **Hourly weekday service on Routes 10, 11, and 12 from 7:00 am with last run ending at 6:00 pm**.

   This is the core existing service that has historically had excellent ridership and should continue to build ridership. Productivity for all Clearlake Routes combined jumps from 2.7 passengers per hour between 6 and 7 am to 9.2 passengers per hour between 7 and 8 am. Overall productivity peaks at 18.3 passengers per hour between 1 and 2 pm and then steadily declines to 8.9 passengers per hour between 5 and 6 pm. Between 6 and 7 pm productivity drops to 5.9 passengers per hour.

2. **Saturday service from 9 am to 7 pm on Routes 10 and 11.**

   From the data provided from RouteMatch, Route 12 only had a total of 28 boardings on the sample Saturday provided. Route 10 had 88 boardings and Route 11 had 82 total boardings. Including all three routes, the productivity before 9 am was just 4 passengers per hour between 8 and 9 am, jumped to 6 passengers per hour between and 9 am and 10 am, peaked at 13 passengers per hour at Noon, and stayed at a minimum of at least 8 passengers until the service ended at 7 pm (between 6 pm and 7 pm, Route 12 had no passengers and the 8 passengers per hour is for routes 10 and 11 only).

[1] RouteMatch does produce additional data, but only the one week sample was provided in a format that could be utilized for the analysis. LTA staff has been working with RouteMatch to provide the data in a format that can be readily utilized for ongoing analysis.

3. **Weekday shoulder hours between 6 pm and 8 pm (with the last bus ending at 9 pm) on Routes 10, 11, 12 and 5.**

   Shoulder service between 6 and 8 pm received 7 passengers per hour while evening service between 9 and 11 pm had 4 passengers per vehicle service hour.

4. **Sunday service between 9 am and 4 pm on Routes 10 and 11.**

   Sunday service was a close second when onboard passengers were asked about their most important improvement. The most important improvement was improved bus stops. Sunday service on Routes 10 and 11 would be expected to be between 5 and 7 passengers per hour, based on Saturday ridership figures and experience in other rural and small urbanized communities.

5. **Late evening service that that starts at 9 pm and ends at 11 pm.**

   Late evening services average just 4 passengers per hour, and should be considered the last priority based on actual ridership experience.

Supportive Actions to Build Clearlake Ridership

Development of more bus shelters at bus stop. This was the top priority improvement by Clearlake passengers in the onboard survey. Bus stop improvements are addressed in Chapter 11, Financial Plan.

Provide better schedule coordination with Yuba College. Ridership at Yuba College is lower than would be expected given the needs and service levels in Clearlake. Despite efforts by LTA and Paratransit Services staff, the schedules for departing students particularly after 6 pm are problematic. While evening classes end at various times, the majority of evening classes either end at 6:20 pm or 9:20 pm.

For the 6:20 end time, the current schedule on Route 12 departs Yuba College at 6:02 pm. Route 5 starts from Rays at 7:15 pm and makes its first stop at Yuba College at 7:49 pm.

For students getting out of class at 9:20 pm, students have to leave class early and walk in the dark to Rays to catch the 9:15 pm bus.

One schedule coordination strategy would be to start Route 5 at 6:25 pm at Ray's with the first stop at Yuba College at 6:27 pm. If the 9:15 pm bus were to depart Ray's at 9:25, it would enable students getting out of class at 9:20 a direct trip home.

Overall, LTA needs to work with Yuba College on an ongoing basis to determine which departure times will help to maximize Yuba College ridership.

Consider a student fee program for Yuba College Students. A partnership between Yuba College and LTA would establish a student fee program that all students would pay per semester. It would enable all students to ride LTA on an unlimited basis with their student ID card. This is discussed in more detail in Chapter 11.

II. Lakeport Local Route

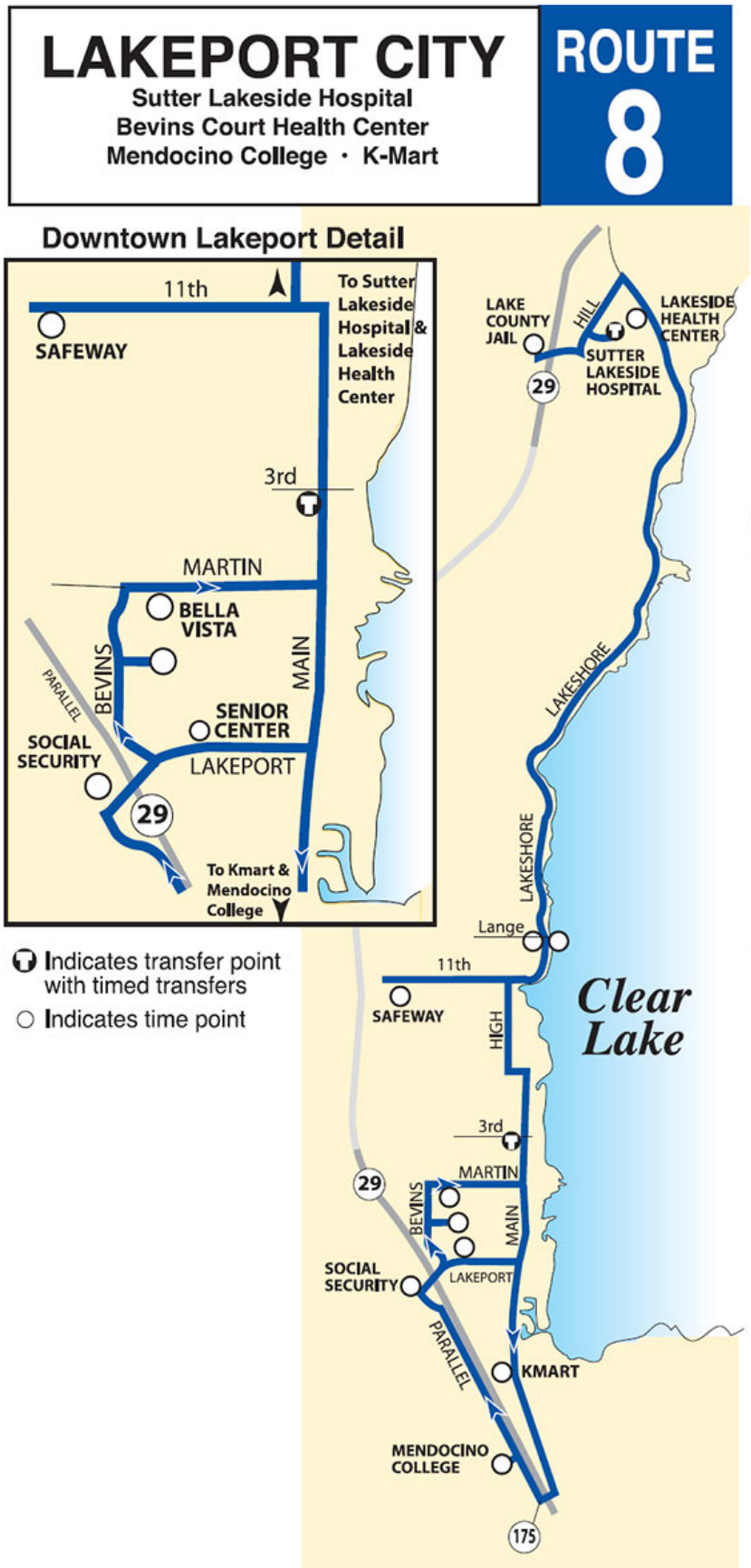
Route 8 Service Assessment

Existing Service

Route 8 is a local bus route that provides service from the Sutter Lakeside Hospital to the north and to Mendocino College to the south. The Route 8 schedule has service every two hours between 7:28 am and 5:18 pm, with an additional run at 4:17 pm that enables hourly service between 3:17 pm and 5:18 pm from Sutter Lakeside Hospital to the City of Lakeport. The main transfer location is from 3rd and Main St., and the last bus departs at 5:46 pm.

As discussed previously, the Route 1 bus from Clearlake to Sutter Lakeside Hospital turns into Route 8 after it departs Sutter Lakeside Hospital. Passengers from the North Shore have a one-seat ride from Lucerne to downtown Lakeport, for example. From Lakeport, the Route 8 bus becomes the Route 1 bus when it departs Sutter Lakeside Hospital.

The Route 8 Lakeport Route is shown on the following page.


LAKEPORT CITY
Sutter Lakeside Hospital
Bevins Court Health Center
Mendocino College · K-Mart
ROUTE
8
Downtown Lakeport Detail
11th
To Sutter Lakeside Hospital & Lakeside Health Center
SAFEWAY
3rd
MARTIN
BELLA VISTA
BEVINS
MAIN
PARALLEL
SENIOR CENTER
SOCIAL SECURITY
LAKEPORT
29
To Kmart & Mendocino College
Indicates transfer point with timed transfers
Indicates time point
LAKE COUNTY JAIL
HILL
LAKESIDE HEALTH CENTER
SUTTER LAKESIDE HOSPITAL
29
LAKESHORE
LAKESHORE
Lange
11th
SAFEWAY
HIGH
Clear Lake
3rd
MARTIN
29
BEVINS
MAIN
SOCIAL SECURITY
LAKEPORT
PARALLEL
KMART
MENDOCINO COLLEGE
175

Market Research

Onboard Survey

- On Route 8, 14% of patrons surveyed are employed full-time, 14% were employed part-time, and 17% were retired. 55% are not employed, which is substantially higher than the systemwide average of 44%.
- 18% of riders are students on Route 8, compared to 31% systemwide. Only 5% of the ridership goes to Mendocino College.
- 47% of the Route 8 ridership has a household income level of less than $10,000, which is the same percentage systemwide.
- 71% of Route riders have no driver's license and no car, well above the systemwide average. Another 19% have a license but no car, and 6% have a car but no license.
- The same percentage of passengers on Route 8 live in North Shore as live in Lakeport. It is notable that while Route 8 is a local Lakeport route, only 42% of the passengers reside in Lakeport. 23% live in Lucerne, 16% live in Nice, 3% in Upper Lake.
- There is a very good mix of trip purposes on Route 8, with 35% shopping, 23% going to recreation activities, 23% for medical, and 16% for work.
- In terms of customer satisfaction, on a scale of 1 to 5 with 5 being the most satisfied, passengers were most satisfied with the perception of being safe with other passengers (4.03) and least satisfied with on-time performance.
- The two service improvements most desired by Route 8 passengers are bus service on Sundays and an unlimited ride Day Pass.

Stakeholder Interviews

- The primary input was that the route changed when Mendocino College opened its new campus location, but the schedule was not adjusted to reflect the change and has exacerbated schedule adherence issues. The current map and schedule guide have the old location for Mendocino College. This is true for all routes serving Lakeport.
- There was a suggestion to include both the jail and Konocti Vista Casino on a revised local Route 8 schedule.

Recent Performance

Ridership

Ridership on Route 8 almost doubled from 14,655 in FY 2009/10 to 28,099 in FY 2012/13. During this time frame, overall productivity as measured by passengers per vehicle service hour increased from 9.7 in FY 2010/11 to 12.5 in FY 2012/13. In FY 2013/14, Route 8 ridership dropped the same percentage as Route 1, 32%, and is also expected to partially recover in FY 2014/15.

Schedule Adherence

According to the data collected in February 2014, Figure 4-12 shows that 56% of the timepoints were on time, defined as being 5 minutes late or up 1 minute early. A total of 37% of timepoints were more than 5 minutes late on average for the five weekdays sampled.

Figure 4-12 Route 8 Schedule Adherence

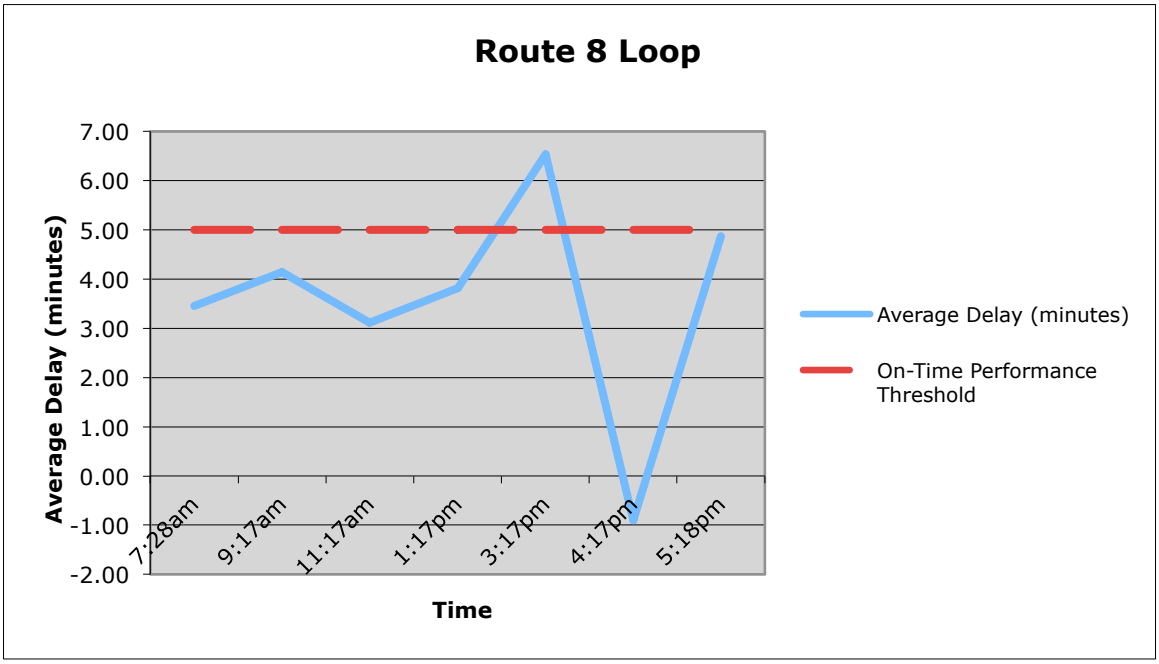
	Timepoints	Pct.
Total Sampled	246	100%
On Time (1 min. before to 5 min. after)	138	56%
Early (>1 minute)	18	7%
Late (>5 minutes and <= 15 minutes)	90	37%
Missed (>15 minutes)	0	0%

Source: February 2014 RouteMatch data

In part, this poor schedule adherence is due to adjustments made to serve the new Mendocino College campus location without changing the schedule. The Route 8 schedule is being updated utilizing the May 2014 schedule adherence data from RouteMatch in order to improve the timing of intervals between timepoints. Implementation of a new Route 1/8 schedule occurred in January 2015.

As shown in Figure 4-13, the average delay for all timepoints for each run indicates that only the 3:17 pm run has a more than 6 minute average delay for all timepoints on that run.

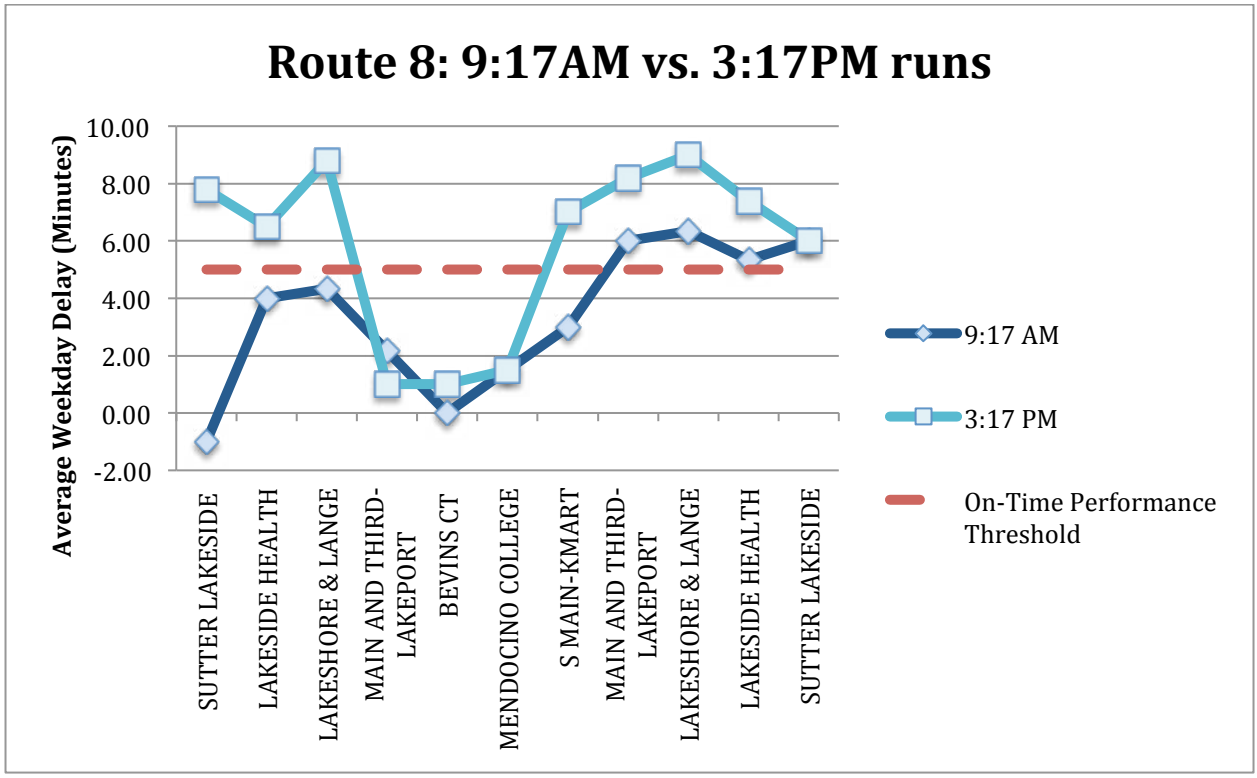
Figure 4-13 Route 8 Average Schedule Delay By Run



Source: February 2014 RouteMatch data

On average, from the chart above, one might conclude that Route 8 is mostly on time. A review of on-time performance data reveals that there is significant variance among different timepoints as shown in the chart below in Figure 4-14. On average, Route 8 is late leaving Sutter Lakeside Hospital and there is schedule recovery time built into the 3rd and Main transfer location. The route is on time when it arrives at Mendocino College, but by the time it arrives at KMART the bus is quite late at 3:17 pm, continues to be late as it reaches Lakeshore and Lange, and then makes up time but is still late when it arrives at Sutter Lakeside. Most of this schedule adherence problem occurs due to extending the route to the new Mendocino College location without making adjustments to the schedule. The graph below points to the need to either make changes to the length of Route 8 or change the timepoints to better reflect the service. The needed schedule changes to Route 8 with improved time intervals was implemented in January 2015.

Figure 4-14 Route 8 Schedule Delay By Stop



Source: February 2014 RouteMatch data

Boarding Patterns

As shown in Figure 4-15, there were a total of 101 average weekday boardings on Route 8. Sutter Lakeside Hospital is the highest boarding location as this is where Route 1 turns into Route 8. The two highest other boarding locations are at KMART with 18.2 boardings and 25.4 boardings for the two stops at the 3rd and Main Transfer stop in Lakeport. Notably, Mendocino College only has an average of 2.2 average daily boardings with an average of 5.4 daily passengers getting off the bus at Mendocino College.

When Route 8 reaches 3rd and Main in Lakeport the first time, an average of 21.4 daily passengers get off the bus there. The next most popular place for getting off the bus is at KMART with an average of 14 daily boardings.

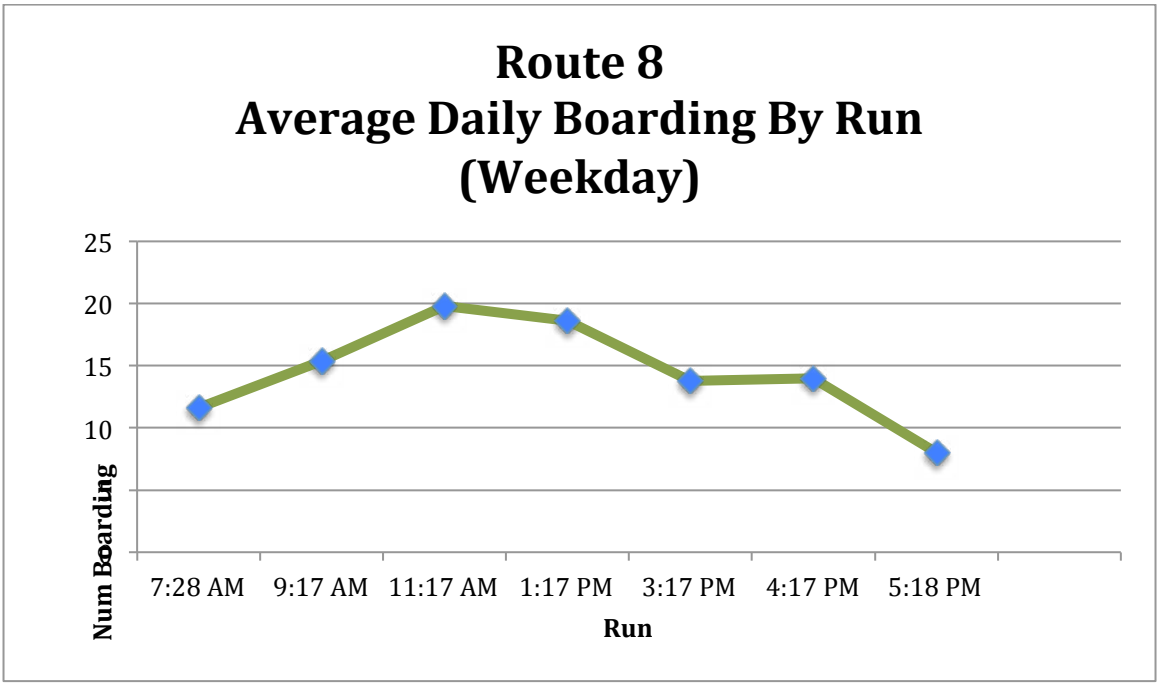
Figure 4-15 Route 8 Boardings By Stop

ROUTE 8 LAKEPORT CITY		
BUS STOPS	AVERAGE WEEKDAY	
	ON	OFF
SUTTER LAKESIDE HOSPITAL	32.00	2.00
LAKESIDE HEALTH	4.40	1.40
LAKESHORE & LANGE	10.00	5.40
THIRD AND MAIN-LAKEPORT	7.20	21.40
BEVINS COURT	2.80	3.40
MENDOCINO COLLEGE	2.20	5.40
KMART	18.20	14.00
THIRD AND MAIN-LAKEPORT	18.20	2.00
LAKESHORE & LANGE	3.40	5.20
LAKESIDE HEALTH	2.60	8.80
SUTTER LAKESIDE HOSPITAL	0.20	32.20
TOTAL AVERAGE WEEKDAY BOARDINGS	101.20	101.20

Source: February 2014 RouteMatch data

Figure 4-16 shows the average daily boardings by run on Route 8. Ridership peaks during the midday at 11:17 am with an average of 20 and steadily declines to 8 passengers on the last pm run at 5:17 pm. The trend of declining ridership later in the day is one of the reasons that a demand response service, the NiteRider was selected for later evening hours.

Figure 4-16 Average Daily Boardings By Run



Source: February 2014 RouteMatch data

Proposed Lakeport Community Service Route

The Route 1/8 configuration is an interim step in providing local circulation within Lakeport. When financially feasible, it will be desirable to have a new Lakeport Community Service route. This section provides the details of the recommended service.

The community service route would be operated on clock headways and utilize a small to medium size cutaway bus. The bus would drop passengers off and pick up at passengers at the front door of major activity centers such as Safeway and KMART. Timed transfers would be provided to Routes 1, 4, and 4A.

A community service route is ideally 10 to 11 miles in length per run in order to accommodate front door service at major activity centers. This necessitates the core service between the Lake County Library and KMART. Runs would route to Lakeshore and Lang to the Lake County Library and from KMART to Mendocino College, based on when Route 1 is operating. The community service route is meant to provide a timed transfer to Route 1 and to complement its coverage. Therefore, on the hour that Route 1 serves KMART, Mendo Mill and Mendocino College, the community service route would serve the northern loop serving Lakeshore and Lange.

Figure 4-17 on the next page shows the tentative community service route in Lakeport. The route alignment needs to be field tested before the final street-by-street alignment can be finalized. The dashed lines denote that service on the community service route would serve Clear Lake High School and Terrace Middle school on certain runs, and service to Mendocino College would not operate during the same hours that Route 1 serves Mendocino College.

North to south, the Lakeport Community Service Route would serve:

- Lakeshore and Lange (designated runs)
- Terrace Middle School (designated runs)
- Lake County Library
- Safeway
- 3rd and Main (Transfers to Route 1, 4 and 4A)
- Library Park
- Bella Vista Senior Apartments
- Bevin Ct.
- Social Security Administration
- Senior Center
- KMART
- Mendo Mill (designated runs only)
- Mendocino College (designated runs only)

A potential schedule for the Lakeport Community Service Route is included in Figure 4-17.

Lakeport Local Community Service Route: Preliminary Recommendation

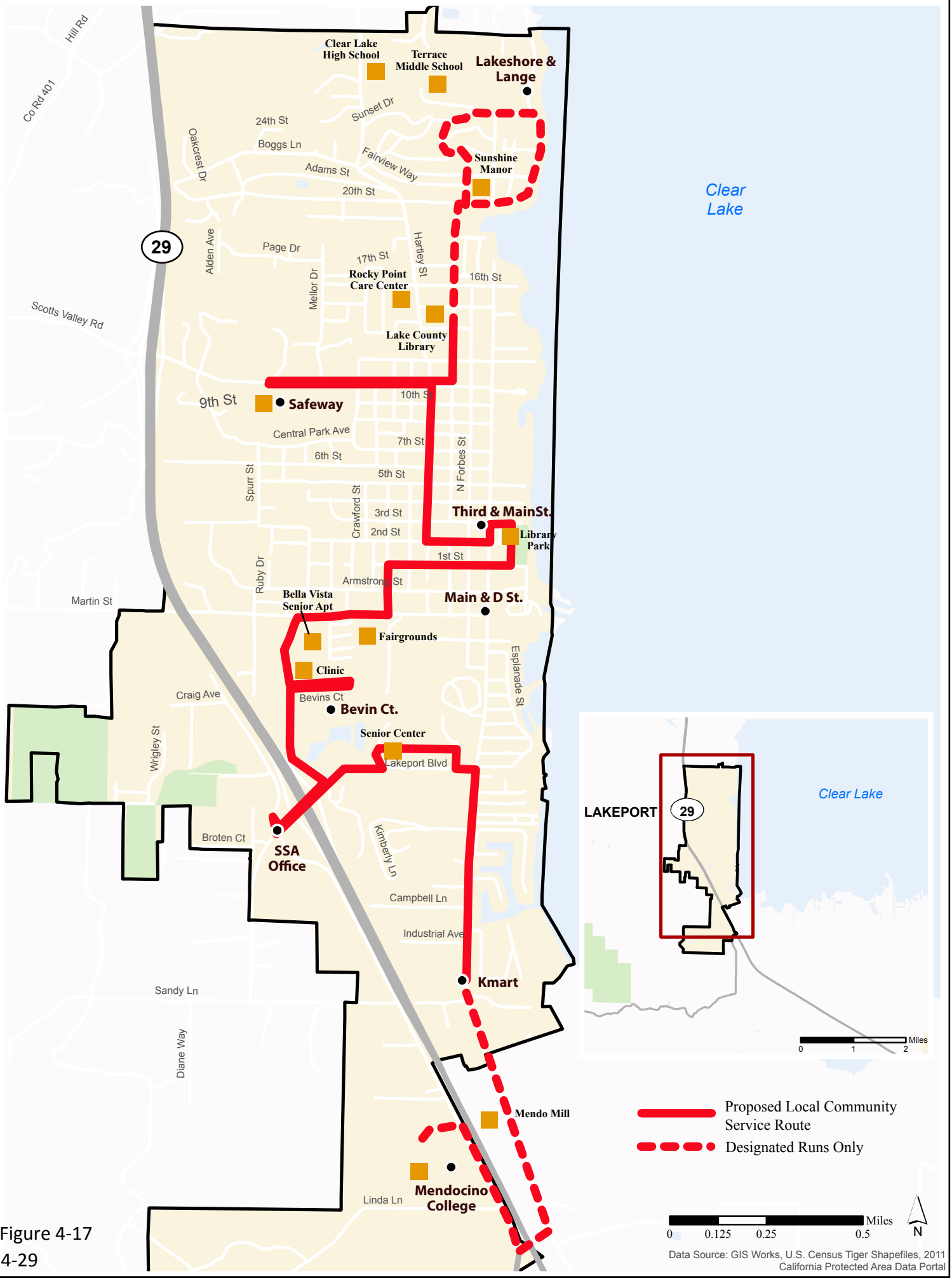


Figure 4-17

Figure 4-18 shows the proposed schedule for the Lakeport Circulator route.

Figure 4-18 Lakeport Circulator Route

Northbound

KMART	Senior Center	Social Security	Bella Vista	3rd & Main	Safeway	County Library
	0:03	0:04	0:06	0:05	0:05	0:03
7:40	Skip	Skip	7:48	7:53	7:58	Skip
9:00	9:03	9:07	9:13	9:18	9:23	9:26
10:00	10:03	10:07	10:13	10:18	10:23	10:26
11:00	11:03	11:07	11:13	11:18	11:23	11:26
12:00 PM	12:03 PM	12:07 PM	12:13 PM	12:18 PM	12:23 PM	12:26 PM
1:00 PM	1:03 PM	1:07 PM	1:13 PM	1:18 PM	1:23 PM	1:26 PM
2:00 PM	2:03 PM	2:07 PM	2:13 PM	2:18 PM	2:23 PM	2:26 PM
3:00 PM	3:03 PM	3:07 PM	3:13 PM	3:18 PM	3:23 PM	3:26 PM
4:00 PM	4:03 PM	4:07 PM	4:13 PM	4:18 PM	4:23 PM	4:26 PM
5:00 PM	5:03 PM	5:07 PM	5:13 PM	5:18 PM	5:23 PM	5:26 PM

Southbound

Giselman & Lange	County Library	3rd & Main	Bella Vista	Social Security	Senior Center	KMART
	0:04	0:04	0:05	0:06	0:04	0:03
8:05 AM	8:09 AM	8:13 AM	8:18 AM	8:24 AM	8:28 AM	8:31 AM
	9:30	9:34	9:39	9:45	9:49	9:52
	10:30	10:34	10:39	10:45	10:49	10:52
	11:30	11:34	11:39	11:45	11:49	11:52
	12:30 PM	12:34 PM	12:39 PM	12:45 PM	12:49 PM	12:52 PM
	1:30 PM	1:34 PM	1:39 PM	1:45 PM	1:49 PM	1:52 PM
2:35 PM	2:39 PM	2:43 PM	2:48 PM	Skip	2:55 PM	2:58 PM
3:30 PM	3:34 PM	3:38 PM	3:43 PM	3:49 PM	3:53 PM	3:56 PM
	4:30 PM	4:34 PM	4:39 PM	4:45 PM	4:49 PM	4:52 PM
	5:30 PM	5:34 PM	5:39 PM	5:45 PM	5:49 PM	5:52 PM

The following are the expected benefits of the longer term vision for the new Route 1 and Lakeport community service route:

- Streamlined and direct service from the North Shore to KMART, Mendo Mills and Konocti Vista Vista Casino, major employment, education and shopping trip generators.
- Elimination of Route 1/8 passenger confusion showing the North Shore communities on the same route schedule as Lakeport key destinations such as downtown Lakeport, KMART, Mendo Mill and Mendocino College.
- Significantly improved schedule adherence on Route 1.

- More passenger friendly service with some door-to-door service by seniors and disabled members of the community in Lakeport.
- Regular hourly service in Lakeport, similar to service levels in Clearlake.
- Improved late evening service to and from the North Shore to Lakeport, Mendocino College and Konocti Vista Casino.

5. Regional Route

Route by route assessments are provided for Route 1. Routes 2 and 4A are treated separately as rural routes and are discussed in Chapter 7. Routes 3, 4 and 7 are intercity routes and reviewed in the next chapter. Recent performance, schedule adherence and boarding patterns are reviewed at the route level. Overall performance of the Regional Routes is then reviewed over the past three years. Service level priorities and supportive actions over the next five years are identified at the end of the chapter.

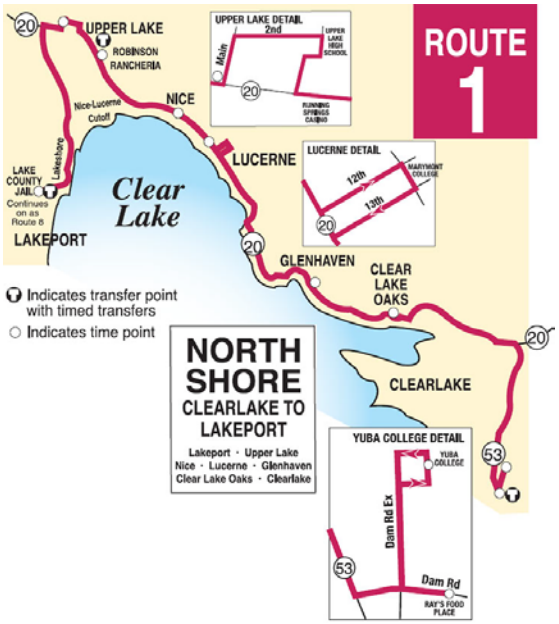
Route 1 Service Assessment

Existing Service (2014)

Route 1 currently provides service approximately every two hours from 6:10 am until 2:00 pm and then hourly from 2:00 - 5:30 pm in the westbound direction from Clearlake to Lakeport. Other communities served include Clearlake Oaks, Glenhaven, Lucerne, Nice, and Upper Lake.

Eastbound from Lakeport to Clearlake, the route operates from 7:07 am until 7:51 pm. Eastbound service operates every two hours except for the last three runs that start at Sutter Lakeside Hospital at 4:21, 5:31 and the last bus departing at 6:31 pm.

It's important to note that at Sutter Lakeside Hospital, the Route 1 bus becomes the Route 8 bus.



Market Research Input

Onboard Survey (November 2013)

- On Route 1, 16% of patrons surveyed were employed full-time, 19% were employed part time and 45% were not employed. These figures are very close to the Lake Transit systemwide averages.
- 32% of riders on Route 1 are students, also very close to the systemwide average.
- 69% of riders have annual household incomes of $15,000 or less, almost the exact figure systemwide.
- 45% of riders have no license and no car, which is less than the 55% systemwide average.
- 43% of Route 1 passengers live in the North Shore in Lucerne (29%) and Nice (14%). 24% of Route 1 passengers live in Clearlake and 23% in Clearlake Oaks.
- On Route 1, on-time route performance was 2.87 on a scale of 1 to 5, with five being very satisfied. This was one of the lowest mean satisfaction ratings received for any route on 7 different attributes. Additional analysis of on-time performance on Route 1 is shown later in this section.
- The overall satisfaction rating was the lowest of all Lake Transit routes with a mean score of 3.7, which is just below routes 7 and 8.
- The two service improvements desired by Route 1 passengers were improved information at bus stops, additional shelters, and service on Sundays. Improved early morning service to Lakeport and Clearlake ranked 4th.

Origin-Destination Patterns To and From Lakeport

Figure 5-1 shows travel patterns from the onboard survey for trip origins in Lakeport and trip destinations by jurisdictions. Likewise, the table shows the trip destination of Lakeport and the distribution of trip origins. The following are some key observations:

- 27 of 62 or 44% of survey respondents had both an origin and destination within Lakeport. There is significant utilization of Lake Transit for local trips within Lakeport.
- More passengers with an origin in Lakeport are travelling to the North Shore (17) than to Clearlake (11).
- 23% of the trip origins from Lakeport have destinations in Upper Lake, Nice and Lucerne.
- 21% of the trips from Lakeport are to Clearlake or Clearlake Oaks.

Stakeholder Input

- Stakeholders said that there is a great need for public transit services within Lake County due to high levels of poverty and disability among the population.

- The level of service along the north shore is seen as insufficient for the need. The latest bus returning to Lucerne from Clearlake leaves at 4 pm, making it impossible for riders to return home from jobs (e.g. Walmart) or college.
- For residents living in Nice and Upper Lake, the first bus starts at 8:45 am from Upper Lake and arrives at Ray's at 9:43 am, making it difficult to attend Yuba College or accept jobs with traditional hours.
- Within Lucerne, many people live in the hills, making it difficult to get to the bus stop. There is no demand response service to connect them to Lake Transit. A local Dial-a-Ride service, possibly operated by the senior center with the new 5310 vehicle was suggested.
- Lucerne Senior Center. Eastbound Route 1 stops in front of the Senior Center, turning onto Country Club Drive and then turning back down to Hwy 20. Westbound, the bus doesn't stop at the Senior Center, but only on Hwy 20. This limits the utility of the service to senior center visitors or staff.

Figure 5-1 Lakeport Origins and Destinations

	Origin In Lakeport	
Destination	Number	Pct.
Lakeport	27	44%
Upper Lake	3	5%
Nice	3	5%
Lucerne	8	13%
Glenhaven	1	2%
Clearlake Oaks	2	3%
Clearlake	11	18%
St. Helena	1	2%
Kit's Corner	2	3%
Kelseyville	2	3%
Total	62	100%
	Destination in Lakeport	
Origin	Number	Pct.
Ukiah	3	5%
Cobb Mtn.	2	4%
Riviera	5	9%
Kelsyville	2	4%
Lakeport	27	47%
Upper Lake	1	2%
Nice	1	2%
Lucerne	4	7%
Clearlake Oaks	1	2%
Clearlake	11	19%
Total	57	100%

- Provide two-way service on Highway 20 by discontinuing routing for Country Club and Old Lucerne Road.
- Many bus stops are not signed at all, leading to confusion about where to wait (among the passengers) and where to stop (among new drivers). One rider said that even a stripe painted on the curb to indicate the bus stop location would be helpful…otherwise it is a complete crapshoot for the new rider.
- Routes 1 and 4 need to run more often. As previously noted, the last bus from Clearlake to Lucerne leaves at 4:10 pm, too early for work trip purposes.
- The consulting team, when riding the bus, found that passengers were quite confused when starting to ride the bus for the bus stops in eastbound and westbound directions.
- On the westbound schedules, there is a need to adjust the 4:10 departure from Ray's to 4:00 pm. Adjust the current departure from Ray's to 5:10 pm from the current departure at 5:00 pm.
- The 7:07 am and 8:31 am runs need to include the normal routing on Route 1 which includes timepoints at Olympic Burns & Valley Rd, and City Hall.
- The 7:07 am westbound route should originate in Upper Lake.
- Running Creek Casino in Upper Lake should be included in the schedule as a timepoint.
- Consider moving the jail stop to the local Route 8 schedule.

Other Input from the JARC Grant Application:

- 19% of the County CalWORKs clients reside in North Shore.
- North Shore communities have 9.8% of the jobs. Most North Shore residents must commute to Lakeport or Clearlake for work.

Recent Performance

Ridership

Ridership has fluctuated quite a bit over the past five years on Route 1. Ridership was 78,302 \ 60,159 in FY 2009/10, and steadily increased to 75,640 in FY 2011/12 with a slight decline to 73,978 in FY 2012/13. Route 1 experienced a 32% decline to 55,996 in FY 2013/14. Ridership based on the first quarter of 2014/15 indicates that Route 1 ridership is projected to partially recover to the 65,000 passenger range in FY 2014/15.

Schedule Adherence

The schedule check from a five-day weekday sample in February 2014 was provided by Paratransit Services, the operations and maintenance contractors for Lake Transit. A Saturday schedule check was also provided, but it is a one-day sample and is not included here. In the westbound direction, there were 384 timepoints sampled over the five day period, and 61.2% of Lake Transit buses were on time, as defined by one minute before the scheduled time to 5 minutes late.

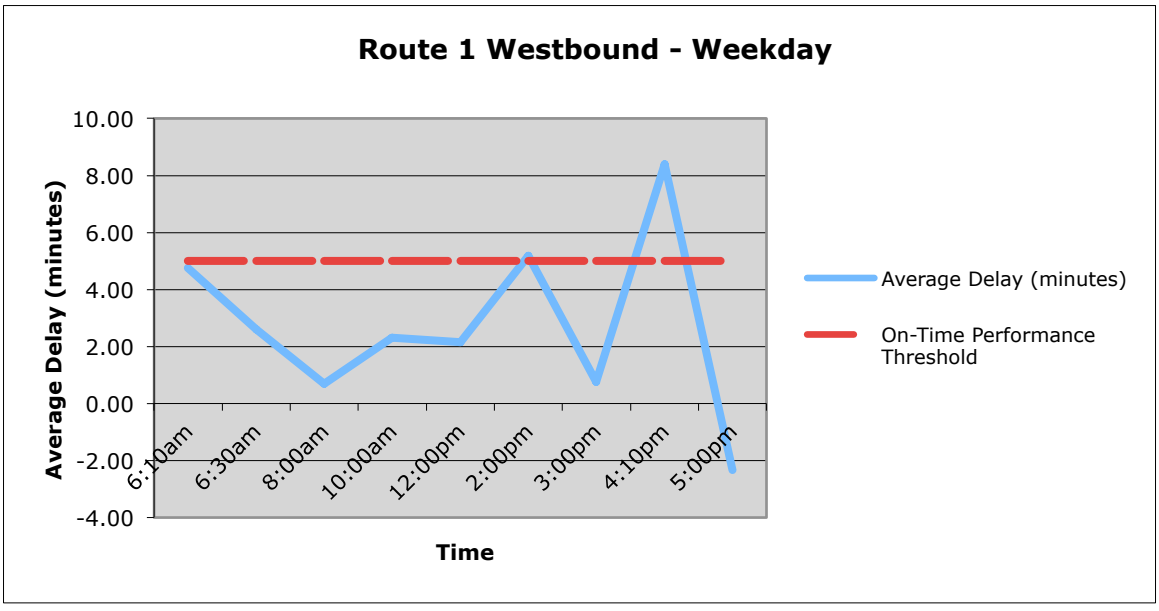
Figure 5-2 Route 1 Westbound Schedule Adherence

	Timepoints	Pct.
Total Sampled	384	100.0%
On Time (1 min. before to 5 min. after)	229	61.2%
Early (>1 minute)	29	7.1%
Late (>5 minutes and <= 15 minutes)	120	30.4%
Missed (>15 minutes)	6	1.3%

Source: February 2014 RouteMatch data

However, when you average the delay by run, the chart below shows that on average the westbound weekday trips are reasonably on time in the westbound direction as shown in Figure 5-3, with the exception of the 4:10 pm run. The implications of this finding is that there need to be adjustments in the schedule to reflect actual running time intervals between timepoints. Such an analysis was completed utilizing RouteMatch data from May 2014. This analysis is being utilized in the new schedule for Route 1 that was implemented in January 2015.

Figure 5-3 Route 1 Westbound Average Delay By Run



Source: February 2014 RouteMatch data

Route 1 Eastbound is much more problematic. As shown in Figure 5-4 only 33% of the timepoints were considered on time.

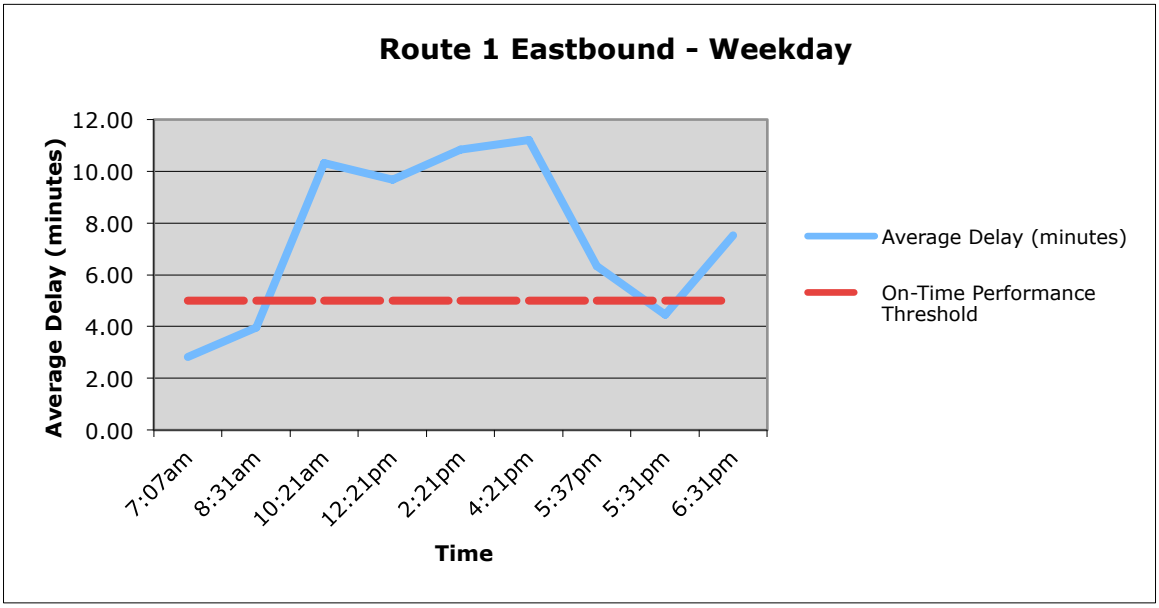
Figure 5-4 Route 1 Eastbound Schedule Adherence

	Timepoints	Pct.
Total Sampled	281	100%
On Time (1 min. before to 5 min. after)	92	33%
Early (>1 minute)	1	0%
Late (>5 minutes and <= 15 minutes)	164	58%
Missed (>15 minutes)	0	0%

Source: February 2014 RouteMatch data

As shown in Figure 5-5, Route 1 Eastbound is on average late throughout the day, more than 10 minutes late on average to timepoints from about 10 am to 4:21 pm.

Figure 5-5 Route 1 Eastbound Average Delay By Run



Source: February 2014 RouteMatch data

Since Route 1 becomes Route 8, one would expect that much of the problem would be that the bus is arriving back to Sutter Lakeside Hospital late. On Route 8, the bus is on average 5 minutes late when it arrives at Sutter Lakeside Hospital. The bus then becomes Route 1 and the bus is an average of 15 minutes late when it arrives at the Nice Post office. The bus is able to make up some time and is an average of 7 minutes late when it arrives back to Ray's. Overall, the schedule adherence on eastbound Route 8/Route 1 is problematic. As described above, a new Route 1 schedule was introduced in January 2015, and the consulting team analyzed May 2014 RouteMatch data to recommend new intervals between timepoints.

Boarding Patterns

For the week long sample, there were an average of 116 weekday boardings westbound and 114 eastbound as shown in

Figure **5-6** below. Ray's, Highway 20/1st Street in Lucerne, and Robinsons are the top 3 boarding locations in the westbound direction. It should be noted that Lake Transit counts all passengers as "off" when they get to Sutter Lakeside Hospital, even though many do stay on the bus as it continues as Route 8 to Lakeport. This is also true in the eastbound direction, as many of the "ons" at Sutter Lakeside Hospital are not boarding there, but actually boarded in Lakeport. Other than Sutter Lakeside Hospital, the three top stops are Hwy 20 and Keyes in Clearlake Oaks, Robinsons, and the Nice Post Office.

Figure 5-6 Route 1 Average Weekday Boardings and Alightings

ROUTE 1 WESTBOUND

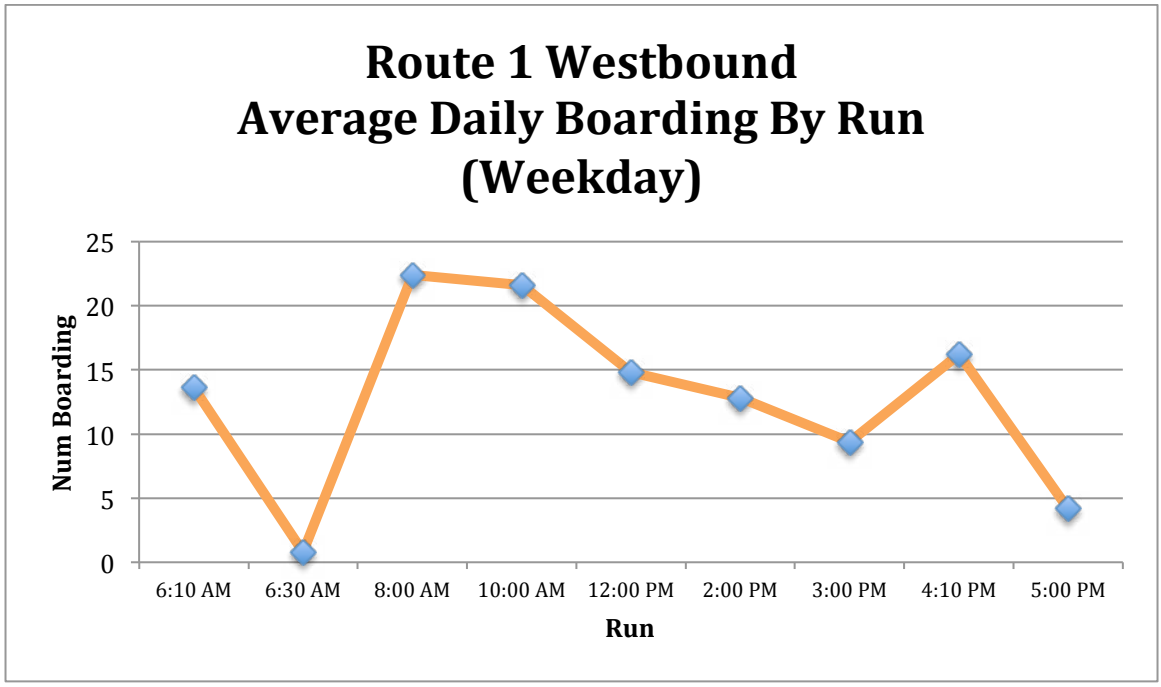
BUS STOPS	AVERAGE WEEKDAY	
	ON	OFF
RAYS	45.00	0.00
CITY HALL	1.40	0.00
OLYMPIC AND BURNS VALLEY	2.00	0.20
HWY 20 AND KEYES	2.60	7.80
HWY 20 AND GLENHAVEN	9.40	15.20
HWY 20 AND 1ST ST	28.20	13.00
NICE POST OFFICE	5.40	4.80
ROBINSONS	14.00	19.20
MAIN ST AND HWY 20	4.80	18.00
LAKE COUNTY JAIL	1.60	2.20
SUTTER Lakeside Hospital	1.40	35.40
TOTAL	115.80	115.80

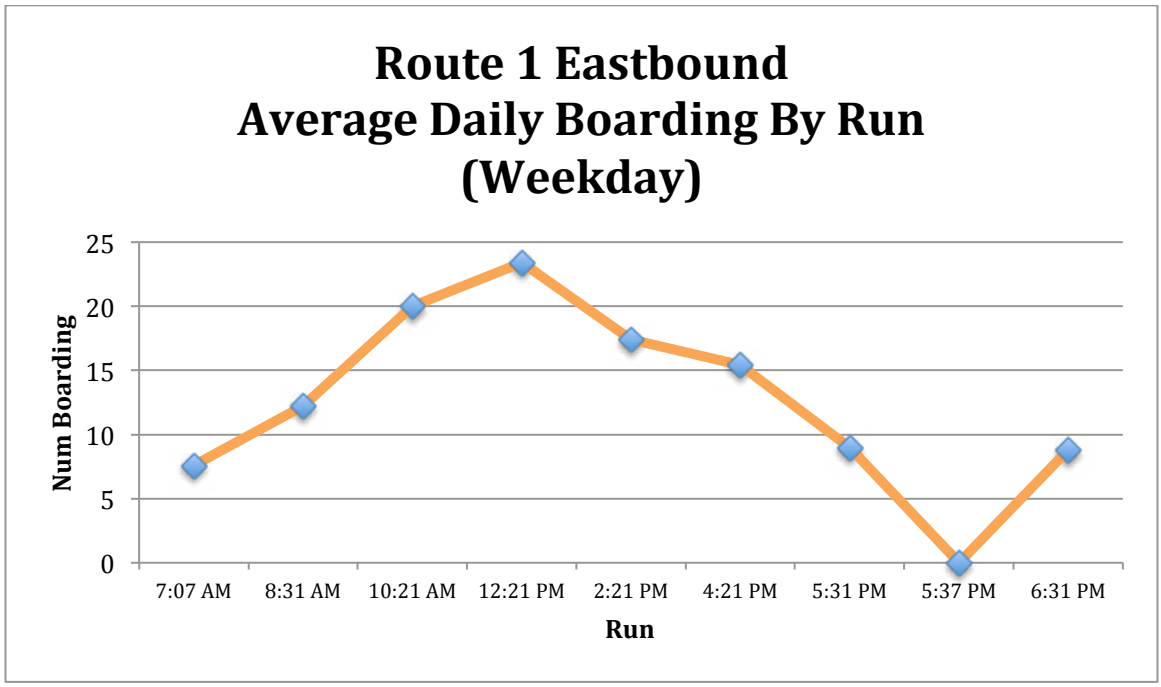
ROUTE 1 EASTBOUND

BUS STOPS	AVERAGE WEEKDAY	
	ON	OFF
SUTTER Lakeside Hospital	35.80	3.00
LAKE COUNTY JAIL	2.40	1.40
MAIN ST & HWY 20	11.00	5.40
ROBINSONS	14.40	10.40
NICE POST OFFICE	10.20	10.80
HWY 20 & 1ST ST	7.40	11.00
HWY 20 & GLENHAVEN	7.20	9.60
HWY 20 & KEYES	20.60	6.80
OLYMPIC AND BURNS VALLEY	4.20	6.00
CITY HALL	0.60	7.00
RAYS	0.00	42.40
TOTAL	113.80	113.80

Source: February 2014 RouteMatch data

Figure 5-7 Average Daily Boardings By Run





Source: February 2014 RouteMatch data

Figure **5-7** above shows the number of boardings by run on Route 1. It should be noted that in the westbound direction, the 6:30 am and 5:00 pm runs are only partial runs as far as Glenhaven and Lucerne, respectively. In the eastbound direction from Lakeport to Clearlake, the 7:07 am run starts in Lucerne.

In the westbound direction, ridership is strongest leaving Ray's at 8 am and 9 am to Lakeport. At 5:00 pm, the service drops to average of 4.2 passengers per run, but the run is limited service to Glenhaven and does not service the most productive stops in Lucerne at Highway 20 and 1st St.

In the eastbound direction between Lakeport and Clearlake, existing ridership is strongest in the midday at 12:21 pm and is lower at in early morning and early evening.

Recent Regional Route Performance

As shown in Figure 5- below, the following are highlights of Regional Route 1 performance over the past two fiscal years and projected for FY 2014/15.

Figure 5-8 Regional Route Performance FY 2012/13 to FY 2014/15

Regional Route	**FY 2012/13**	**FY 2013/14**	**FY 2014/15***
Base Statistics	Route 1	Route 1	Route 1
Operating Cost	$440,948	$565,628	$503,128
Fare Revenues	$108,799	$115,400	$104,657
Passenger Trips	73,978	77,309	64,618
Vehicle Service Hours	6,573	8,340	6,627
Vehicle Service Miles	178,116	214,389	179,183
Estimated Performance Statistics			
Passengers/Service Hour	11.25	9.27	9.75
Passenger/Service Mile	0.415	0.361	0.361
Average Fare/Passenger	$1.47	$1.49	$1.62
Farebox Recovery	24.7%	20.4%	20.8%
Cost/Passenger Trip	$5.96	$7.32	$7.79

*FY 2014/15 ridership is based on the first quarter. Ridership will be higher due to the January2015 expansion of service.

JARC Grant Improvements to Regional Routes

JARC Grant Overview

In April 2013, Lake Transit Authority submitted a JARC grant application to Caltrans "to provide expanded services to meet job access needs for low income persons including welfare recipients." The grant application included the following elements:

- Service improvements including extended hours until 10:00 pm or later in the cities of Clearlake and Lakeport, and in the unincorporated communities of Lower, Clearlake Oakes, Glenhaven, Lucerne, Nice, Upper Lake, and Kelseyville.
- Fixed route service capacity and frequency improvements at commute times in Clearlake and Lakeport.

The estimated benefits were the provision of 55,765 additional annual one-way trips with access to an estimated 7,615 jobs.

The total project was estimated at $1,126,346 over a three-year period through June 30, 2017.

JARC Funding Implementation efforts to date

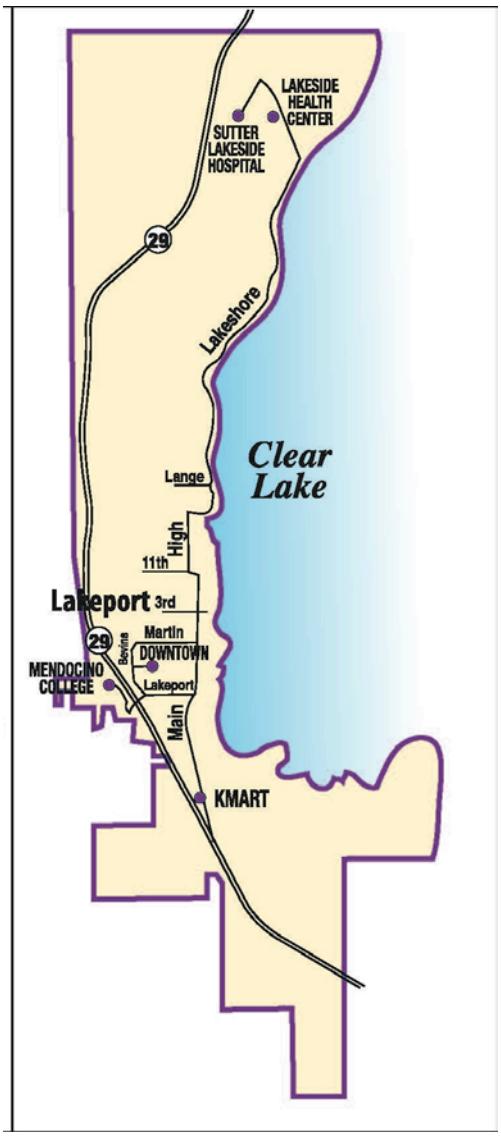
Service Improvements in Clearlake

In September 2013, significant service improvements were made to the Clearlake Route with a reconfiguration of old routes 5 and 6, to new routes 5, 10, 11, and 12. The improvements provided more direct travel and improved frequencies between key origins and destinations. It also provides evening service on Routes 5 and 10 until 11 pm.

Nite Rider Service

In a collaboration effort with the Lake Transit General Manager and Paratransit Services Manager, the consulting team and the graphic artist, plans were made to provide Nite Rider service in Lakeport. The "On-Call Evening Transit for Everyone" in the greater Lakeport area has the following features:

- Dial-A-Ride service is provided from 6:00 pm to 9:30 pm Mondays through Fridays.



- The Dial-A-Ride service area is the same as the existing Lakeport Dial-A-Ride service area as shown to the left.

The reason for the demand response service in the evening is that, in general, transit demand drops off in the evening. In the Lakeport area, overall evening demand is expected to be quite dispersed at generally lower demand levels than daytime core hours when government services are available.

A significant community outreach was originally undertaken to promote the service. Once travel patterns are determined based on the actual experience of the Nite Rider service, if a new community service route is established in Lakeport, it will be evaluated to determine if evening fixed route service would be more beneficial than Dial-A-Ride Service.

Remaining Grant Fund Services to be implemented

There are essentially two additional service improvements proposed in the JARC grant:

1. Service frequency and evening service improvement on Route 1 serving the north Shore area. (Implemented January 2015)

2. Improved daytime service levels in Lakeport (Not implemented, see Chapter 4)

January 2015 Service Expansion on Routes 1/8

In May 2014, a working paper was prepared and reviewed by LTA Transit Manager for implementing two remaining JARC grant services. The working paper developed three different alternatives:

1. Alternatives for adjusting the route lengths of Routes 1 and 8 in order to provide reliable service every two hours on regional routes to Lakeport.
2. A local circulator service within the greater Lakeport Area.
3. Additional early morning and later evening service on Routes 1/8 to better meet the transit needs of both North Shore and Lakeport residents.

In July 2014, additional schedule alternatives were reviewed with the LTA Transit Manager. At that time, a contract amendment was provided to analyze May 2014 RouteMatch data in order to provide additional data to provide appropriate time intervals between scheduled timepoints.

Figure 5-9 is the schedule that is being implemented in January 2015 as the TDP Update is being finalized.

The expanded schedule and slight revisions to the route accomplish the following:

1. *Northbound Route 8 and Eastbound Route 1*

   Northbound Route 8 schedules and Eastbound Route 1 schedules are integrated for easy passenger communication.

   A new early morning run starts in Lakeport at 6:14 am at 3rd and Main St. and serves the North Shore including Upper Lake at 6:45 am to Lucerne at 7:08 am arriving to Ray's at 7:45 am. This responds to passenger and survey input to provide better work schedule opportunities to Clearlake from North Shore communities.

   Service originates from Mendocino College at 8:00 am, 9:00 am and 10:00 am on Northbound Route 8, serving the Lakeport community and EastboundRoute 1 serving the North Shore community hourly at the Nice Post Office at 9:04, 10:04 and 11:04 am. The hourly service arrives to Yuba College and Ray's at 9:45 am, 10:45 am and 11:45 am.

   Two additional runs are added in the evening departing Mendocino College at 8:30 pm and 9:40 pm. This will enable students taking night classes to return home in both Lakeport and the North Shore. Service from the Nice Post Office in the evening from the North Shore to Clearlake is offered, for example, at 5:04 pm, 6:04 p, 7:29 pm, 9:29 pm, and 10:39 pm. Buses arrive at Ray's in Clearlake at 5:45 pm, 6:45 pm, 8:10 pm, 10:10 pm and 11:20 pm.

   The last three evening runs do not serve the Lake County Jail, but service to the jail is provided on 8 runs.

   Service is routed to the Marymount College campus on most runs

Figure 5-9 Expansion of Routes 1 and 8

	Westbound Route 1 Schedule							**Southbound Route 8 Schedule**								
	Clearlake	Clearlake Oaks	Glenhaven	Lucerne	Nice		Upper Lake	Lakeport								
	Ray's/ Walmart	Highway 20& Keyes	Highway 20& Glenhaven	Hwy 20 & 1st	Nice Post Office	Robinson Rancheria	Main St. & Hwy 20	Lake County Jail	Sutter Lake-side Hosp.	Lakeside Health	Lakeshore & Lange	3rd & Main	Bella Vista Martin St	Senior Center	KMART S. Main St.	Mendocino College
Recommended Interval		0:13	0:10	0:20	0:04	0:08	0:09	0:08	0:04	0:04	0:07	0:07	0:05	0:04	0:03	0:04
Bus 1	6:00 AM	6:13 AM	6:23 AM	6:43 AM	6:47 AM	6:55 AM	7:04 AM	7:12 AM	7:16 AM	7:20 AM	7:27 AM	7:34 AM	7:39 AM	7:43 AM	7:46 AM	7:50 AM
Bus 3	7:00	7:13	7:23	7:43	7:47	7:55	8:04	8:12	8:16	8:20	8:27	8:34	8:39	8:43	8:46	8:50
Bus 2	8:00	8:13	8:23	8:43	8:47	8:55	9:04	9:12	9:16	9:20	9:27	9:34	9:39	9:43	9:46	9:50
Bus 1	10:00	10:13	10:23	10:43	10:47	10:55	11:04	11:12	11:16	11:20	11:27	11:34	11:39	11:43	11:46	11:50
Bus 2	12:00 PM	12:13 PM	12:23 PM	12:43 PM	12:47 PM	12:55 PM	1:04 PM	1:12 PM	1:16 PM	1:20 PM	1:27 PM	1:34 PM	1:39 PM	1:43 PM	1:46 PM	1:50 PM
Bus 1	2:00 PM	2:13 PM	2:23 PM	2:43 PM	2:47 PM	2:55 PM	3:04 PM	3:12 PM	3:16 PM	3:20 PM	3:27 PM	3:34 PM	3:39 PM	3:43 PM	3:46 PM	3:50 PM
Bus 3	3:00 PM	3:13 PM	3:23 PM	3:43 PM	3:47 PM	3:55 PM	4:04 PM	4:12 PM	4:16 PM	4:20 PM	4:27 PM	4:34 PM	4:39 PM	4:43 PM	4:46 PM	4:50 PM
Bus 2	4:00 PM	4:13 PM	4:23 PM	4:43 PM	4:47 PM	4:55 PM	5:04 PM	5:12 PM	5:16 PM	5:20 PM	5:27 PM	5:34 PM	5:39 PM	5:43 PM	5:46 PM	5:50 PM
Bus 1	6:00 PM	6:13 PM	6:23 PM	6:43 PM	6:47 PM	6:55 PM	7:04 PM	--	7:08 PM	7:12 PM	7:19 PM	7:26 PM	7:31 PM	7:35 PM	7:38 PM	7:42 PM
Bus 3	7:00 PM	7:13 PM	7:23 PM	7:43 PM	7:47 PM	7:55 PM	8:04 PM	--	8:08 PM	8:12 PM	8:19 PM	8:26 PM	8:31 PM	8:35 PM	8:38 PM	8:42 PM
Bus 2	8:30 PM	8:43 PM	8:53 PM	9:13 PM	9:17 PM	9:25 PM	9:34 PM	--	9:38 PM	Express					9:55 PM	9:59 PM
Bus 4	9:35 PM	9:48 PM	9:58 PM	10:18 PM	10:22 PM	Ends at Nice Post Office										

	Northbound Route 8 Schedule								**Eastbound Route 1 Schedule**						
	Lakeport								Upper Lake	Nice		Lucerne	Glenhaven	Clearlake Oaks	Clearlake
	Mendocino College	Social Security Parallel Drive	Bella Vista Martin St	3rd & Main St.	Lakeshore & Lange	Lakeside Health	Sutter Lake-side Hosp.	Lake County Jail	Main St.& Hwy 20	Robinson Rancheria	Nice Post Office	Hwy 20& 1st.	Hwy 20& Glenhaven	Hwy 20 & Keyes Blvd	Ray's/ Walmart
Recommended Interval	0:00	0:05	0:04	0:05	0:07	0:07	0:02	0:05	0:10	0:09	0:10	0:04	0:15	0:09	0:13
Bus 2				6:14	6:21	6:28	6:30	6:35	6:45	6:54	7:04	7:08	7:23	7:32	7:45
Bus 1	8:00	8:05	8:09	8:14	8:21	8:28	8:30	8:35	8:45	8:54	9:04	9:08	9:23	9:32	9:45
Bus 3	9:00	9:05	9:09	9:14	9:21	9:28	9:30	9:35	9:45	9:54	10:04	10:08	10:23	10:32	10:45
Bus 2	10:00	10:05	10:09	10:14	10:21	10:28	10:30	10:35	10:45	10:54	11:04	11:08	11:23	11:32	11:45
Bus 1	12:00 PM	12:05	12:09	12:14	12:21 PM	12:28 PM	12:30 PM	12:35 PM	12:45 PM	12:54 PM	1:04 PM	1:08 PM	1:23 PM	1:32 PM	1:45 PM
Bus 2	2:00 PM	2:05 PM	2:09 PM	2:14 PM	2:21 PM	2:28 PM	2:30 PM	2:35 PM	2:45 PM	2:54 PM	3:04 PM	3:08 PM	3:23 PM	3:32 PM	3:45 PM
Bus 1	4:00 PM	4:05 PM	4:09 PM	4:14 PM	4:21 PM	4:28 PM	4:30 PM	4:35 PM	4:45 PM	4:54 PM	5:04 PM	5:08 PM	5:23 PM	5:32 PM	5:45 PM
Bus 3	5:00 PM	5:05 PM	5:09 PM	5:14 PM	5:21 PM	5:28 PM	5:30 PM	5:35 PM	5:45 PM	5:54 PM	6:04 PM	6:08 PM	6:23 PM	6:32 PM	6:45 PM
Bus 2	6:30 PM	6:35 PM	6:39 PM	6:44 PM	6:51 PM	6:58 PM	7:00 PM	--	7:10 PM	7:19 PM	7:29 PM	7:33 PM	7:48 PM	7:57 PM	8:10 PM
Bus 1	8:30 PM	8:35 PM	8:39 PM	8:44 PM	8:51 PM	8:58 PM	9:00 PM	--	9:10 PM	9:19 PM	9:29 PM	9:33 PM	9:48 PM	9:57 PM	10:10 PM
Bus 3	9:40 PM	9:45 PM	9:49 PM	9:54 PM	10:01 PM	10:08 PM	10:10 PM	--	10:20 PM	10:29 PM	10:39 PM	10:43 PM	10:58 PM	11:07 PM	11:20 PM

2. *Westbound Route 1 and Southbound Route 8 Schedule*

   The existing 6:30 am Route 1 Westbound run that currently starts at Ray's and goes to Lucerne where it terminates, would now start at 7:00 am from Clearlake and make all stops on Route 1/8 and terminate at Mendocino College at 8:50 am. With the 6:00 am run from Clearlake arriving at Mendocino College at 7:50 am, this schedule provides excellent connection from the North Shore to job and education opportunities in Lakeport.

   Four evening runs are operated from Clearlake at 6:00 pm, 7:00 pm, 8:30 pm and 9:35 pm. All runs serve the North Shore and arrive at Mendocino College in Lakeport at 7:42, 8:42 and 9:59 pm. With the existing afternoon schedule, this enables North Shore residents who work or attend Yuba College to have a reasonable schedule home, with the last bus departing at 9:35 pm. Many Yuba College classes end at 9:20 pm.

   Direct routing to the Marymount College campus is provided on most runs.

Short-Term Service Level Priorities for Regional Routes

When JARC grant funding ends, the LTA Board will need to determine how much of the service expansion of Routes 1/8 are sustainable without the special grant funding. The following are service level guidelines for priorities based on productivity and ridership potential.

Overall, there is a desire for more service than is likely sustainable over the five-year time frame of the TDP. Details on the cost trade-off and funding availability are discussed in significant detail in Chapter 11. In Chapter 11, there is also discussion of three financial scenarios. The maximum funding scenario suggests several potential actions that could increase funding levels and sustain many of the productive improvements made to the Regional Routes with JARC funding. In Chapter 6 on County-to-County, one of the suggested strategies is submitting two FTA 5311 (f) grants for Route 4 and 7, and incorporating Routes 1 and 7 into separate grant applications. This is discussed in more detail in the next chapter.

The LTA Board may determine other criteria than productivity and ridership potential are more important in determining priorities for the Regional Routes. For example, if evening access to community colleges is more important, then late evening hours (#4 below) may have a higher priority than hourly service during peak periods (#3 below) and the priority order would be changed.

1. **Consistent service every two hours on Routes 1/8 in both directions between 6 am and 6 pm westbound and 8 pm eastbound on weekdays.**

   This is the core service level that generates the majority of ridership on Routes 1/8 and Route 4. The new schedules implemented in January 2015 should resolve many of the schedule adherence issues during the core hours on Routes 1 and 8. A similar adjustment to timepoints on Route 4 need to be undertaken..

2. **Two hour service on Saturdays from 8 am to 6 pm westbound and 8 am to 8 pm eastbound.**

   During the February 2014 RouteMatch sample, there was no ridership on the early morning runs on Saturday service. The last run at 6:31 pm at Sutter Lakeside Hospital to the North Shore was the busiest run of the day and should be retained.

3. **Hourly service during peak periods on Routes 1/8.**

   The new schedule implemented in January 2015 has hourly service during peak periods on Routes 1/8. Ridership monitoring will determine how much additional ridership these additional runs generate. It is the consulting team's hypothesis that the hourly service will generate more ridership and productivity than the late evening service.

4. **Late evening service to 11:20 pm on Routes 1 and 8**

   It is not known what the ridership and productivity will be on the new evening and late evening runs on the Route 1/8 schedule that will be implemented in January 2015. The hypothesis is that it would be lower than the weekday hourly service runs. It may or may not be more than the Sunday service, but improved evening access to Mendocino College and Yuba College provides the basis for a higher priority of late evening service.

5. **Sunday service on Regional Routes**

   Sunday service is the most desired improvement of passengers. The 2015 cost for implementing Sunday service on the Regional Routes is $53,000 in direct operating costs plus approximately $15,000 or more for Sunday dispatching and supervision costs.

   However, Sunday service is likely to be 150 -175 daily passengers compared to 225 Saturday passengers and 330 average daily weekday passengers based on experience elsewhere.

Separate FTA 5311 (f) Applications for Routes 1 and 3

In Chapter 6, Intercity Routes, it is recommended that a separate application be submitted for Routes 4 and 7. Routes 1 and 3 would have a separate FTA 5311 (f) application.

Longer Term Alternatives for Routes 1 and 8

If funding can be secured, the five-year plan is to have a mainline Route 1 that would be extended to Konocti Vista Casino. Route 8 would be replaced with a local community service route in Lakeport. This alternative could only be funded in the Maximum Funding scenario detailed in the Financial Plan, Chapter 11.

Extended Route 1 to Konocti Vista Casino

In this alternative Route 1 could continue from Sutter Lakeside Hospital along Lakeshore, Main St. in Lakeport, serving 3rd and Main St., KMART, Mendo Mill and Mendocino College and terminate at Konocti Vista. The longer term vision would retain the expanded Route 1/8 improvements along the North Shore that were implemented in January 2015. The mainline Route 1/8 would be combined into a single Route 1. The primary difference is eliminating Route 8, replacing it with a community service route in Lakeport and making Route 1 into a mainline route to Konocti Vista Casino.

The following are the key changes to the Regional Routes:

1. Route 8 as it currently exists is eliminated. Route 1 continues from Sutter Lakeside Hospital terminating at Mendocino College.
2. The Route 4, 4A and Route 8 segments south of Lakeport Blvd. on Parallel Drive are eliminated. Instead, timed transfers with Route 1 would serve Mendocino College.

Figure 5-10 shows the proposed 5-year financially unconstrained vision for regional and lifeline routes in the Lakeport area.[1] Figure 5-11 is a preliminary schedule for the Route 1 vision with a local community circulator in Lakeport.

[1] The map from the Lakeport Analsyis working paper is included in the administrative draft. It will be updated if Mark approves including this 5-year financially unconstrained vision into the TDP.

InterCity Routes Servicing Lakeport: 5-Year Financially Unconstrained Vision

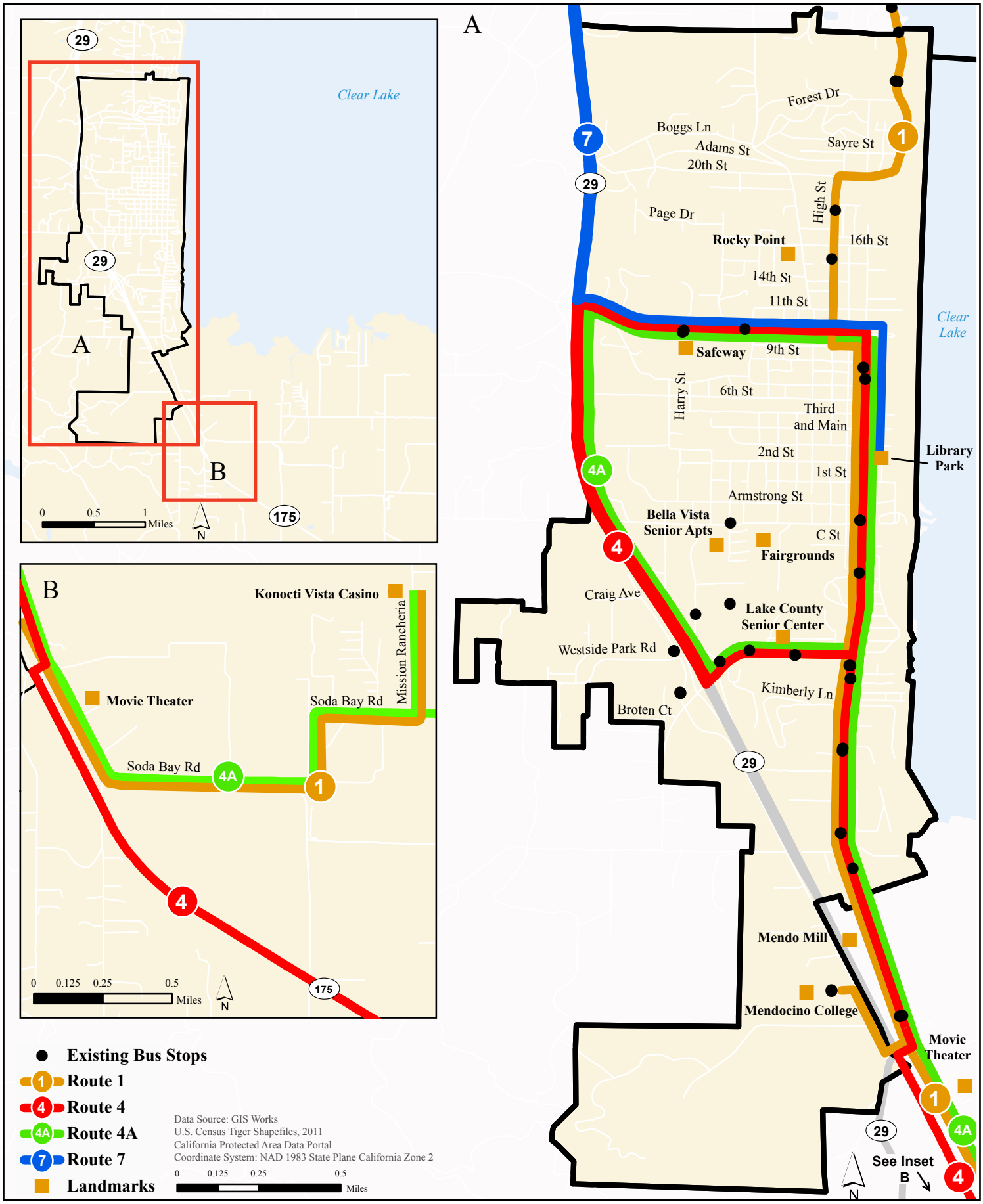


Figure 5-10

Figure 5-11 Mainline Route 1 to Konocti Vista Casino

Westbound Route 1 Schedule

	Clearlake	Clearlake Oaks	Glenhaven	Lucerne	Nice		Upper Lake	Lakeport							
	Ray's/ Walmart	Highway 20& Keyes	Highway 20& Glenhaven	Hwy 20 & 1st	Nice Post Office	Robinson Rancheria	Main St. & Hwy 20	Lake County Jail	Sutter Lake-side Hosp.	Lakeside Health	Lakeshore & Lange	3rd & Main	KMART	Mendocino College	Konocti Vista Casino
Recommended Interval		0:13	0:10	0:21	0:04	0:09	0:08	0:08	0:04	0:04	0:07	0:07	0:04	0:04	0:07
Bus 1	6:00 AM	6:13 AM	6:23 AM	6:44 AM	6:48 AM	6:57 AM	7:05 AM	7:13 AM	7:17 AM	7:21 AM	7:28 AM	7:35 AM	7:39 AM	7:43 AM	7:50 AM
Bus 3	7:00	7:13	7:23	7:44	7:48	7:57	8:05	8:13	8:17	8:21	8:28	8:35	8:39	8:43	8:50
Bus 2	8:00	8:13	8:23	8:44	8:48	8:57	9:05	9:13	9:17	9:21	9:28	9:35	9:39	9:43	9:50
Bus 1	10:00	10:13	10:23	10:44	10:48	10:57	11:05	11:13	11:17	11:21	11:28	11:35	11:39	11:43	11:50
Bus 2	12:00 PM	12:13 PM	12:23 PM	12:44 PM	12:48 PM	12:57 PM	1:05 PM	1:13 PM	1:17 PM	1:21 PM	1:28 PM	1:35 PM	1:39 PM	1:43 PM	1:50 PM
Bus 1	2:00 PM	2:13 PM	2:23 PM	2:44 PM	2:48 PM	2:57 PM	3:05 PM	3:13 PM	3:17 PM	3:21 PM	3:28 PM	3:35 PM	3:39 PM	3:43 PM	3:50 PM
Bus 3	3:00 PM	3:13 PM	3:23 PM	Express	3:30 PM	3:39 PM	Express	Express	3:50 PM	Express	Express	4:05 PM	4:09 PM	4:13 PM	4:20 PM
Bus 2	4:00 PM	4:13 PM	4:23 PM	4:44 PM	4:48 PM	4:57 PM	5:05 PM	5:13 PM	5:17 PM	5:21 PM	5:28 PM	5:35 PM	5:39 PM	5:43 PM	5:50 PM
Bus 1	6:00 PM	6:13 PM	6:23 PM	6:44 PM	6:48 PM	6:57 PM	7:05 PM	7:13 PM	7:17 PM	7:21 PM	7:28 PM	7:35 PM	7:39 PM	7:43 PM	7:50 PM
Bus 3	7:00 PM	7:13 PM	7:23 PM	7:44 PM	7:48 PM	7:57 PM	8:05 PM	8:13 PM	8:17 PM	8:21 PM	8:28 PM	8:35 PM	8:39 PM	8:43 PM	8:50 PM
Bus 2	8:30 PM	8:43 PM	8:53 PM	9:14 PM	9:18 PM	9:27 PM	9:35 PM	9:43 PM	9:47 PM	9:51 PM	9:58 PM	10:05 PM	10:09 PM	10:13 PM	10:20 PM
Bus 1	9:50 PM	10:03 PM	10:13 PM	10:34 PM	10:38 PM	Bus Deadheads back to Clearlake									

Eastbound Route 1 Schedule

	Lakeport								Upper Lake	Nice		Lucerne	Glenhaven	Clearlake Oaks	Clearlake
	Konocti Vista Casino	Mendocino College	KMART	3rd & Main St.	Lakeshore & Lange	Lakeside Health	Sutter Lake-side Hosp.	Lake County Jail	Main St.& Hwy 20	Robinson Rancheria	Nice Post Office	Hwy 20& 1st.	Hwy 20& Glenhaven	Hwy 20 & Keyes Blvd	Ray's/ Walmart
Recommended Interval		0:07	0:04	0:04	0:06	0:07	0:04	0:05	0:10	0:10	0:09	0:04	0:15	0:12	0:13
Bus 2			6:11	6:15	6:21	6:28	6:32	6:37	6:47	6:57	7:06	7:10	7:25	7:37	7:50
Bus 1	8:00	8:07	8:11	8:15	8:21	8:28	8:32	8:37	8:47	8:57	9:06	9:10	9:25	9:37	9:50
Bus 3	9:00	9:07	9:11	9:15	9:21	9:28	9:32	9:37	9:47	9:57	10:06	10:10	10:25	10:37	10:50
Bus 2	10:00	10:07	10:11	10:15	10:21	10:28	10:32	10:37	10:47	10:57	11:06	11:10	11:25	11:37	11:50
Bus 1	12:00 PM	12:07 PM	12:11 PM	12:15 PM	12:21 PM	12:28 PM	12:32 PM	12:37 PM	12:47 PM	12:57 PM	1:06 PM	1:10 PM	1:25 PM	1:37 PM	1:50 PM
Bus 2	2:00 PM	2:07 PM	2:11 PM	2:15 PM	2:21 PM	2:28 PM	2:32 PM	2:37 PM	2:47 PM	2:57 PM	3:06 PM	3:10 PM	3:25 PM	3:37 PM	3:50 PM
Bus 1	4:00 PM	4:07 PM	4:11 PM	4:15 PM	4:21 PM	4:28 PM	4:32 PM	4:37 PM	4:47 PM	4:57 PM	5:06 PM	5:10 PM	5:25 PM	5:37 PM	5:50 PM
Bus 3	4:30 PM	4:37 PM	4:41 PM	4:45 PM	4:51 PM	4:58 PM	5:02 PM	5:07 PM	5:17 PM	5:27 PM	5:36 PM	5:40 PM	5:55 PM	6:07 PM	6:20 PM
Bus 2	6:30 PM	6:37 PM	6:41 PM	6:45 PM	6:51 PM	6:58 PM	7:02 PM	7:07 PM	7:17 PM	7:27 PM	7:36 PM	7:40 PM	7:55 PM	8:07 PM	8:20 PM
Bus 1	8:00 PM	8:07 PM	8:11 PM	8:15 PM	8:21 PM	8:28 PM	8:32 PM	8:37 PM	8:47 PM	8:57 PM	9:06 PM	9:10 PM	9:25 PM	9:37 PM	9:50 PM
Bus 3	9:00 PM	9:07 PM	9:11 PM	9:15 PM	9:21 PM	9:28 PM	9:32 PM	9:37 PM	9:47 PM	9:57 PM	10:06 PM	10:10 PM	10:25 PM	10:37 PM	10:50 PM
Bus 2	10:20 PM	10:27 PM	10:31 PM	10:35 PM	10:41 PM	10:48 PM	10:52 PM	10:57 PM	11:07 PM	11:17 PM	11:26 PM	11:30 PM	Terminates at Marymount		

Cost Considerations

The vehicle service hours and vehicle service miles for the proposed Route 1 to Konocti Casino would be similar to the cost of the expanded service on Routes 1/8 that was implemented in January 2015.

The additional cost is essentially the addition of a Lakeport community service route that would provide regular local circulation within Lakeport. The local Lakeport Circulator would have an annual cost of $88,500 that was discussed in Chapter 4.

6. Intercity Routes

This chapter starts with an assessment of the three Intercity routes, Routes 3, 4 and 7. These routes[1] are currently funded by FTA 5311 (f) funding. Service level priorities, and supporting actions are then identified for existing Routes 3, 4 and 7. In effect, as shown on Exhibit 6-1 on the following page, the combined route provides a single seat ride from Calistoga to Ukiah. The final sections evaluate the potential for increasing connectivity, particularly to Greyhound services. In Chapter 11, a maximum funding financial scenario explores how to potentially maximize all funding sources, including FTA 5311(f). The final section of this chapter provides the potential rationale and basis for future applications for Intercity services to maximize FTA 5311 (f) funding.

Route 3 Service Assessment

Existing Service

Route 3 is an Intercity Route between Clearlake and Napa County with destinations in Calistoga and St. Helena Hospital in Deer Park. St. Helena Hospital at Deer Park is served twice daily. Free transfers are available to the Napa VINE transit route 10, Calistoga Shuttle and the St. Helena Shuttle.

Route 3 Southbound from Clearlake currently provides service approximately every two hours from 6:10 am until 12:45 pm and then again at 4:45 pm. Two runs (7:55 am and 12:45 pm) go all the way to the final stop at Deer Lake. Another two runs (6:10 am and 4:45 pm) terminate at the second to last stop, Calistoga. The 10:00 am run terminates in Middletown.

Northbound, the route operates from 7:25 am until 5:50 pm. Northbound service begins approximately 5-10 minutes after Route 3 Southbound arrives in station, except for the 12:19 pm service from Middleton which has an approximately 2 hour gap.

The VINE Route 10 operates between Napa Valley College and Calistoga on weekdays and between the Soscol Transit Center in the City of Napa and Calistoga on Saturdays and Sundays. Service operates every 30 to 60 minutes during the times that Route 3 makes connections. Connections from both Route 3 Southbound to Route 10 Southbound to Napa and from the City of Napa northbound, connecting to Route 3 northbound are quite convenient in general. For example, the Route 3 bus arriving in Calistoga at 5:45 pm has connections to Napa VINE Route 10 at 6:00 pm and 6:30 pm. Connections to the Amtrak bus are available in Napa.

[1] Those Route 4 runs that are connected to Routes 3 and 7 for intercity travel.


Lake Transit
Select Regional and Intercity Routes
Glenn Co.
Colusa Co.
Upper Lake
Nice
Indian Valley Reservoir
North Lakeport
Clear Lake
Lucerne
Spring Valley
Ukiah
Lakeport
Clearlake Oaks
Soda Bay
Clearlake Riviera
Kelseyville
Clearlake
Lower Lake
Yolo Co.
Mendocino Co.
Sonoma Co.
Cobb
Hidden Valley Lake
Middletown
Calistoga
Napa Co.
20
175
29
Existing Service
Major Roads
Data Source: GIS Works
U.S. Census Tiger Shapefiles, 2011
California Protected Area Data Portal
Coordinate System: NAD 1983 State Plane California Zone 2
0 2.5 5 10
Miles
N

Figure 6-1

Passengers travelling southbound can transfer to Route 11 to Vallejo, for connections to many public transportation options including the Vallejo Ferry, SolTrans, and connections to BART and the Capitol Corridor. Connections are also available to Amtrak and Greyound.

Market Research Input

Onboard Survey

- On Route 3, 12% of patrons surveyed were employed full-time, 33% were employed part time and 39% were not employed.
- 45% of riders on Route 3 are students.
- 100% of riders have annual household incomes of $35,000 or less.
- 39% of riders have no license and no car, which is less than the 55% systemwide average.
- 21% of riders are youth under 16 years old, significantly more than 6% systemwide average.
- 50% of Route 3 passengers live in Clearlake, with another 15% coming from communities north of the route – Cobb (9%), Clearlake Oaks (3%), and Nice (3%). 21% of Route 3 passengers live in Middletown. Only 3% live in Napa Valley.
- 56% of riders use Route 3 for school/college (31%) and work (25%). 11% uses it for long-distance travel compared to systemwide average of 4%, expected due to the nature of service.
- 50% of riders travel one-way, a high figure which is expected due to Route 3 connections to intercity services.
- The overall satisfaction rating was the third highest of all Lake Transit routes with a mean score of 4.17, which is just below routes 4A and 2. The lowest rated satisfaction rating on Route 3 was for the On-time Performance attribute at 3.37 out of 5, although this is still slightly above the systemwide average of 3.32.
- The two service improvements desired by Route 3 passengers were improved information at bus stops and additional shelters.

Stakeholder Input

- There is a need for improvement of Route 3 to better service the International Charter School in the afternoon (school is out at 2:30 pm, bus arrives at 3:20 pm).
- Route 3 can be used to access medical facilities in Napa County such as St. Helena Hospital. However, this can be difficult to access with the limited schedule of Route 3. The issue is being addressed as part of the Coordinated Public Transit-Human Services Transportation Plan.

Recent Performance

Ridership

Ridership has steadily increased over the past five years on Route 3 (except for 2009/10). In FY 2008/09 ridership was 20,168 but dropped down to 18,160 in FY 2009/10, and then steadily increased to 23,617 in FY 2012/13. Passenger trips dropped to 18,878 in FY 2013/14. Based on first quarter 2014/15 statistics, ridership in 2014/15 is projected to increase back to approximately 21,000 annual passenger trips on Route 3.

Schedule Adherence

During the five-day weekday schedule check in February 2014, Figure 6-2 indicates there were 164 timepoints sampled for Route 3, and 65.8% of Lake Transit buses were on time, as defined by one minute before the scheduled time to 5 minutes late.

Figure 6-2 Route 3 Schedule Adherence

ROUTE 3 SUMMARY	Timepoints	Pct
On Time (1 min. before to 5 min. after)	87	53.0%
Early (>1 minute)	21	12.8%
Late (>5 minutes and <= 15 minutes)	53	32.3%
Missed (>15 minutes)	3	1.8%
Total Sampled	164	100%

Source: February 2014 RouteMatch data

Route 3 Southbound is actually almost 100% on-time for two out of five runs as shown in Figure 6-3 below. For the 7:55 am run, 33% is late or missed. However, the 4:45 pm run is significantly late starting from Rays, at 89%. Drivers are on a split shift to operate the 4:45 run and check into the Paratransit Services yard at 4:30 pm. Starting late on a regular basis is a driver management issue that should be resolved in order to improve passenger convenience.

Route 3 Northbound is significantly late for all runs except the 2:20 pm run. By late afternoon, it is significantly behind schedule, with about 80% late or missed connections. Even though Route 3 northbound is a continuation of Route 3 southbound, the general timeliness of the southbound bus is not being reflected in the northbound bus. On the 2:20 pm run, drivers were early to the timepoint 36% of the time. On the 9:30 am run, drivers were early to the timepoints 29% of the time. Although the February 2014 sample size is limited, the limited data available points to the fact that drivers are not being properly trained and supervised to not leave timepoints early as they left timepoints on several occasions from 2 to 4 minutes early. Figure 6-3 below shows Route 3 schedule adherence by run.

For the 7:25 am to 12:19 pm run departures from St. Helena Hospital in Helena, delay seems to start only at the last two stops – Lower Lake (Hwy 53 & 29) and Clearlake (Rays). The bus however was observed to leave as early as 7 minutes early for the connection from Route 10 in Calistoga to Route 3 Northbound to Clearlake. A Route 10 bus arrives in Calistoga at 9:48 am, and the Route 3 bus is scheduled to depart at 9:50 am. However, the Route 3 bus left at 9:43 am, 7 minutes early.

The 6:52 pm bus starts in Middletown and is interlined from the Route 2 bus. The Route 2 bus is late to Middletown, causing the Route 3 Northbound bus to be late.

Figure 6-3 Route 3 Schedule Adherence by Run

	RUNS - ROUTE 3 SOUTHBOUND				
	6:10 AM	**7:55 AM**	**10:00 AM**	**12:45 PM**	**4:45 PM**
On Time (1 min. before to 5 min. after)	100%	53%	91%	65%	11%
Early (>1 minute)	0%	16%	9%	29%	0%
Late (>5 minutes and <= 15 minutes)	0%	21%	0%	6%	89%
Missed (>15 minutes)	0%	11%	0%	0%	0%

	RUNS - ROUTE 3 NORTHBOUND					
	7:25 AM	**9:30 AM**	**12:19 PM**	**2:20 PM**	**5:50PM**	**6:52 PM**
On Time (1 min. before to 5 min. after)	59%	53%	50%	64%	22%	0%
Early (>1 minute)	12%	29%	0%	36%	0%	13%
Late (>5 minutes and <= 15 minutes)	29%	18%	50%	0%	72%	88%
Missed (>15 minutes)	0%	0%	0%	0%	6%	0%

Source: February 2014 RouteMatch data

Boarding Patterns

For the week long sample, there were an average of 37 weekday boardings southbound and 35 northbound as shown in Figure 6-4 below. In the southbound direction, most of the boardings were in Clearlake at Rays. Most passengers got off in Middletown destinations (22), and Calistoga (11). For the week of sample data, there were only 2 passengers departing at St. Helena Hospital.

Figure 6-4 Route Boarding and Alightings by Stop

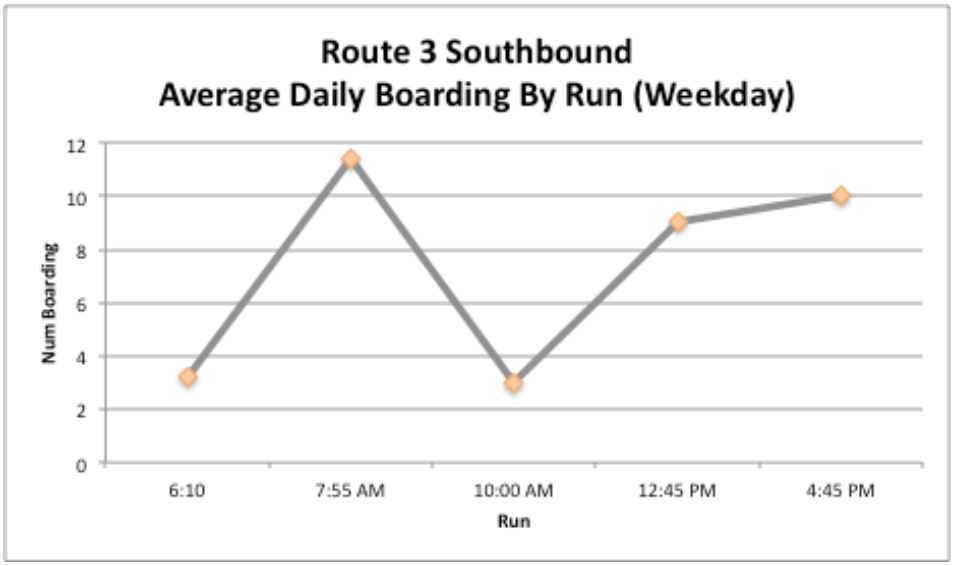
ROUTE 3 SOUTHBOUND			
TOWN	BUS STOPS	AVERAGE WEEKDAY	
		ON	OFF
CLEARLAKE	RAYS	25.00	0.00
LOWER LAKE	HWY 53 & 29	2.80	0.00
HIDDEN VALLEY LAKE	HARTMAN RD	4.00	3.20
MIDDLETOWN	HWY 29 & YOUNG	1.80	8.40
	TWIN PINE	3.00	13.60
CALISTOGA	LINCOLN AVE BRIDGE	0.00	11.00
DEER PARK	ST HELENA DEER PARK	0.00	0.40
	TOTAL BY RUN	36.60	36.60

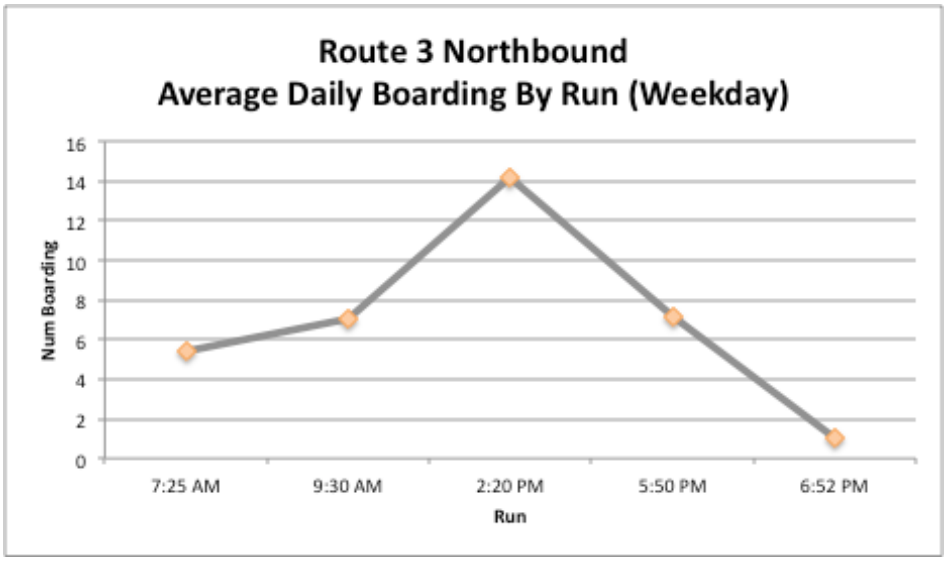
ROUTE 3 NORTHBOUND			
TOWN	BUS STOPS	AVERAGE WEEKDAY	
		ON	OFF
DEER PARK	ST HELENA DEER PARK	0.80	0.00
CALISTOGA	LINCOLN AVE BRIDGE	12.00	0.00
MIDDLETOWN	TWIN PINE	5.80	3.00
	HWY 29 & YOUNG	12.20	2.20
HIDDEN VALLEY LAKE	HARTMAN RD	3.40	3.80
LOWER LAKE	HWY 53 & 29	0.60	1.80
CLEARLAKE	RAYS	0.00	24.00
	TOTAL BY RUN	34.80	34.80

Source: February 2014 RouteMatch data

In the northbound direction, Lincoln Avenue Bridge in Calistoga where the transfer from the Napa VINE Route 10 occurs, and Hwy 29/Young in Middletown are the top two boarding locations. It should be noted that there were was less than one passenger per day boarding from St. Helena Hospital in Deer Park.

Figure 6-5 Route 3 Boardings By Run





Source: February 2014 RouteMatch data

Figure 6-5 above shows the number of boardings by run on Route 3.

In the northbound direction between St. Helena Hospital, Calistoga and Clearlake, the most onboarding is at Hwy 29 & Young in Middletown for the 2:20 pm run. Ridership is lower in early morning and early evening.

Route 4 Service Assessment

Existing Service

Route 4 connects Clearlake, Kit's Corner, Kelseyville and Lakeport along the Highway 29 corridor. In the westbound direction, service is provided from 6:20 am with the last run leaving Ray's at 5:10 pm and arriving to 3rd and Main at 6 pm. Eastbound, service begins at 6:10 am from 3rd and Main in Lakeport to Clearlake, and the last bus departs 3rd & Main at 7:50 pm.

In general, service is every two hours with additional trips in the morning and afternoon to provide hourly service at certain times of the day.

Market Research

Onboard Survey (November 2013)

- On Route 4, 15% of patrons are employed full-time and 19% employed part-time. This is slightly less than system average. However, only 7% are retired, compared to 20% systemwide.
- 29% of the ridership on Route 4 is students, very close to the 31% systemwide.
- 57% of the ridership on Route 4 had household incomes of $10,000 or less, compared to 47% systemwide.
- A total of 85% of the riders surveyed have no license, no car or neither a car nor a license. This is slightly below the systemwide average of 89%.
- Shopping and school/college both had 28% of the trip purposes, followed by medical appointments at 24%.
- 54% of the Route 4 passengers reside in Clearlake, followed by 21% who live in Lakeport.
- In terms of customer satisfaction, on a scale of 1 to 5 with 5 being the most satisfied, passengers were most satisfied with connections to other services (4.42) and least satisfied with on-time performance (3.46).
- The two improvements that Route 4 passengers would most like to see are bus service on Sundays and shelters at more bus stops.

Stakeholder Input

- In the Eastbound direction on Route 4, there is a gap in service departing Lakeport from 10:45 am to 2:00 pm. In the Westbound direction, service is provided at a minimum of every two hours. Social service agencies reported that this makes Route 4 service inconvenient for some of their clients.

Recent Performance

Ridership

Route 4 ridership increased from 40,000 annual passengers in FY 2008-09 to a peak of 52,828 in FY 2011-12. In FY 2012/13, ridership dropped down to 47,601 annual passengers and then more substantially to 34,309 in FY 2013/14. Ridership is expected to partially recover to approximately 38,000 annual riders in FY 2014/15, significantly below the peak of 52,828 in FY 2011/12.

Schedule Adherence

Schedule adherence varies a great deal on this route. Overall, Route 4 westbound is on time at designated timepoints 59% of the time on weekdays. Route 4 eastbound is only on time 40.9% of the time.

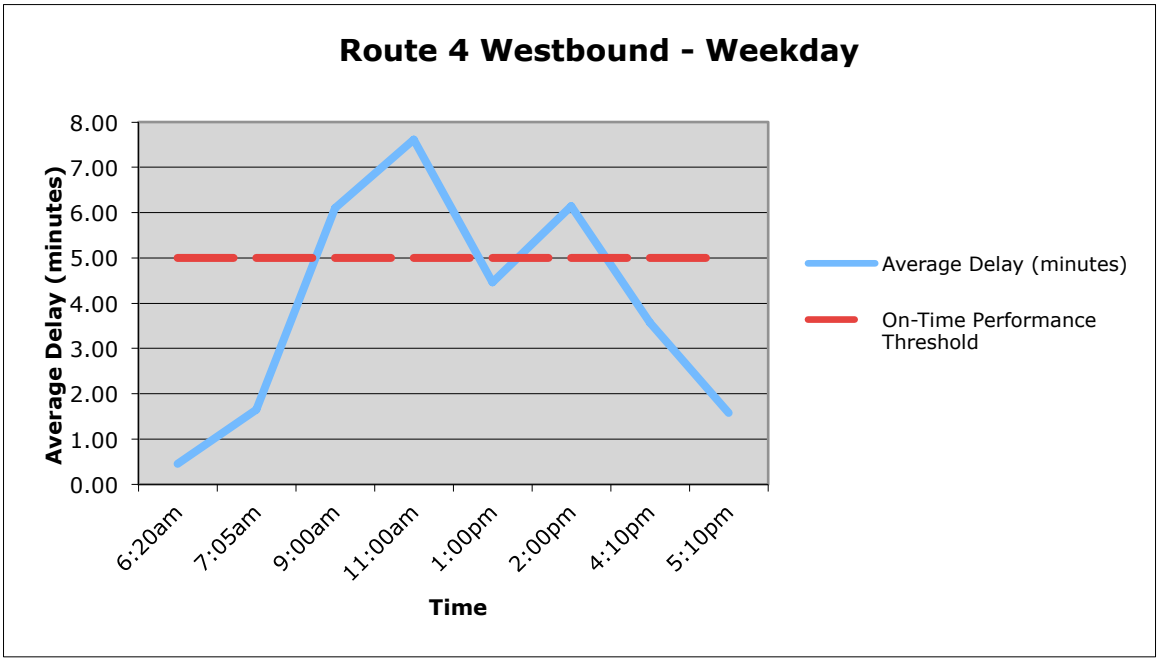
Figure 6-6 Route 4 Schedule Adherence

Route 4 Westbound	Timepoints	Pct.
Total Sampled	201	100%
On Time (1 min. before to 5 min. after)	119	59%
Early (>1 minute)	12	6%
Late (>5 minutes and <= 15 minutes)	66	33%
Missed (>15 minutes)	4	2%

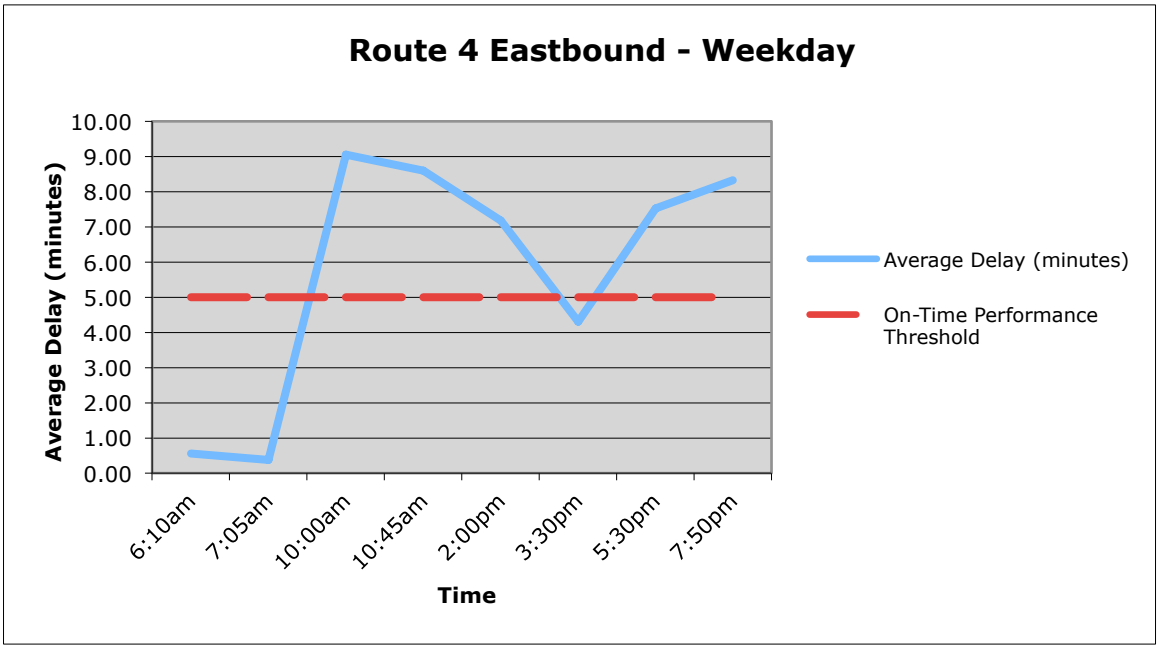
Route 4 Eastbound	Timepoints	Pct.
Total Sampled	186	100%
On Time (1 min. before to 5 min. after)	76	41%
Early (>1 minute)	11	6%
Late (>5 minutes and <= 15 minutes)	91	49%
Missed (>15 minutes)	5	2.7%

The average on-time performance for each timepoint by run is shown in Figure 6-7 below.

Figure 6-7 Route 4 Average Schedule Delay By Run



Source: February 2014 RouteMatch data

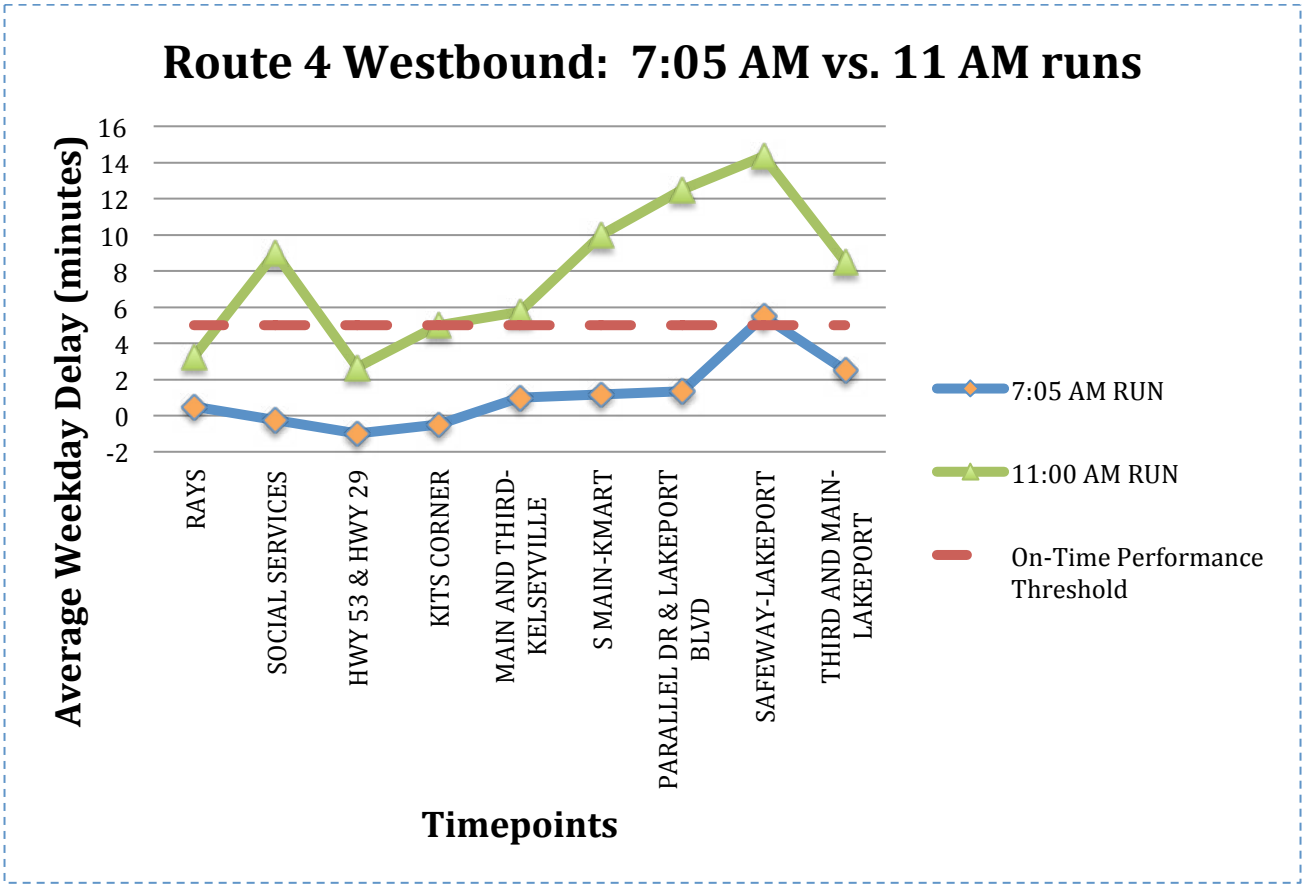


There is significant variance by time of day on Route 4. For the 7:05 am westbound trip from Clearlake to Lakeport, the bus is on time 83% of the time at timepoints. At the 11:00 am run, buses are on time just 29% of the time. Then back at 4:10 pm the Route 4 westbound is 75% on time.

As Figure 6-8 below shows, the 11:00 am bus, on average over a five weekday sample, is on time until it reaches Kelseyville and then the route becomes significantly off schedule and 14 minutes behind schedule on average when it reaches Safeway. When it reaches 3rd and Main in Lakeport it is an average of 8 minutes late.

Overall schedule adherence on Route 4 is not good and the schedules and timepoint intervals need to be adjusted based on a larger sample of RouteMatch schedule adherence data. Providing service reliability is one of the keys to rebuilding ridership on Route 4.

Figure 6-8 Route 4 Westbound Average Delay By Stop



Source: February 2014 RouteMatch data

Boarding Patterns

Route 4 westbound has an average of 73 daily weekday boardings and alightings. About 50% of the boardings are from Ray's in Clearlake and the most passengers get off the bus at 3rd and Main in Lakeport. However, a sizable average weekday number get off the bus at 3rd and Main in Kelseyville as well as KMART. The Route 4 routing provides one seat rides to key destinations within Lakeport.

Figure 6-9 Route 4 Boardings and Alightings

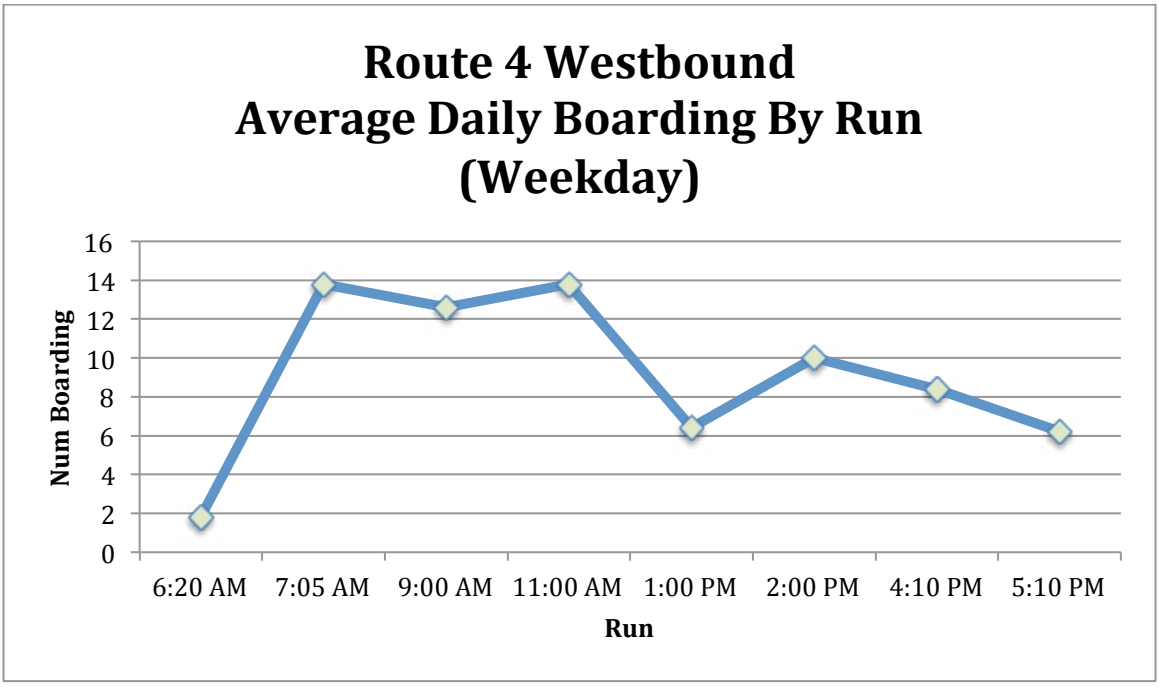
ROUTE 4 WESTBOUND		
BUS STOPS	AVERAGE WEEKDAY	
	ON	OFF
RAYS	37.40	0.60
SOCIAL SERVICES	2.40	1.80
HWY 53 & HWY 29	3.80	0.00
KITS CORNER	10.80	6.20
MAIN AND THIRD-KELSEYVILLE	9.80	11.20
KMART	2.20	13.60
PARALLEL DR	1.20	8.20
SAFEWAY	4.60	6.60
THIRD AND MAIN-LAKEPORT	0.80	24.80
TOTAL	73.00	73.00

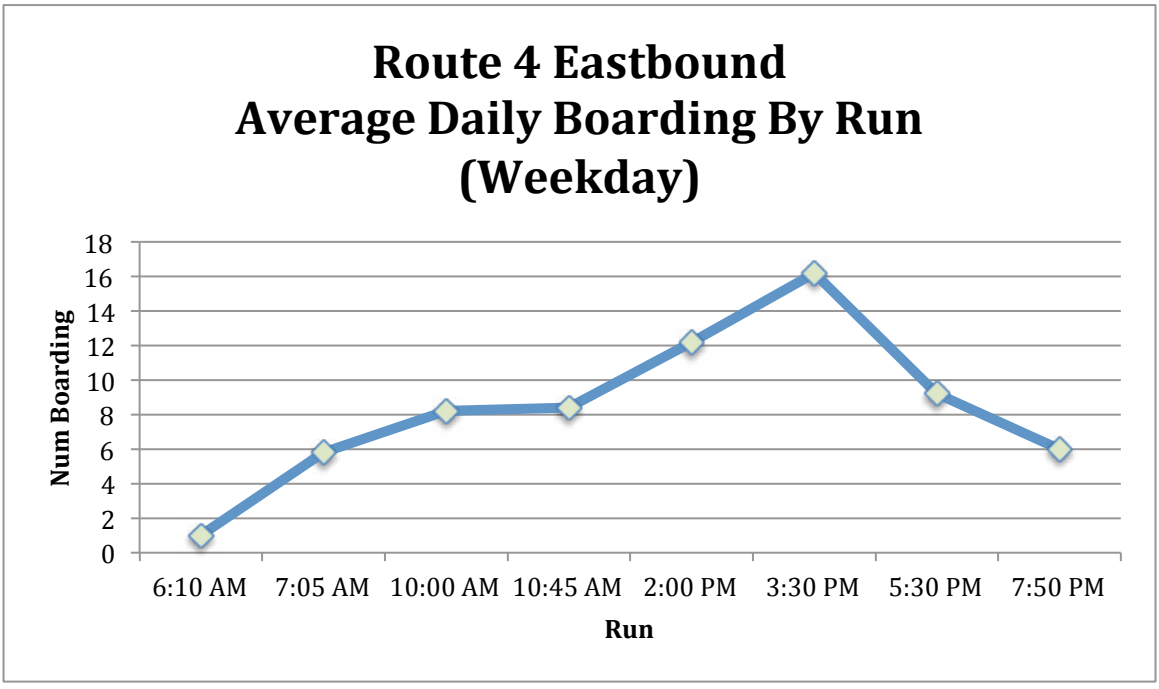
ROUTE 4 EASTBOUND		
BUS STOPS	AVERAGE WEEKDAY	
	ON	OFF
THIRD AND MAIN-LAKEPORT	36.00	3.80
MAIN AND D ST	0.60	0.80
PARALLEL DR	4.40	1.40
KMART	10.00	3.40
MAIN AND THIRD-KELSEYVILLE	8.40	7.20
KITS CORNER	6.60	8.80
HWY 53 & HWY 29	0.00	5.20
SOCIAL SERVICES	1.00	2.00
RAYS	0.00	34.40
TOTAL	67.00	67.00

Source: February 2014 RouteMatch data

In the eastbound direction, there are an average of 67 boardings, with over half boarding at 3rd and Main in Lakeport. The large majority of daily passengers get off the bus at Ray's in Clearlake.

Figure 6-10 Route 4 Average Daily Boardings By Run





Source: February 2014 RouteMatch data

As shown in Figure 6-10 above, there is definitely a peak directional passenger flow in the morning on Route 4 westbound from Clearlake to Lakeport and then a peak of boardings by run in the mid-afternoon at 3:30 pm from Lakeport to Clearlake.

Route 7 Service Assessment

Existing Service

Route 7 is an intercity route between Lakeport and Ukiah, serving the communities of Lakeport, Upper Lake, Blue Lakes, and Ukiah (including Mendocino College, the Veterans Clinic and Ukiah Airport). It provides connections to Mendocino Transit Authority, Amtrak and Greyhound.

Westbound to Ukiah, Route 7 operates trips daily leaving Third and Main in Lakeport with the first bus departing at 8 am and the last bus departing Lakeport at 5:15 pm. Service runs about 4 hours apart initially in the morning, departing Lakeport at 8 am and Noon. In the afternoon service is provided about 2 hours apart in the late afternoon at 3:00 pm and 5:15 pm.

In Ukiah, all runs stop at the Pear Tree Center and Mendocino College, with two runs serving at Amtrak and three runs serving Greyhound.

Eastbound from Ukiah to Lakeport, service is also provided four times a day, with three originating at the Airport's Greyhound stop, two serving Amtrak, three serving Mendocino College and all runs serving the Pear Tree Center. The eastbound routes depart from Ukiah at 9:35 am with last run departing at 6:35 pm.

The Greyhound bus in the southbound direction only has one bus seven days a week that departs Ukiah at 1:45 pm. The Route 7 westbound bus is scheduled to arrive at 1:30 pm, which provides an excellent connection. In the Northbound direction, there is only one Greyhound bus that arrives in Ukiah at 6:30 pm. The Route 7 westbound bus departs the Greyhound Airport stop at 6:35 pm which does not provide significant cushion for transfers.

Market Research Input

Onboard Survey

- On Route 7, 11% of patrons surveyed were employed full-time, 33% were employed part time and none were unemployed.
- Route 7 has the highest percentage of student riders, at 63%.
- 73% of riders have annual household incomes under $15,000, while another 13% earn less than $35,000 per year.
- 50% of riders have no license and no car, which is about the same as the 55% systemwide average.
- 25% of Route 7 passengers live in the Lakeport, 20% in Upper Lake, and 10% in Ukiah.
- 45% of riders use Route 7 for school/college, far above the systemwide average of 21%. This is expected as Route 7 connects to the main Mendocino College campus.
- 20% each uses it for work, and to access recreation opportunities. 15% each uses it for shopping, medical appointment, and social services appointments.

- 47% of riders travel one-way, a high figure which is expected due to Route 7 connections to intercity services.
- Route 7 appears to be used by a higher proportion of persons in wheelchairs (6%) than the other routes (systemwide average 2%).
- The overall satisfaction rating was the second lowest of all Lake Transit routes with a mean score of 3.74, which is just below route 1, and tied with route 8.
- Systemwide, Route 7 earned the dubious distinction of having the lowest rated satisfaction rating on *any* aspect of service, for on time performance (2.75).
- Route 7 also has the lowest satisfaction rating of all routes, for courtesy of driver (3.55) and cost of fares (3.0).
- The two service improvements most desired by Route 7 passengers were improved information at bus stops and additional shelters, similar to Route 3.

Stakeholder Input

- Riders would like a later bus from Ukiah to Lakeport, leaving Ukiah at 9:00 or 9:30 pm. Currently the last bus leaves at 6:35 pm from Ukiah airport, and 6:56 pm from Mendocino College.
- Desire for better connections to Amtrak and Greyhound in Ukiah – bus is frequently running late and has trouble making connections.
- Desire for a discounted semester pass program for Mendocino College students – potentially in conjunction with Mendocino Transit Authority.

Recent Performance

Ridership and Productivity

Ridership has generally increased every year over the past five years on Route 7. In FY 2008/09 ridership was 12,992. By FY 2012/13, ridership had increased 31% to 17,027.

Schedule Adherence

During the five day weekday schedule check in February 2014, there were 161 timepoints sampled for Route 7, and 68.3% of Lake Transit buses were on time, as defined by one minute before the scheduled time to 5 minutes late. According to the RouteMatch data shown in Figure 6-11 below, almost 10% of the runs left 1 minute or more early.

Figure 6-11 Route 7 Schedule Adherence

ROUTE 7 SUMMARY	Timepoints	Pct
On Time (1 min. before to 5 min. after)	94	58.4%
Early (>1 minute)	16	9.9%
Late (>5 minutes and <= 15 minutes)	46	28.6%
Missed (>15 minutes)	5	3.1%
Total Sampled	161	100%

Source: February 2014 RouteMatch data

Most runs on Route 7 westbound and eastbound (except 3 pm westbound which is 100% on time) experienced around 15%-30% of timepoints late or missed. Of note is the 12 pm westbound run as shown in Figure 6-12 below, with 73% late or missed timepoints. This is particularly problematic because the 12 pm bus is scheduled to arrive at the Airport Greyhound stop at 1:30 pm, and the Greyhound bus is scheduled to depart at 1:45 pm. While only three data timepoints were provided, the bus arrived from 1:41 to 1:43 pm on two of three days that valid data was available. This is very little time to transfer to the Greyhound bus if it is on time.

The Noon Route 7 bus is the same bus as the Route 4 bus that is scheduled to arrive at 3rd and Main at 11:50 am. While only two days of valid timepoints were available for Route 4, it was an average of 9 minutes late to 3rd and Main, but Route 7 was able leave on time. However, when the bus departs the Robinsons Rancheria, the Route 7 bus was 13 or 14 minutes late for three of five days sampled. Overall, schedule adherence on the 12 pm run needs to be improved to ensure connections with Greyhound in Ukiah.

Figure 6-12 Route 7 Schedule Adherence By Run

	RUNS - ROUTE 7 WESTBOUND			
	8:00 AM	12:00 PM	3:00 PM	5:15 PM
On Time (1 min. before to 5 min. after)	61%	20%	100%	64%
Early (>1 minute)	21%	7%	0%	5%
Late (>5 minutes and <= 15 minutes)	18%	63%	0%	32%
Missed (>15 minutes)	0%	10%	0%	0%

	RUNS - ROUTE 7 EASTBOUND			
	9:35 AM	2:00 PM	4:20 PM	6:35 PM
On Time (1 min. before to 5 min. after)	60%	63%	73%	80%
Early (>1 minute)	7%	4%	13%	12%
Late (>5 minutes and <= 15 minutes)	33%	29%	13%	4%
Missed (>15 minutes)	0%	4%	0%	4%

Source: February 2014 RouteMatch data

From the passenger perspective, passengers were least satisfied with schedule adherence on Route 7. There are too many timepoints where the bus is departing early, and concerted effort needs to be put into improved schedule adherence to improve customer satisfaction.

Boarding Patterns

For the week-long sample for Route 7, there were an average of 39 weekday boardings westbound and 36 eastbound as shown on the chart below. In the westbound direction, most of the boardings were in Lakeport locations, with Third and Main being the busiest. About 25% alighted at Mendocino College, and another 20% alighted at Pear Tree Center in Ukiah.

In the eastbound direction, two-thirds on-boarded in Ukiah, and two-thirds alighted in Lakeport. The top on-boarding locations were the Airport, Pear Tree Center, and Mendocino College, all in Ukiah. Figure 6-13 below shows the boardings and alightings in both directions.

Figure 6-13 Route 7 Boardings and Alightings By Stop

ROUTE 7 WESTBOUND

TOWN	BUS STOPS	AVERAGE WEEKDAY	
		ON	OFF
CLEARLAKE	THIRD AND MAIN	20.40	1.40
ROBINSON RANCHERIA	ROBINSONS	6.20	4.80
UPPER LAKE	1ST AND MAIN	4.20	3.80
BLUE LAKES	BLUE LAKES	0.60	2.40
UKIAH	MENDOCINO COLLEGE UKIAH	0.80	9.40
	PEAR TREE	0.60	7.80
	VETERANS CLINIC	0.00	0.60
	BURGER KING	0.00	0.20
	AIRPORT	0.60	3.00
	TOTAL BY RUN	38.60	38.60

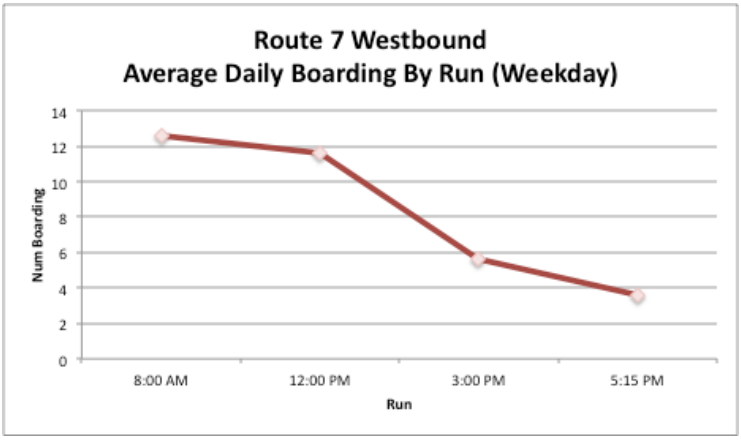
ROUTE 7 EASTBOUND

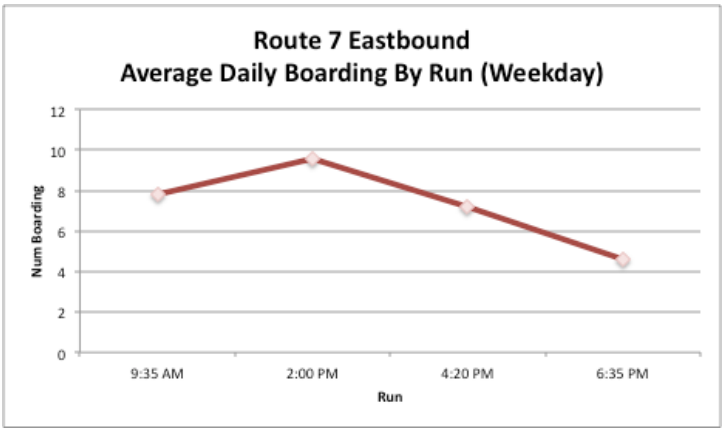
TOWN	BUS STOPS	AVERAGE WEEKDAY	
		ON	OFF
UKIAH	AIRPORT	7.20	0.40
	BURGER KING	0.00	0.40
	VETERANS CLINIC-UKIAH	0.40	0.00
	PEAR TREE	7.40	0.00
	MENDOCINO COLLEGE UKIAH	6.60	0.40
BLUE LAKES	BLUE LAKES	2.00	0.60
UPPER LAKE	1ST AND MAIN	1.20	2.60
ROBINSON RANCHERIA	ROBINSONS	3.00	3.40
CLEARLAKE	THIRD AND MAIN	1.40	21.40
	TOTAL BY RUN	36.00	36.00

Source: February 2014 RouteMatch data

Figure 6-14 below shows the boarding active by run for Route 7. In the westbound direction, the 8 am and Noon runs have the most passenger activity with an average of 12 passenger per run. In the eastbound direction, the first runs departing Ukiah at 9:35 am and 2 pm have the most passenger activity.

Figure 6-14 Route 7 Boardings by Run





Source: February 2014 RouteMatch data

Recent Intercity Route Performance

Figure 6-15 below provides the overall performance of Routes 3, 4 and 7 from FY 2012/13 to what is projected for FY 2014/15. The following are key observations:

- Overall operating costs remained quite steady at just under $500,000 over the three-year period.
- Compared to other route categories, ridership and fare revenues were reasonably flat. Ridership in FY 2012/13 was 38, 000 and despite the disruption in service in August 2013, was about 36,000 in FY 2013/14, and is projected to just drop slightly in FY 2014/15. This has resulted in relatively flat fare revenues in the $80,000 range over the three year period.
- The farebox recovery ratio is projected to be a healthy 15.8% in FY 2014/15.

Figure 6-15 Intercity Route Performance: FY 2012/13 to FY 2014/15 Projected

	FY 2012/13			
Intercity Routes	Route 3	Route 4	Route 7	Total
Operating Cost	$283,209	$290,066	$243,960	$817,236
Fare Revenues	$55,468	$72,274	$23,239	$150,981
Passenger Trips	21,168	47,601	17,027	$85,796
Vehicle Service Hours	3,633	4,209	3,491	$11,333
Vehicle Service Miles	112,788	128,024	112,309	$353,121
Performance Statistics				
Passengers/Service Hour	5.83	11.31	4.88	7.57
Passenger/Service Mile	0.188	0.372	0.152	0.243
Average Fare/Passenger	$2.62	$1.52	$1.36	$1.76
Farebox Recovery	19.6%	24.9%	9.5%	18.5%
Cost/Passenger Trip	$13.38	$6.09	$14.33	$9.53
	FY 2013/14			
Base Statistics	Route 3	Route 4	Route 7	Total
Operating Cost	$237,198	$286,442	$243,960	$767,600
Fare Revenues	$55,955	$53,054	$23,239	$132,247
Passenger Trips	18,878	34,309	17,027	70,214
Vehicle Service Hours	3,364	4,074	3,491	10,929
Vehicle Service Miles	103,402	123,667	112,309	339,378
Performance Statistic				
Passengers/Service Hour	5.61	8.42	4.88	6.42
Passenger/Service Mile	0.183	0.277	0.152	0.207
Average Fare/Passenger	$2.96	$1.55	$1.36	$1.88
Farebox Recovery	23.6%	18.5%	9.5%	17.2%
Cost/Passenger Trip	$12.56	$8.35	$14.33	$10.93
	FY 2014/15			
Base Statistics	Route 3	Route 4	Route 7	Total
Operating Cost	$283,209	$349,652	$282,689	$915,550
Fare Revenues	$55,468	$63,417	$19,996	$138,881
Passenger Trips	21,168	37,588	13,620	72,376
Vehicle Service Hours	3,633	4,522	3,633	11,789
Vehicle Service Miles	112,788	134,715	111,761	359,264
Estimated Performance				
Passengers/Service Hour	5.83	8.31	3.75	6.14
Passenger/Service Mile	0.188	0.279	0.122	0.201
Average Fare/Passenger	$2.62	$1.69	$1.47	$1.92
Farebox Recovery	19.6%	18.1%	7.1%	15.2%
Cost/Passenger Trip	$13.38	$9.30	$20.76	$12.65

Alternatives for Maximizing FTA 5311(f) Funding

Sunday Service

Service is currently provided Monday to Saturday on Routes 3 and 7. Greyhound service is operated 7 days a week. In Calistoga, VINE Routes 10 and 11 operate on Sundays, enabling connections to Greyhound and Amtrak services on Sundays.

Providing Sunday service on Routes 3, 4 and 7 would likely be received well by Caltrans as an amendment for additional funding in future FTA 5311 (f) funding. Caltrans received approved expansion of Saturday service for Trinity Transit in Trinity County.

The cost of Sunday service on existing Intercity routes would be $61,802[2] operating costs plus the cost for dispatching and supervision that could be shared if regional services were also operated on Sundays.

Lake Transit is currently utilizing its maximum funding for FTA 5311(f) funding. It is therefore reasonable to consider options as discussed below for enabling additional FTA 5311 (f) funding.

Splitting FTA 5311 (f) applications into separate corridors

Routes 3, 4 and 7 are combined into a single FTA 5311 (f) application. In this alternative, FTA 5311(f) applications would be split into the two corridors that the intercity routes serve.

There is a good rationale for combining Routes 4 and 7 into a single application and Routes 1 and 3 into a second FTA 5311 (f) application. For the proposed Routes 4 and 7, Route 4 provides an important feeder function from Clearlake for passengers desiring to travel to Ukiah for connections to both Greyhound and Amtrak services southbound to Santa Rosa or connections to the San Francisco Bay Area where other connections in the Greyhound network are available. Connections from the Northshore are available from Routes 1/8 to Lakeport. Therefore, passengers from both the North Shore, Lakeport and Clearlake have the opportunity for intercity connections to Ukiah. The configuration of Routes 4 and 7 is shown in Figure 6-16 below.

Combining Routes 1 and 3 also provide a good coupling of Routes for County-to-County connections to both Greyhound and Amtrak with connecting VINE Routes 10 and 11 to Vallejo, where good connections are available to both Sacramento and the San Francisco Bay Area where additional Greyhound and Amtrak connections are available.

[2] Assumes 26 daily vehicle service hours and 795 daily miles, 75 Sundays and marginal hourly variable costs at $23.76 per vehicle service hour, $0.76 per vehicle service mile (fuel and maintenance).


Lake Transit
Select Regional and Intercity Routes
Glenn Co.
Colusa Co.
Upper Lake
Nice
Indian Valley Reservoir
Ukiah
North Lakeport
Clear Lake
Lucerne
Spring Valley
Lakeport
Clearlake Oaks
20
175
29
Soda Bay
Clearlake Riviera
Kelseyville
Clearlake
Yolo Co.
Lower Lake
Mendocino Co.
Sonoma Co.
Cobb
Hidden Valley Lake
Middletown
Calistoga
Napa Co.
Calistoga-Upper Lake
Clearlake-Ukiah
Major Roads
Data Source: GIS Works
U.S. Census Tiger Shapefiles, 2011
California Protected Area Data Portal
Coordinate System: NAD 1983 State Plane California Zone 2
0 2.5 5 10
Miles
N

Figure 6-16

As shown in Figure 6-17 below, Route 3 from Calistoga would be a contiguous route to Upper Lake, where a connection and timed transfer would be available for intercity connections to Ukiah. This would enable to North Shore residents to have a direct connection to either Calistoga or Ukiah.

The practice of having different FTA 5311 (f) applications for different corridors is fairly common practice among other California FTA 5311 (f) agencies. Trinity Transit, Modoc, and Eastern Sierra Transit Authority all have two applications for different corridors or segments of services.

Expand Service to Cache Creek

The third option is expanding service to a new location that provides connections to Greyhound and Amtrak services. The likely alternative for this option would be the extension of certain Route 1 runs from Clearlake to Cache Creek Casino in Yolo County. This would be considered a longer term option for consideration.

Cache Creek Casino is about 49 miles from Clearlake to Cache Creek Casino. Cache Creek Casino has regular bus service to Woodland on Route 215 with hourly service eastbound between 6 and 10 am and then again between 2 pm and 1 am. Service is similar in the westbound direction. From Woodland, there are excellent connections to Davis and Sacramento where passengers can connect with an array of Greyhound and Amtrak services.

In this service scenario, Route 1 might be extended on three or four round trips daily between Clearlake and Cache Creek. If the service was integrated into the Route 1 schedules, the additional FTA 5311(f) funding could be utilized to continue the expansion of Route 1 to the North Shore and Clearlake.

Three runs in each direction among Lakeport-Clearlake-Cache Creek is estimated at 6,384 annual vehicle service hours and 174,000 vehicle service hours. The marginal cost of service[3] is estimated at an annual cost of $282,000, within the $300,000 cap for FTA 5311 (f) projects.

Expansion to Santa Rosa or Cloverdale

A fourth longer term option would be to connect Lake Transit to Santa Rosa and Cloverdale. This option would connect Lake Transit to both Greyhound and Sonoma-Marin Area Rail Transit (SMART), a passenger rail and bicycle-pedestrian pathway project under construction in Marin and Sonoma counties. It will serve a 70-mile corridor from Larkspur to Cloverdale, with a first phase from San Rafael to Santa Rosa.

[3] Includes variable costs at $23.76 per vehicle service hour, $0.76 per vehicle service mile (fuel and maintenance).


Lake Transit
Select Regional and Intercity Routes
Glenn Co.
Colusa Co.
Upper Lake
Nice
Indian Valley Reservoir
North Lakeport
Clear Lake
Lucerne
Spring Valley
Ukiah
Lakeport
Clearlake Oaks
Soda Bay
Clearlake Riviera
Kelseyville
Clearlake
Lower Lake
Yolo Co.
Mendocino Co.
Sonoma Co.
Cobb
Hidden Valley Lake
Middletown
Calistoga
Napa Co.
20
175
29
Calistoga-Upper Lake
Clearlake-Ukiah
Major Roads
Data Source: GIS Works
U.S. Census Tiger Shapefiles, 2011
California Protected Area Data Portal
Coordinate System: NAD 1983 State Plane California Zone 2
0 2.5 5 10
Miles
N

Figure 6-17

Priority Improvements for Intercity Routes

Short-Term Actions

- In the next FTA 5311 (f) cycle, submit two separate applications for Routes 4 and 7 and a separate application for Routes 1 and 3. Only the Route 1 runs that can be through routed to Calistoga and St. Helena would be included in the application.
- Provide passenger information at key bus stops. This was a top priority improvement from passengers on the on-board survey.
- Improve scheduling practices to improve on-time performance. In particular, monitoring the RouteMatch data can provide the Paratransit Services operations supervisor with needed information such that no buses leave early from schedule timepoints.
- Improved driver scheduling can avoid leaving Rays on Southbound Route 3 late. While the sample size is very small, during the sample February 2014 week, drivers left late from Rays 11 minutes late on 2 of 3 days when data was available. It is also imperative that the 12:00 pm Route 7 Westbound run leaves and arrives on time. If Route 4 schedule adherence cannot be consistently improved, then scheduling practices should change in order for Route 7 Westbound to leave on time.

Medium-Term Actions

- Consider adding Sunday service to the FTA 5311(f) applications. The annual cost of Sunday service on the Intercity routes would be $61,802 plus additional costs for dispatching and supervision that would possibly be shared with Regional routes. Additional Sunday service on the Intercity routes would be an excellent candidate for additional FTA 5311 (f) funding that is discussed in more detail in Chapter 11.
- There is a need for an increase in the number of bus shelters available for Route 3 and Route 7 passengers. This was a top priority for an onboard survey.

Potential Longer Term Actions

- Depending on the success of splitting out the FTA 5311(f) application into Routes 4 and 7 and Routes 1 and 3, consider an additional application for FTA 5311(f) for service to Cache Creek.
- Connection to Cloverdale or Santa Rosa.

7. Rural Routes

Routes 2 and 4A are considered rural routes as they both fill gaps in service between outlying areas and transfer locations. Service is limited to four round trips on Route 2 and three round trips on Route 4A.

Route 2 Service Assessment

Existing Service

Route 2 is a rural bus route that provides service from the Kits Corner transfer point on Soda Bay Road, to the Hwy 29 and Young transfer center in Middletown to the south.

The Route 2 Southbound schedule has service every three to four hours between 7:40 am and 6:03 pm. The Northbound service runs approximately every two hours from 6:45 am to 10:26 am, then again at 3:36 pm. Route 2 is coordinated with Route 4 schedules for transfer to Lakeport with no more than a 10 minute wait. Route 2 buses are also coordinated with Route 4A buses. Only one run is coordinated for transfers to Route 4 to Clearlake.

Market Research

Onboard Survey

- Route 2 has the lowest level of employment among all routes. The majority of the patrons surveyed are retired (45%) or not employed (36%). The percentage retired is substantially higher than the system average of 20%.
- Route 2 also has the most occasional riders – 54% of respondents said they only ride one or two days a week.
- 22% of riders are students on Route 2, compared to 31% systemwide.
- 76% of the Route 2 ridership have household income levels of less than $15,000.
- 45% of Route 2 riders have no driver's license and no car, about the same as the systemwide average of 55%. Another 18% have a license but no car, and 18% are under 16 years old.
- 42% of Route 2 passengers live in Cobb, 36% in Kelseyville (Rivieras) and 18% in Middletown.
- Route 2 has a diverse mix of trip purposes, but survey respondents did not utilize Route 2 for social services appointments or long distance travel. 25% each of riders uses it to go to work, to go to school/college, and to attend medical appointments. 17% also uses it to access recreational opportunities, and 8% uses it for shopping.

- Route 2 scored the second highest in terms of satisfaction rating, at 4.25, just behind Route 4A.
- The two service improvements most desired by Route 2 passengers are connections to other services and on-time performance.

Recent Performance

Ridership

Ridership was on an upward trend for Route 2, until FY 2012/13. In FY 2008/09 ridership was 5,691, increasing to 8,820 in FY11/12, but dropped to 22% to 6,882 in FY 2012/13 and again dropped to 6,100 in FY 2013/14. Ridership is projected to increase to 6,400 based on FY 2013/14 ridership figures.

Schedule Adherence

The schedule adherence check in Figure 7-1 from a five-day weekday sample in February 2014 for Route 2 shows that of the 189 timepoints sampled over the five day period, 68.7% of Lake Transit buses were on time, as defined by one minute before the scheduled time to 5 minutes late.

Figure 7-1 Route 2 Schedule Adherence

ROUTE 2 SUMMARY	Timepoints	Pct
On Time (1 min. before to 5 min. after)	118	62.4%
Early (>1 minute)	12	6.3%
Late (>5 minutes and <= 15 minutes)	57	30.2%
Missed (>15 minutes)	2	1.1%
Total Sampled	189	100%

Source: February 2014 RouteMatch data

Figure 7-2 below shows schedule adherence by run. The initial Route 2 southbound run is 92% on time but subsequent runs are only about 33-56% on time. This is a function of the scheduling of buses by contact operator Paratransit Services. Route 3, for example, on some runs becomes the Route 2 bus at Middletown, and if that bus is late, then the Route 2 bus is late. In the northbound direction, only the 10:26 am run has a noticeable schedule adherence problem with 54% of buses late to timepoints.

Figure 7-2 Route 2 Schedule Adherence By Run

	RUNS - ROUTE 2 SOUTHBOUND			
	7:40 AM	11:35 AM	2:35 PM	6:03 PM
On Time (1 min. before to 5 min. after)	92%	56%	33%	39%
Early (>1 minute)	8%	0%	0%	0%
Late (>5 minutes and <= 15 minutes)	0%	44%	63%	61%
Missed (>15 minutes)	0%	0%	4%	0%

	RUNS - ROUTE 2 NORTHBOUND			
	6:45 AM	8:26 AM	10:26 AM	3:36 PM
On Time (1 min. before to 5 min. after)	100%	62%	46%	79%
Early (>1 minute)	0%	24%	0%	21%
Late (>5 minutes and <= 15 minutes)	0%	14%	50%	0%
Missed (>15 minutes)	0%	0%	4%	0%

Source: February 2014 RouteMatch data

Boarding Patterns

For the week long sample, there was an average of 19 daily weekday boardings southbound and 12 northbound daily boardings as shown in **Figure 7-3** below. Kits Corner has the most boardings in the southbound direction and the most alightings in the northbound direction.

Figure 7-3 Route 2 Boardings and Alightings

ROUTE 2 SOUTHBOUND			
TOWN	BUS STOPS	AVERAGE WEEKDAY	
		ON	OFF
SODA BAY ROAD	KITS	9.60	0.20
MOUNTAIN RESORTS	LOCH LOMMOND	3.60	2.80
	HOBERGS	0.20	2.60
	COBB HARDESTERS MARKET	0.80	0.00
	HWY 175 ANDERSON SPRINGS	1.80	2.60
MIDDLETOWN	TWIN PINE CASINO	2.40	6.60
	HWY 29 & YOUNG	0.80	2.00
	TOTAL BY RUN	19.20	16.80

ROUTE 2 NORTHBOUND			
TOWN	BUS STOPS	AVERAGE WEEKDAY	
		ON	OFF
MIDDLETOWN	HWY 29 & YOUNG	4.80	0.00
MOUNTAIN RESORTS	HWY 175 ANDERSON SPRINGS	0.60	0.80
	COBB HARDESTERS MARKET	3.60	1.60
	HOBERGS	0.20	0.60
	LOCH LOMMOND	3.00	0.80
SODA BAY ROAD	KITS CORNER	0.00	8.40
	TOTAL BY RUN	12.20	12.20

Route 4A Service Assessment

Route Description

Route 4A provides service from Kit's Corners, Riviera Shopping Center, Soda Bay, Kelseyville, and Konocti Vista Casino to Lakeport. The service has three trips in each direction. From Kit's Corner, service is provided at 9:16 am, 11:20 am and 4:33 pm. From 3rd and Main in Lakeport, service is provided at 10:15 am, 1:35 pm, and 5:25 pm.

Market Research

Onboard Survey

- On Route 4A only 7% are employed full-time, but 36% are employed part-time or seasonally. This compares to systemwide totals of 18% for employed full-time and 18% who are employed part-time. The limited schedule of Route 4A is not conducive to using Lake Transit for full-time employment.
- 54% of the ridership on Route 4A are students, compared to 31% systemwide.
- 50% of those surveyed have household incomes of less than $10,000.
- 85% of the Route 4A passengers lack a license, a car or both for the trip they were making on Lake Transit.
- 53% of the passengers listed their primary trip purpose as school or college, which is significantly higher than 21% systemwide.
- In terms of customer satisfaction, the courtesy of drivers ranks the highest (4.60) and on-time performance ranked the lowest at 3.87 passengers per hour.
- The two most important improvements to riders on Route 4A are bus service on Sundays and shelters at more bus stops.

Recent Performance

Ridership and Productivity

With very limited service, ridership has grown from 5,746 annual trips in FY 2008/09 to 7,754 annual trips in FY 2012/13. Productivity on this route is about one-half of Routes 8 and 4 that also serve Lakeport. With ridership increases, however, productivity as measured in passengers per vehicle service hour has increased from 3.75 passengers per hour in FY 2008/09 to 5.6 passengers per hour.

Schedule Adherence

Despite the limited schedule, Route 4A is on-time just 48.5% of the timepoints surveyed over five days, and 57% in the westbound direction. 18.8% and 26.5% of the timepoints were recorded as early on Route 4A westbound and eastbound, respectively, meaning the bus departed the stop more than one minute early on a regular basis.

Route 4A westbound is generally on-time when it departs from Kit's Corner but is an average of 7 minutes late by the time it reaches Konocti Casino on the first two runs and is on-time for the last run starting at Kit's Corner at 4:33 pm. Route 4A eastbound has a similar pattern.

There is a need to adjust the timepoints to avoid early departures on Route 4A.

Boarding Patterns

Figure 7-4 below provides the boarding and alighting locations at each of the timepoints. The top boarding locations on Route 4A westbound are at Kit's Corners and Konocti Casino. There are 3 passengers a day each that get off at Safeway and KMART, and 4 passengers a day get off at 3rd and Main in Lakeport. In the eastbound direction, the top boarding locations are 3rd and Main in Lakeport with 2-3 passengers a day at KMART and Konocti Casino.

Figure 7-4 Boarding and Alighting by Stop

Route 4A Westbound		
BUS STOPS	AVERAGE WEEKDAY	
	ON	OFF
KITS	6.20	0.80
RIVERIA SHOPPING CENTER	2.40	1.60
SODA BAY	1.60	0.60
MAIN AND THIRD-KELSEYVILLE	1.20	1.40
POST OFFICE-FINLEY	0.00	0.00
KONOCTI VISTA CASINO	3.40	0.80
KMART	0.40	3.40
MENDOCINO COLLEGE	1.00	1.00
SAFEWAY	0.60	3.00
THIRD AND MAIN-LAKEPORT	0.00	4.20
TOTAL BY RUN	16.80	16.80
AVERAGE DAILY BY RUN		

Route 4A Westbound		
BUS STOPS		
THIRD AND MAIN-LAKEPORT	6.20	0.20
THIRD & D ST	0.60	0.00
MENOCINO COLLEGE	0.60	0.60
KMART	2.60	1.20
KONOCTI VISTA CASINO	2.00	2.00
POST OFFICE-FINLEY	0.40	0.60
MAIN AND THIRD-KELSEYVILLE	0.00	0.00
SODA BAY	0.80	1.00
RIVERIA SHOPPING CENTER	1.20	1.00
KITS CORNER	0.00	7.80
TOTAL BY RUN	14.40	14.40

Recent Performance of Rural Routes

Figure 7-5 shows the performance of the Rural Routes 2 and 4A between FY 2012/13 and projected through FY 2014/15.

Figure 7-5 Rural Route Performance FY 2012/13 to FY 2014/15

	FY 2012/13		
Lifeline Routes	Route 2	Route 4A	Total
Base Statistics			
Operating Cost	$ 106,907	$ 91,724	$ 198,630
Fare Revenues	$ 9,793	$ 13,238	$ 23,031
Passenger Trips	6,882	7,754	14,636
Vehicle Service Hours	1,616	1,384	3,000
Vehicle Service Miles	41,068	35,500	76,568
Estimated Performance Statistics			
Passengers/Service Hour	4.26	5.60	4.88
Passenger/Service Mile	0.168	0.218	0.191
Average Fare/Passenger	$ 1.42	$ 1.71	$ 1.57
Farebox Recovery	9.2%	14.4%	11.6%
Cost/Passenger Trip	$ 15.53	$ 11.83	$ 13.57
Subsidy/Passenger Trip	$ 14.11	$ 10.12	$ 12.00
	FY 2013/14		
Base Statistics	Route 2	Route 4A	Total
Operating Cost	$ 100,684	$ 88,527	$ 189,212
Fare Revenues	$ 8,793	$ 10,681	$ 19,474
Passenger Trips	6,100	6,063	12,163
Vehicle Service Hours	1,520	1,333	2,853
Vehicle Service Miles	38,482	34,231	72,713
Estimated Performance Statistics			
Passengers/Service Hour	4.01	4.55	4.26
Passenger/Service Mile	0.159	0.177	0.167
Average Fare/Passenger	$ 1.44	$ 1.76	$ 1.60
Farebox Recovery	8.7%	12.1%	10.3%
Cost/Passenger Trip	$ 16.51	$ 14.60	$ 15.56
Subsidy/Passenger Trip	$ 15.06	$ 12.84	$ 13.96
	FY 2014/15		
Base Statistics	Route 2	Route 4A	Total
Operating Cost	$ 114,634	$ 99,051	$ 213,685
Fare Revenues	$ 10,161	$ 12,777	$ 22,938
Passenger Trips	6,363	6,676	13,039
Vehicle Service Hours	1,698	1,466	3,163
Vehicle Service Miles	42,775	37,335	80,110
Estimated Performance Statistics			
Passengers/Service Hour	3.75	4.55	4.12
Passenger/Service Mile	0.149	0.179	0.163
Average Fare/Passenger	$ 1.60	$ 1.91	$ 1.76
Farebox Recovery	8.9%	12.9%	10.7%
Cost/Passenger Trip	$ 18.01	$ 14.84	$ 16.39
Subsidy/Passenger Trip	$ 16.42	$ 12.92	$ 14.63

The following are key points on performance:

- The two rural routes are estimated to cost Lake Transit about $213,685 in FY 2014/15. The costs for providing this rural route service has been relatively constant.
- The expected average productivity for both routes is expected to be about 4 passengers per hour in FY 2014/15. This is the same productivity that might be expected from a robust general public Dial-A-Ride service.
- The average farebox recovery ratio is expected to be 10.7% in FY 2014/15, down slightly from 11.6% in FY 2012/13. The recommended minimum farebox recovery ratio for rural routes is 8%.
- The average subsidy per passenger trip in FY 2014/15 is expected to be about $13.63 per passenger.

Service Alternatives

The rural services provide coverage along two corridors, but are not designed to have significant ridership demand. The Flex Route capability provides passengers a choice of having the bus stop one mile off the route if the passenger desires such a trip.

Service levels are currently very basic, and there are not significant opportunities for increasing or decreasing service levels based on current demand.

However, if ridership levels drop and the routes are not able to meet farebox or producitivity goals, there are a few alternatives that could be considered.

Reduce Service from Five to Three Days a Week

In many rural areas, rural fixed routes like Routes 2 and 4A are operated two or three days a week instead of five days a week. However, if the service is reduced to less than five days a week, there should be a minimum of three trips per day to enable passengers an array of mobility choices for that day. The action should only be considered if minimum performance standards are not being met.

Combine Routes 2 and 4A into a Single Route

Route 2 has four round trips daily and Route 4A has three round trip daily. If minimum performance standards are not met, one cost-cutting measure would be to combine Routes 2 and 4A into a single route. The new route would have three round trips in each direction.

This alternative might be a more viable alternative if Routes 1/8 were extended to the Konocti Vista Casino, an alternative explored in Chapter 5. A timed transfer at the Konocti Vista Casino could be made for trips to Lakeport or passengers would have the options of transferring to Route 4 as is the current practice. This would further reduce the cost of rural routes.

Replace Fixed Route Service with Dial-A-Ride Service

In this alternative, the Dial-A-Ride service boundaries would be extended to the Route 2 and 4A corridors and coordinated with the existing Dial-A-Ride services in Lakeport and Clearlake. There are rural transit agencies that operate broader demand response services to supplement fixed route services along major corridors such as regional Routes 1/8 and 4. One example is the Fresno County Rural Transit Authority that provides general public Dial-A-Ride as a supplement to their regional routes.

This alternative would mean less convenience to the passengers as it would require advance reservations the previous day in order to maximize productivity. Same day service would be available at a higher price as is currently the practice.

8. Dial-A-Ride and Mobility Management

I. Dial-A-Ride

Overview of Existing Services

Dial-A-Ride service is requested by a passenger by phone with an advanced reservation for pick-up by a Lake Transit Dial-A-Ride vehicle at the curb (or at the door if requested by an eligible senior or disabled individual) and taken on shared ride basis to the curb at the desired destination.

In Lake County, Dial-A-Ride service is available to the general public but at a significantly higher fare than those individuals who are seniors 65 and older or are eligible for Americans with Disabilities Act (ADA) Paratransit service. Passengers certified as eligible for ADA receive reservation priority when making a Dial-A-Ride reservation.

There are three distinct Dial-A-Ride services in Lake County:

- Clearlake Dial-A-Ride: Service is provided in the Clearlake and Lower Lake area. The existing boundaries of the Clearlake Dial-A-Ride service are shown in Exhibit 8-1. On Fridays, Dial-A-Ride services is offered to anywhere within the Clearlake City limits.
- Lakeport Dial-A-Ride: Service is provided in the Lakeport area as far north as Robin Hill Dr. and as far south as Sky Park Dr. The maps of the Lakeport Dial-A-Ride are shown in Exhibit 8-2.
- Nite Rider Dial-A-Ride: Evening Dial-A-Ride service in the greater Lakeport area, funded with JARC.

In addition to the Dial-A-Ride services, where Dial-A-Ride service is not offered Flex Stop service is offered within 1 mile of the fixed route with a one day advanced reservation. The exceptions are on intercity routes, Routes 3 and 7, and those intercity trips on Route 4.

In Clearlake and Lakeport, the Dial-A-Ride service also provides ADA Complementary Paratransit Service which is described in more detail below.

Dial-A-Ride Boundary

Clearlake, CA

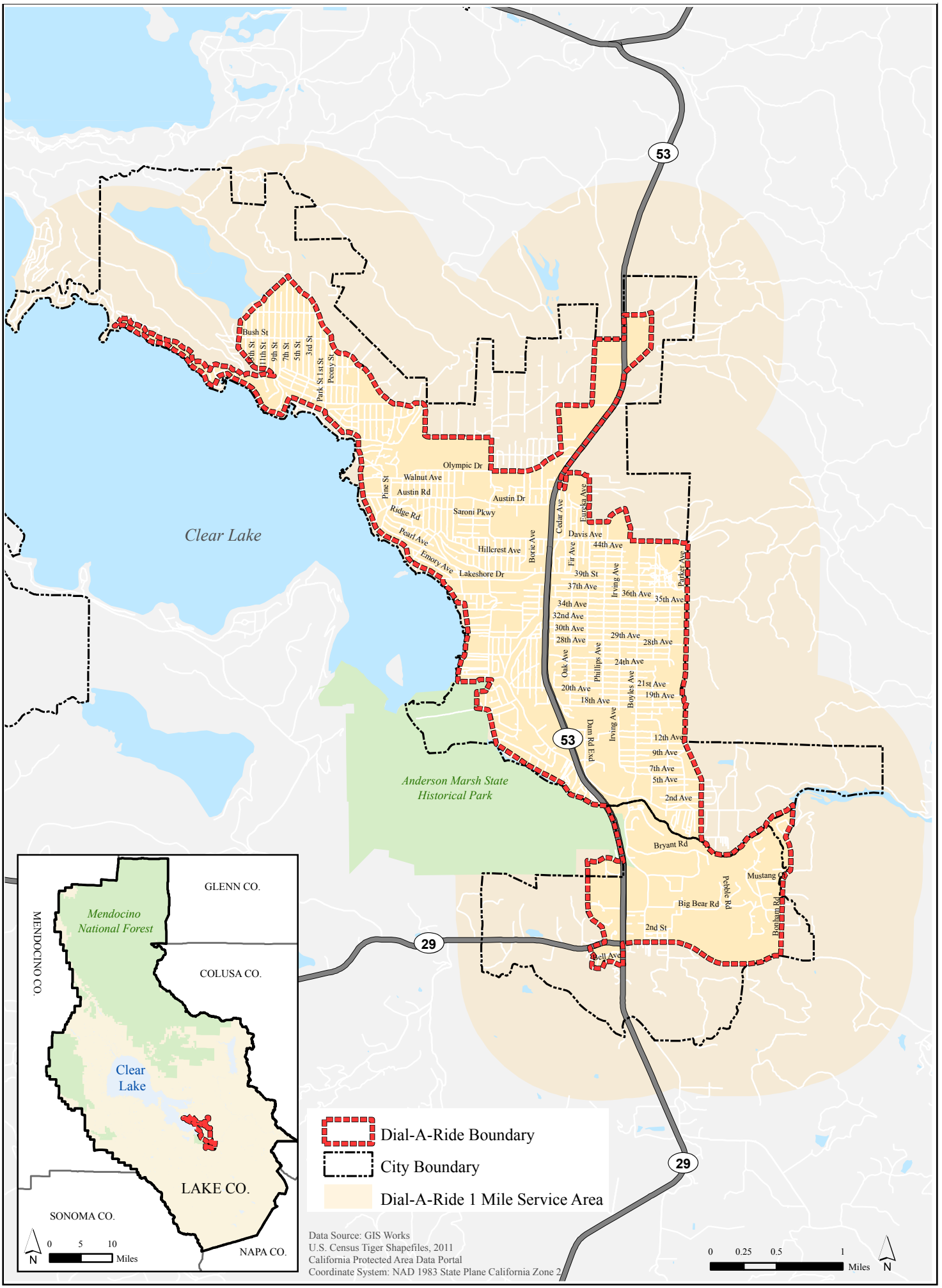


Figure 8-1

Dial-A-Ride Boundary

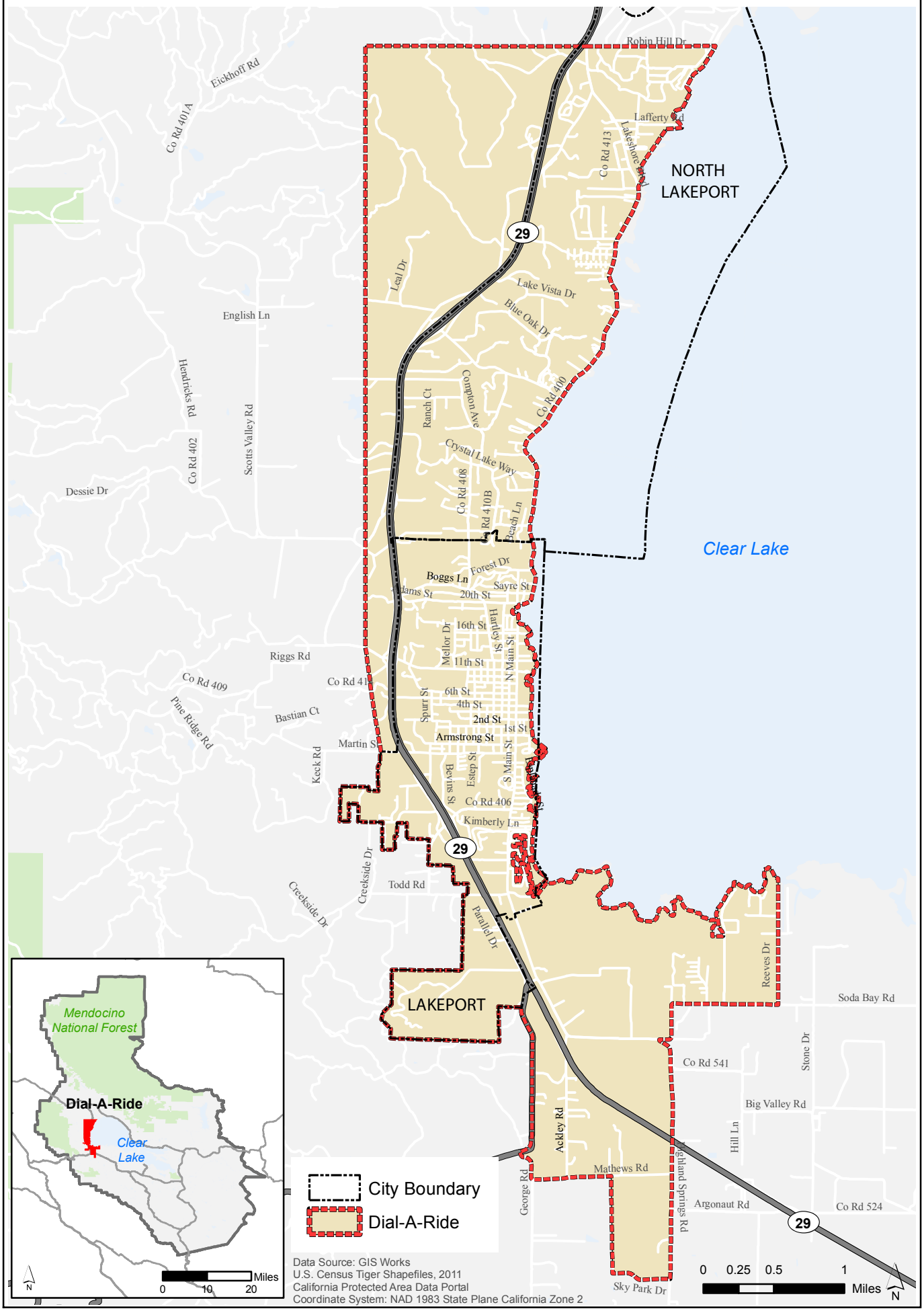


Figure 8-2

ADA Complementary Paratransit

The 1990 Americans with Disability Act included requirements for complementary paratransit service for individuals who could not utilize fixed route bus or train service due to a disability. It is meant to be a parallel service with comparable levels of service provided to individuals with a disability who are not able to use bus or train fixed route service. This was federal civil rights legislation and ADA Paratransit requirements are the same for all public transportation systems in the United States.

The basic requirement of ADA Paratransit service is defined in the Code of Federal Regulations

(CFR), Part F, commencing with 37.121 (hereinafter referred to as ADA Paratransit regulations).

"….each public entity operating a fixed route system shall provide Paratransit or other special service to individuals with disabilities that is comparable to the level of service provided to individuals without disabilities who use the fixed route system."

ADA Paratransit Eligibility

There are three categories for ADA Paratransit eligibility in the ADA Paratransit regulations:

"(1) Any individual with a disability who is unable, as the result of a physical or mental impairment (including a vision impairment), and without the assistance of another individual (except the operator of a wheelchair lift or other boarding assistance device), to board, ride, or disembark from any vehicle on the system which is readily accessible to, and usable by, individuals with disabilities.

(2) Any individual with a disability who needs the assistance of a wheelchair lift or other boarding assistance device and is able, with such assistance, to board, ride and disembark from any vehicle that is readily accessible to and usable by individuals with disabilities. If the individual wants to travel on a route on the system during the hours of operation of the system at a time, or within a reasonable period of such time, when such a vehicle is not being used to provide designated public transportation on the route. *[Regulations specify the circumstances under which this paragraph is applicable.]*

(3) Any individual with a disability who has a specific impairment-related condition which prevents such individual from traveling to a boarding location or from a disembarking location on such system."

Most individuals who cannot board, ride or get off a regular public transit bus because of a disability are eligible under the Americans with Disabilities Act (the ADA) for paratransit services. An application for certification to be eligible for ADA Paratransit is included in the Lake Transit website.

ADA Paratransit Service Criteria

In providing ADA Paratransit for ADA Paratransit eligible passengers, Lake Transit must meet the following service criteria:

Service Area: Provide complementary paratransit service to origins and destinations within corridors with a width of three-fourths of a mile on each of side of each fixed route. Lake Transit has established boundaries of the Dial-A-Ride service area that in many areas exceed the ADA Paratransit requirements. In general, Routes 1, 2, some runs on Route 4, and 4A will travel up to 3/4 mile from the fixed route for a flex route. In Clearlake and Lakeport, the Dial-A-Ride boundaries are in places 1 mile and beyond a fixed route. As shown in Exhibit 8-3, there are certain areas of the current Clearlake Dial-A-Ride boundary that exceed the required ¾ mile. On Fridays when all of Clearlake is served, there are many areas that far exceed the service area requirements.

Fares: Fares for a trip charged to an ADA Paratransit eligible user of the complementary Paratransit service shall not exceed twice the fare charged to an individual paying full fare (i.e. without regard to discounts) for a trip of similar length, at a similar time of day, on the entity's fixed route system. For Lake Transit, the general public fare is $1.25 and the ADA Paratransit fare is $2.50 for one day advanced reservation and $3.00 for same day service.

Hours and Days of Service**:** "The complementary paratransit service shall be available throughout the same hours and days as the entity's fixed route service." Lake Transit Dial-A-Ride service is available to eligible ADA Paratransit passengers during the same hours and days as fixed route service.

Response Time: "The entity shall schedule and provide paratransit service to any ADA paratransit eligible person at any requested time on a particular day in response to a request for service made the previous day." The Lake Transit Dial-A-Ride contractor Paratransit Services provides reservations during normal business hours for service the next day as required.

No Trip Purpose Restrictions: "Shall not impose restrictions or priorities based on trip purpose." None of the Lake Transit Dial-A-Ride programs have trip purpose restrictions

Capacity Constraints: "The entity shall not limit the availability of complementary paratransit service to ADA paratransit eligible individuals by any of the following:

- Restrictions on the number of trips an individual will be provided
- Waiting lists for access to the service
- Any operational pattern or practice that significantly limits the availability of service to ADA paratransit eligible persons."

According to Paratransit Services staff, there are no existing capacity constraints.

Dial-A-Ride Boundary

Clearlake, CA

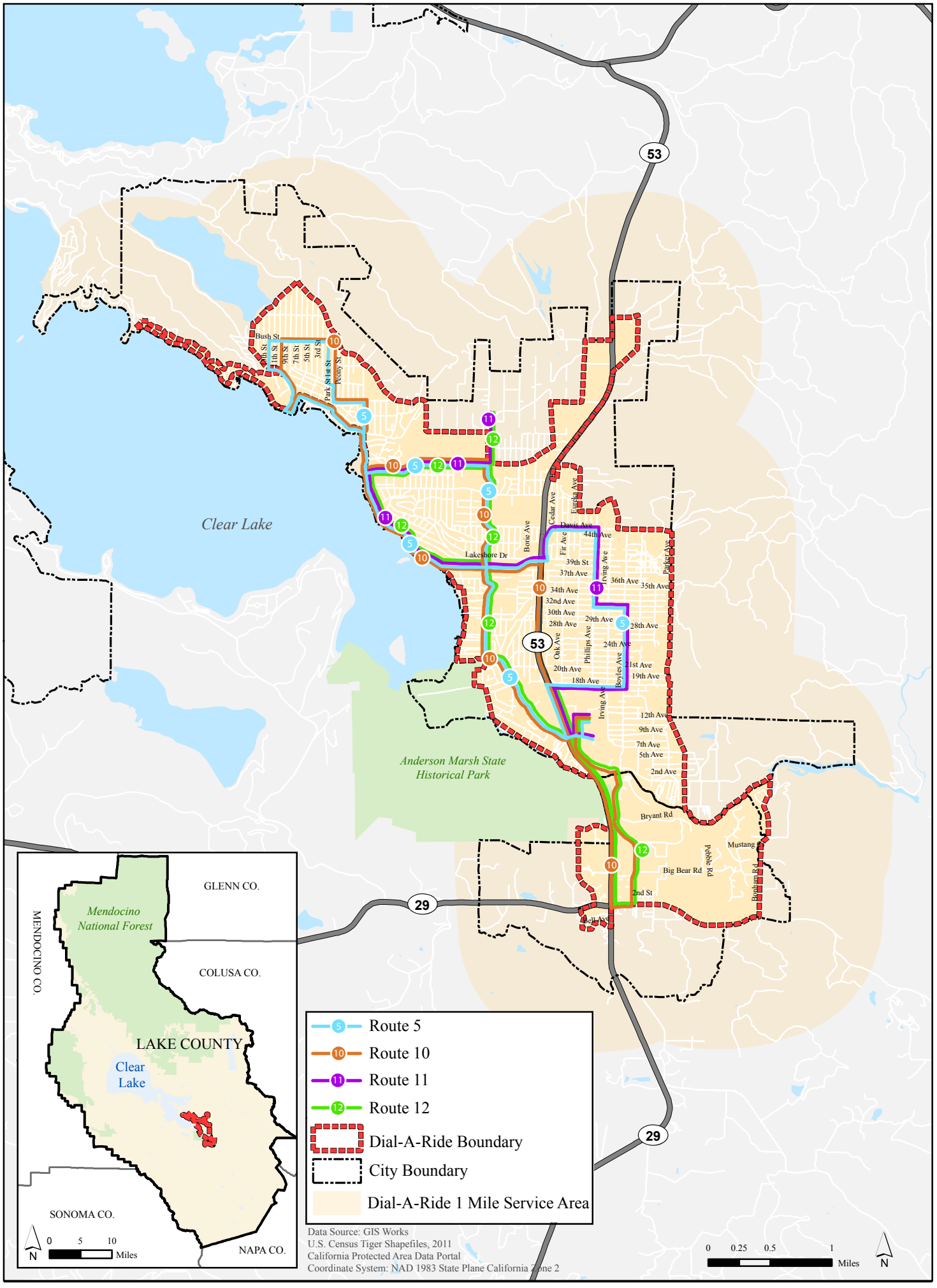


Figure 8-3

Senior and Disabled and General Public Dial-A-Ride Accommodations

In most respects, Lake Transit exceeds what is required by ADA Paratransit regulations. Seniors 65 and over and disabled individuals with a Medicare Card, DMV Disabled Person status, or disabled Veterans received the discounted Dial-A-Ride fare of $2.50. Seniors and disabled individuals can also request door-to-door service which exceeds the requirements of ADA Paratransit service.

For fixed route services where Dial-A-Ride service is not available, seniors and disabled individuals can receive a flex stop ride up to 1 mile on either side of the fixed route for just an additional 75 cents. The flex stop will drop the passenger at the curb up to one mile from the fixed route.

The general public can also ride Dial-A-Ride, but the fare is $5.00 for a one day advanced reservation and $10.00 for same day service. A flex stop requests also adds $5.00 to the $1.25 fare for local trips and $5.00 to the $2.25 fare for a regional trip.

Nite Rider Service

With available Jobs Access Reverse Commute (JARC) grant funding, evening service in Clearlake was added with the last bus departing Rays on Route 5 at 10:15 pm. Both Route 5 and 12 in Clearlake provide expanded evening service.

Due to the expected lower demand for equivalent evening service in the greater Lakeport Area, Nite Rider Dial-A-Ride service was implemented in May 2014. Nite Rider has the following service characteristics:

- Service is available Monday to Friday, 6 pm to 9:30 pm
- On-call service is available to everyone
- Available by subscription or advance reservation. Passengers can pay $2.50 per ride or use a Lake Transit monthly pass.
- Available by same day request, if space is available. Fare for same day service is $3.50 per ride or passengers can utilize Lake Transit monthly pass with a $1.00 surcharge.

The service area for Nite Rider is shown in Figure 8-4 below. Service is provided in a broader area than the daytime Route 8 area serves.

Exhibit 8-4
Nite Rider Boundary

Recent Dial-A-Ride Performance

Dial-A-Ride provides a valuable service in Lake County, but overall performance has declined. When the last Transit Development Plan was completed in 2009, the productivity as measured by passengers per vehicle service hour was reported at 2.5 passengers per hour in Lakeport and the Clearlake DAR was reported at 2.4 passengers per hour. The operating cost per passenger trip was reported at $14.51 for the Lakeport DAR and $14.92 for the Clearlake DAR. The farebox recovery ratio averaged 6.5%.

As shown in Figure 8-5 on the next page, in FY 2012/13, the average productivity for both Dial-A-Ride services had declined to an average of 2.05 passengers per vehicle service and the cost per passenger trip had increased to an average of $27.96, far exceeding inflation during this time

Figure 8-5 Recent Dial-A-Ride Performance

Dial-A-Ride	FY 2012/13			
Base Statistics	Lakeport DAR	Clearlake DAR	Total	
Operating Cost	$ 243,388	$ 242,714	$ 486,102	
Fare Revenues	$ 15,687	$ 18,037	$ 33,725	
Passenger Trips	8,535	8,852	17,387	
Vehicle Service Hours	4,209	4,257	8,467	
Vehicle Service Miles	43,375	37,635	81,010	
Estimated Performance Statistics				
Passengers/Service Hour	2.03	2.08	2.05	
Passenger/Service Mile	0.197	0.235	0.215	
Average Fare/Passenger	$ 1.84	$ 2.04	$ 1.94	
Farebox Recovery	6.4%	7.4%	6.9%	
Cost/Passenger Trip	$ 28.52	$ 27.42	$ 27.96	
Subsidy/Passenger Trip	$ 26.68	$ 25.38	$ 26.02	
	FY 2013/14			
Base Statistics	Lakeport DAR	Clearlake DAR	Total	
Operating Cost	$ 198,802	$ 212,400	$ 411,201	
Fare Revenues	$ 8,466	$ 10,140	$ 18,606	
Passenger Trips	5,107	5,958	11,065	
Vehicle Service Hours	3,460	3,761	7,221	
Vehicle Service Miles	30,892	26,594	57,486	
Estimated Performance Statistics				
Passengers/Service Hour	1.48	1.58	1.53	
Passenger/Service Mile	0.165	0.224	0.192	
Average Fare/Passenger	$ 1.66	$ 1.70	$ 1.68	
Farebox Recovery	4.3%	4.8%	4.5%	
Cost/Passenger Trip	$ 38.93	$ 35.65	$ 37.16	
Subsidy/Passenger Trip	$ 37.27	$ 33.95	$ 35.48	
	FY 2014/15 Projected			
Base Statistics	Lakeport DAR	Clearlake DAR	Nite Rider	Total
Operating Cost	$ 221,746	$ 267,165	$ 49,229	$ 538,140
Fare Revenues	$ 11,834	$ 16,840	$ 1,373	$ 30,047
Passenger Trips	5,044	7,976	564	13,584
Vehicle Service Hours	3,460	4,196	781	8,436
Vehicle Service Miles	30,892	29,128	3,096	63,116
Estimated Performance Statistics				
Passengers/Service Hour	1.46	1.90	0.72	1.61
Passenger/Service Mile	0.163	0.274	0.182	0.215
Average Fare/Passenger	$ 2.35	$ 2.11	$ 2.43	$ 2.21
Farebox Recovery	5.3%	6.3%	2.8%	5.6%
Cost/Passenger Trip	$ 43.96	$ 33.50	$ 87.29	$ 39.62
Subsidy/Passenger Trip	$ 41.62	$ 31.38	$ 84.85	$ 37.40

period. The average farebox recovery ratio, however, was slightly higher at 6.9% due to the fare increase.

In FY 2013/14, after the disruption in service in August 2013, productivity declined even further to an average of 1.53 passengers per hour and an average cost per passenger trip of $37.16. The farebox recovery ratio declined to an average of 4.5%.

In FY 2014/15, overall Dial-A-Ride is expected to stabilize and the Clearlake DAR in particular is expected to improve productivity back to 1.9 passengers per hour. The cost per passenger for the Clearlake DAR is expected to be about $33 per passenger trip; however, the total Dial-A-Ride performance with the Nite Rider service is expected to cost an average of $87.29 per passenger trip.

In local rural community Dial-A-Ride services, the performance standard goal is normally a minimum of 3.0 passengers per vehicle service hour. There are a number of factors that have contributed to the decline in productivity:

1. Improvements in service levels for fixed route services. The significant improvements in Routes 5, 10, 11 and 12 provide significant improvements in mobility options at a much lower cost for many senior and disabled individuals who previously utilized Dial-A-Ride services. With improved service levels on Routes 1 and 8, the demand for Dial-A-Ride might decline during the second half of FY 2014/15.

2. Lake Transit exceeds ADA Paratransit requirements by allowing same day service for both the general public and ADA Paratransit eligible individuals. This requires the service contractor to have a driver and vehicle available at all times, even when demand is low. While this policy engenders passenger satisfaction and customer convenience, it is inefficient and drives down the passengers per vehicle service hour. At many times, the Dial-A-Ride service is more of a taxi service than a Dial-A-Ride service. ADA Paratransit requires next day reservations. When systems limit service to ADA Paratransit, vehicles can be scheduled when passengers request rides, and there is more opportunity to group trips in advance.

When demand for same day service is high, allowing it helps to improve productivity by filling seats on the trips grouped from the previous day reservations. In evaluating the performance statistics, it is very clear that the improved fixed route service in Clearlake has reduced the demand for same day service.

3. Fares for seniors and disabled individuals on ADA Paratransit service increased in February 2012 from $2.00 to $2.50 for next day service and from $2.00 to $3.00 for same day service. A round trip on Dial-A-Ride is $5.00. For seniors and disabled who are on a low fixed income, it limits the number of trips they can afford. The fare increase likely also contributed to the decline in demand.

The following section provides Dial-A-Ride alternatives for consideration.

Dial-A-Ride Alternatives

1. Retain the status quo

The decline in performance exhibited in Exhibit 8-5 points to a need to make changes to the Dial-A-Ride policies. This is not considered a viable alternative.

2. Dial-A-Ride as ADA Paratransit service only

In this alternative, the Dial-A-Ride service would transition to only what is required by the Americans with Disability Act Complementary ADA Paratransit requirements. In most urban transit systems and in some rural transit systems, the ADA Complementary Paratransit Service Criteria cited above are the adopted public policy for Dial-A-Ride service. The most significant changes would be the following:

- Eliminate service to seniors and disabled Individuals who are able to utilize Lake Transit. In order to utilize ADA Paratransit services, passengers would need to be certified as eligible for ADA Paratransit service.
- Elimination of Nite Rider service and late night service in Clearlake.
- Reduction of the service area to ¾ mile of the local fixed routes. As shown in Exhibit 8-6, in some cases the Dial-A-Ride boundary would be beyond the City of Clearlake limits and in other cases, Dial-A-Ride would not serve some areas within the Clearlake boundaries. Eliminate same day service as reservations for ADA Paratransit service need to be made by 5:00 pm the day before service is provided.
- If Routes 1 becomes part of an intercity service, it would limit the flex routes outside of Lakeport and Clearlake.

In scheduling the ADA Paratransit service, Paratransit Services would be able to plan the ADA Paratransit routes for eligible passengers. The vehicle service hours and vehicle service miles would only be utilized when passenger demand requires it.

The combination of shorter trips from the reduced service, the ability to group trips based on actual demand, and the limits on eligibility to individuals who are certified as ADA Paratransit eligible will both reduce demand and the needed service supply to meet the demand. The data is currently not available to conduct a detailed analysis of the impact this alternative would have. It is not known, for example, how many of the existing Dial-A-Ride passengers would be eligible for ADA Paratransit service. An order of magnitude estimate is that the number of vehicle hours and vehicle service mile could be reduced by approximately one-third.

Dial-A-Ride Boundary

Clearlake, CA

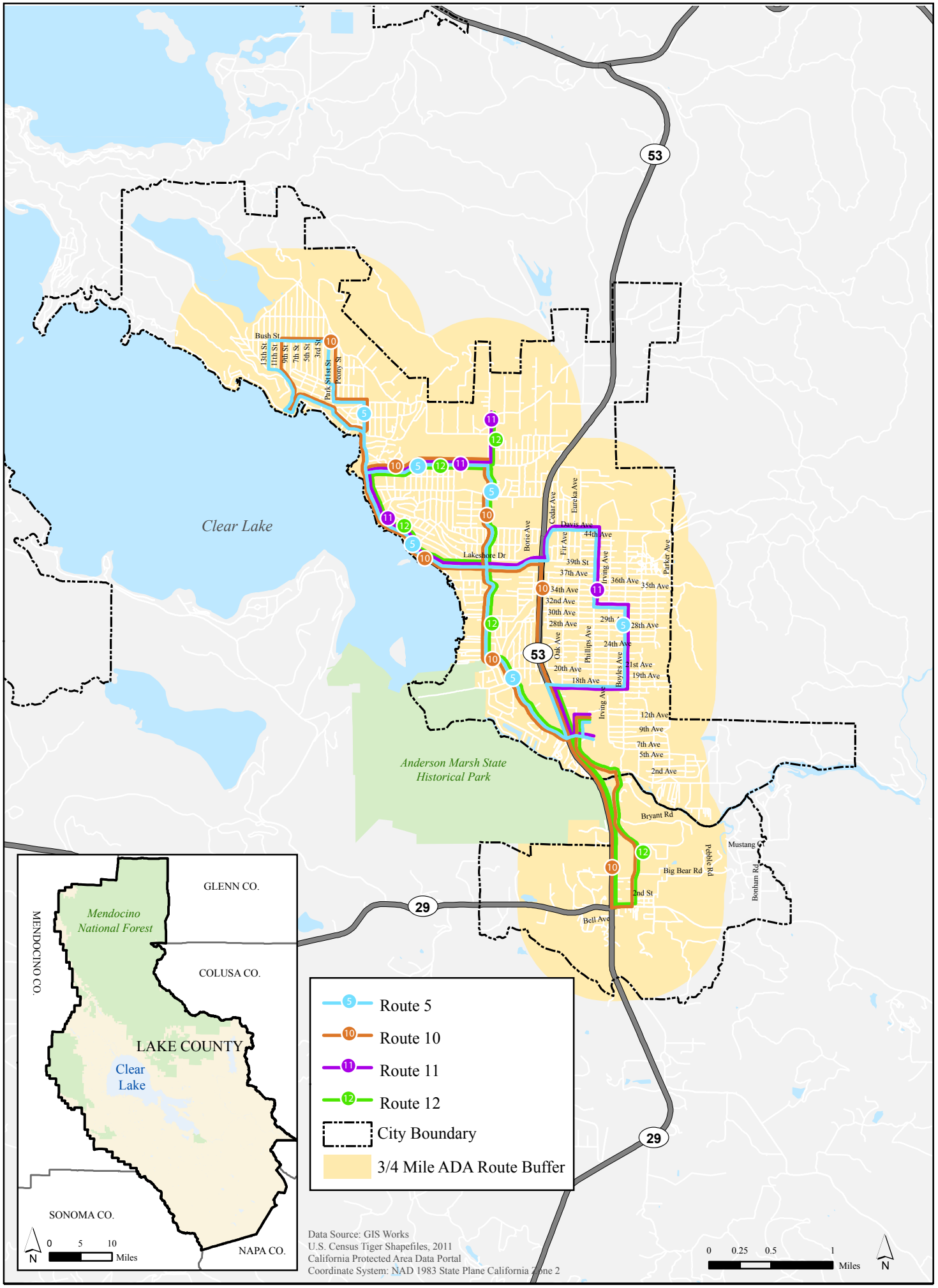


Figure 8-6

3. Dial-A-Ride includes ADA Paratransit eligible and Seniors 65+

This alternative would be the same as Alternative 2 with two primary exceptions:

1) Seniors 65+ would be eligible for Dial-A-Ride service regardless of their ADA Paratransit eligibility.
2) Same day requests would only be accepted if the trip could be accommodated on a pre-planned trip scheduled the previous day. Accommodating such requests would increase productivity of the service as well as increase fare revenues with little or no additional costs.

Recommendation

Alternative 3 is the preferred alternative, as it would maintain Dial-A-Ride service for older adults while at the same time reducing overall Dial-A-Ride costs, increasing productivity, and increasing the farebox recovery ratio.

II. Mobility Management

There are a number of partnerships in Lake County that provide Dial-A-Ride services through social service agencies. The existing and potential strategies described below are from October 2014, Lake County 2014 Coordinated Public Transit-Human Services Transportation Plan (Coordinated Plan) by AMMA Transit Planning. The consulting teams for the Transit Development and Marketing Plan and the Coordinated Plan collaborated during the parallel study processes.

Existing and Potential Strategies[1]

Existing Mobility Management Strategies

There are a variety of mobility management efforts already in place within Lake County. These are transportation programs that meet specialized needs through other-than-general-public-transit. Efforts identified during the outreach include:

- Many of the stakeholder organizations purchase passes for their low income constituents – Welfare to Work, Child Welfare, Probation Department, Health Services, St. Helena Hospital and International Charter School.
- There is a lot of carpooling among senior center participants.
- Lake Transit is getting two 5310 vans for two senior centers. One was designated for Middletown, but that senior center can't identify funds for operations so it will go to Lucerne. Lucerne is interested in using it to establish a local Dial-A-Ride which will bring older adults (and others) to the senior center or to connect with Lake Transit.
- Lucerne Senior Center has one existing van to provide medical transportation from the greater Lucerne area to medical appointments around the County.
- St. Helena Hospital has an 8-passenger van that is wheelchair accessible (2 wheelchair positions), operated by a pool of three paid drivers. They take patients to a variety of medical facilities including their own rural health clinic and hospital, but also to competing facilities in and out of the county. They are not "allowed" to use the service to promote use of their own facilities. The service is funded from their general fund and is "not reimbursable."

[1] This section is copied from the "Draft Lake County 2014 Coordinated Public Transit – Human Services Transportation Plan" (January 2015).

- The Lakeside Health Center and the Clearlake Family Health Center each have one van, used almost exclusively for trips within the county.
- Family Resource Center, which works with HeadStart kids, teen moms and others has 2 vans they utilize as needed.
- The Tribal Consortium has one van that is used to provide Tribal members with trips for both in-county and out-of-county non-emergency medical transportation.
- The County Behavioral Health Department's inter-agency committee provides a forum for discussion on various issues that includes the transportation of seriously mentally ill individuals who sometimes rely upon the Fire District's non-emergency medical transportation services. This committee is exploring field-based service delivery that would decrease the need for expensive out-of-county transportation for clients of the Behavioral Health Department.
- CCS (California Children's Services) has a mileage reimbursement program, budgeted at as much as $20,000 annually to pay for transportation.
- In-Home Supportive Services (IHSS) is paying for transportation provided by workers to their client. The amounts are limited.

Stakeholder Outreach Input: Potential New Strategies

A number of opportunities for additional mobility management efforts surfaced during the outreach discussions:

- There was positive reception to the idea of travel training, particularly for older adults. It does not appear that there have been any such programs at senior centers in the past.
- There was interest in a case manager-focused One-Call/One Click capability whereby case workers could readily determine whether or not, and how, a trip could be made on Lake Transit or on other transportation resources.
- One stakeholder noted that they would like to see ambassadors on the bus to assist new riders who are unfamiliar with the system.
- Area Agency on Aging would consider buying passes for older adults if they had funding. They are willing to explore possibilities related to increasing use of transportation by lowest income seniors.
- Department of Health representatives expressed interest in an "agency pass" whereby the transit subsidy funds available to several human service agencies could be used to easily purchase bus tickets and, in some cases, be restricted to certain trip purposes, e.g. non-emergency medical transportation.

- There is receptiveness to the idea of Lake County brokerage for non-emergency medical transportation trips – particularly by the hospital personnel who would prefer not be providing transportation.
- With one-third of the County on MediCal, opportunities may be possible to coordinate with MediCal service providers and the developing managed MediCal entity, Partnership Health Plan.

Coordinated Plan Goals and Strategies

There are several Coordinated Plan strategies relevant to Mobility Management.

Strategy 2.1 Define the CTSA model that is appropriate and sustainable for Lake County.

Objective and Purpose

- Currently, Lake Transit Authority (LTA) is the designated Consolidated Transportation Services Agency (CTSA) for Lake County. As LTA is a contracted service provider, it is useful to consider what structure makes sense for Lake County's CTSA that will ensure continuity around CTSA leadership. This strategy seeks to identify the appropriate CTSA model for Lake County, likely assessed through a planning study.

- The opportunities identified through this Coordinated Plan will require some leadership to help bring them about. While Lake Transit can, and has, played an important role in securing Section 5310 funding for senior center transportation, it isn't clear that that should continue as a responsibility of Lake Transit versus becoming a formalized activity of Lake's CTSA. Lake Transit has also been seeking to hire a Mobility Manager. This position is the likely "boots-on-the-ground" by which a variety of Coordinated Plan initiatives can secure funding, be implemented, and be monitored. Determining where that position sits, on the Lake Transit organizational chart can be addressed in defining a Lake County appropriate CTSA model.

Strategy 2.3 Develop a mobility manager function that can be a focal point for implementing the Coordinated Plan goals and strategies.

Objective and Purpose

As has been noted, Lake County has already embarked upon the process of hiring a Mobility Manager, trip broker and coordinator who will have a variety of coordination responsibilities. This effort is funded with Caltrans Section 5316/5317 dollars from prior cycles. As envisioned, this position will provide a focal point moving the Coordinated Plan's goals and strategies

forward. This individual becomes the human infrastructure by which various partnership projects can be realized, ones that often take substantial staff time to ensure their successful implementation.

As this position is new, it will be shaping its place and responsibilities with respect to this Coordinated Plan and to other activities promised through the grant process.

Strategy 3.1 Develop near and long-term non-emergency medical transportation (NEMT) alternatives to address NEMT trip needs both within Lake County and to out-of-county destinations, including enhanced transit connections, special shuttle or life-line services, brokered trip provision across multiple providers, use of targeted mileage reimbursement and other such initiatives.

Objective and Purpose

The objective of this strategy is to begin addressing a perennial challenge for Lake County: transportation for medical trips. Non-emergency medical transportation was the most commonly reported need, particularly for target populations, during stakeholder interviews for this 2014 Coordinated Plan and was also reported during outreach for the 2008 Plan, particularly for target populations. Additionally, the Information and Referral service at Lakeport Senior Center says it is the most frequent request need among their callers.

There may be some instances where a targeted shuttle service can provide non-emergency medical trips to selected persons. Placer County's Health Express and Imperial County's Med-Express are both examples of such service.

Because of the complex geography of Lake County that makes serving remote areas challenging, as well as the costs associated with Dial-A-Ride and ADA assistance limitations, public transit may not always be the most appropriate or effective mode for every trip. Developing alternatives such as NEMT programs that can travel where Lake Transit buses cannot and providing door-to-door or door-through-door assistance which may be subsidized for eligible passengers can make the difference in a vulnerable Lake County resident receiving timely and preventative medical care. A volunteer driver mileage reimbursement program meets the objective of the provision of low-cost transportation that can provide trips where Lake Transit does not travel and can improve mobility for those too frail or whose trip-making is too complicated to be served by public transit.

Strategy 3.2 Develop way finding and trip specific improvements or information tools to support travel to key NEMT destinations within and beyond Lake County.

Objective and Purpose

This strategy's objective is to utilize cost-effective, easy to develop and easy to implement solutions that equip agency personnel to assist their clients travel to popular medical destinations.

This strategy responds directly to comments received during outreach about the overall difficulty in getting to non-emergency medical appointments, as well as comments regarding the difficulty of reading schedules, knowing where to catch the bus and coordinating between different routes. Also, Lake County's Public Health Department requested transit information that can be easily used by caseworkers. It was also reported in the survey of medical facilities that 48% had some awareness of Lake Transit, but not at route-level familiarity and that 20% had no knowledge at all.

Building a Mobility Management Capability

Formalizing the home for Lake County Mobility Management will facilitate a leadership role by which to implement this Coordinated Plan. Some effort to explore the appropriate CTSA organizational model and affiliation is indicated and may further shape Lake County Mobility Management. From a general perspective, Mobility Management in Lake County can pursue the following characteristics and advantages:

- As an ***organizing strategy*** for initiating coordinated projects to address mobility gaps of the target groups, providing leadership around these projects.
- As a ***focal point for getting the right partners to the table*** to secure additional funds or overcome institutional barriers or promote new services.
- To ***help to secure funding***, including new and continued funding, by which to implement new mobility projects and to assist local partners in complying with funding rules and regulation.

Most importantly, working from within the appropriate organizational home, the Mobility manager can undertake the leg-work necessary to create more non-emergency medical transportation options.

Mobility Programs Coordinator

A Mobility Programs Coordinator RFP was issued on September 19, 2014 to seek proposals for a partially grant-funded position to establish a mobility management program and trip brokerage. The resulting contract would be for a two-year term. It is funded by a combination of $87,000 in federal grant funds, and $64,000 in Transportation Development Act, Article 4.5 funds, for a

two-year total of $151,000. The RFP outlines an annual budget of $66,000 for the Mobility Programs Coordinator plus up to $1,500 for training and conferences, and up to $8,000 for local business expenses related to travel.

The emphasis of the mobility management program and trip brokerage is to improve Non-Emergency Medical Transportation (NEMT) for Lake County by seeking additional funding sources (such as MediCal reimbursement, 5310 grant funds, managed care transportation contracts, and others), and developing a trip brokerage program to provide those needing NEMT or other specialized services with the lowest cost service that will effectively meet their trip needs. Among other things, the tasks include establishing a volunteer driver program, and developing coordination contracts between Lake County non-profit agencies and medical providers.

In December 2014, the LTA Board awarded the Mobility Programs Coordinator contract to Paratransit Services, the current fixed route and Dial-A-Ride operator for Lake Transit. Paratransit Services committed to hiring a local Lake County resident for the position.

The detailed work scope provides the following key milestones:

FY 2014/15

- Hiring the Mobility Program Coordinator (completed)
- Establish Lake Transit Authority or Paratransit Service as a Medi-Cal provider
- Development of survey tools and outreach materials to re-engage former partners and develop interest from new partners for Mobility Program. Memorandum of Understanding will be developed for each partner.
- Develop and Implement a Pay Your Pal and Volunteer Driver program. This includes research best practices, establishing procedures for "certifying" and monitoring volunteer drivers, recruiting volunteer drivers, creating a system for trip documentation and fuel reimbursement.

FY 2015/16

- Develop detailed operations plan for trip brokerage system. This includes meeting with potential non-emergency medical transportation (NEMT) ride providers, developing service standards and compliance reporting, billing and audit processes.
- Conduct NEMT Outreach. This will include mobility training, an informational campaign, and marketing strategy.
- Development of operational infrastructure for the NEMT brokerage, or "one stop: mobility call center".
- Development of operations brokerage operations manual, including call center processes and procedures, staff training, etc.

Ongoing Tasks

- Develop funding sources
- Coordination with stakeholders
- Operational analysis and monitoring
- Quality assurance program implementation

The current funding for the Mobility Programs Coordinator is through November 2016.

A key task of the Mobility Programs Coordinator will be to develop the necessary partnerships and funding sources to continue the Mobility Program Coordinator position during the five-year time frame of the Short Range Transit Plan. Article 4.5 funding can be utilized as a funding foundation, but will need to be supplemented with non-grant funding sources in order to be sustainable.

Another key question that will need to be addressed after November 2016 is whether or not LTA continues to provide this function or whether this CTSA function is outsourced to a private non-profit agency.

9. Marketing Strategies

Introduction

This chapter will address marketing strategies to support implementation of the service recommendations outlined in this Transit Development Plan.

Effective service planning and active marketing are two halves of the ridership development equation. Without effective marketing, even the best planned transit service will not attract maximum ridership – it will remain a best kept secret. Conversely, no amount of marketing can sell a service that is poorly designed, unreliable or does not meet the customer's needs.

The marketing plan will begin with an assessment of Lake Transit's current visibility, image and customer experience. It will then establish specific objectives for the marketing and communications program and address the potential for building ridership among various target groups within Lake County. Finally it will provide a detailed program of strategies recommended for implementation.

The plan is based on a thorough examination of the existing system and its community presence. Information sources included a survey of transit riders, complete customer experience review, meetings with transit management and staff, informal interviews with bus drivers and passengers and in-depth stakeholder interviews with representatives of a wide variety of community organizations including:

- Marymount College
- Yuba College
- Mendocino College
- Lake County International Charter School
- St. Helena Hospital
- LTA Board of Directors
- Veterans Services
- County Office of Education/Healthy Start
- Social Services/Welfare to Work
- Adult Services
- Area Agency on Aging
- Lakeport City Council
- Clearlake City Council
- Middletown Senior Center
- Lucerne Alpine Senior Center
- Lakeport Senior Center
- Highland Senior Center
- Family Resource Center
- Housing Authority
- Child Welfare Services
- People Services
- Lake County Probation Department
- Fire Chief
- HSA Outdoor

In addition to the stakeholder interviews, focus groups of potential riders were conducted with Welfare to Work clients, Mendocino College students, Yuba College students and People Services independent living clients.

A detailed report of findings was presented in an earlier Market Research and Outreach Report. This plan will draw on that document.

Marketing Assessment

Community Visibility and Image

There is generally good awareness of Lake Transit services and how to access them, among those with a "need" for transit. As in most communities, non-users are less aware of the specifics of the service but generally aware of Lake Transit's role and say they would "Google" the system if they needed information.

Stakeholders at social services, medical facilities and educational institutions were well aware of how their constituents depend on the transit system for mobility and had significant knowledge about the services and their limitations. However, many were unaware of the recent service improvements in Clearlake. There was interest among the social service agencies in having their staff be better "trained" in the specifics of Lake Transit service.

Among users and potential users in focus groups, there is a high level of familiarity with the service. However, many were unaware of the new late night service in Clearlake. Those who were aware of and using the extended service were very appreciative.

Lake Transit has a generally positive image and there is high satisfaction, particularly with service in Clearlake. Services to outlying communities, while highly appreciated. are more problematic due to long distances and limited frequencies.

One social service manager said "You don't hear bad things about Lake Transit" and an elected official commented, "Outside of the strike, my constituents are very pleased with the service."

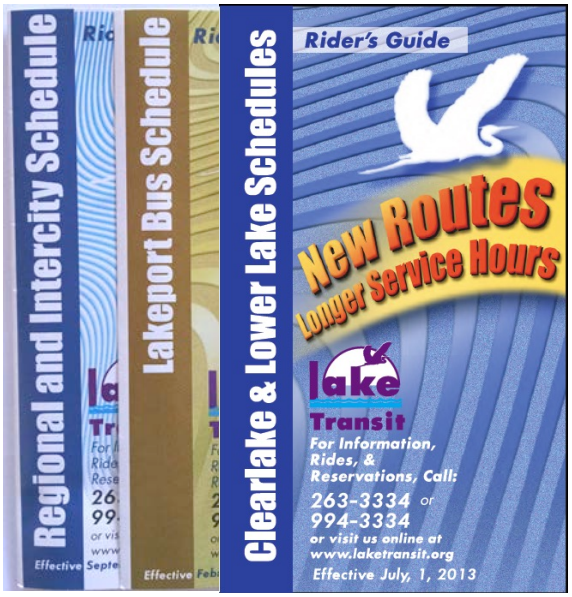
Current Marketing Presence

The most visible elements of Lake Transit's marketing presence, as for any transit agency, are its vehicles and bus stops.

The vehicles utilize a few different looks as shown at the right. All include the Lake Transit logo as a central graphic on a primarily white bus. On some buses, there is an accent color of fuchsia, on others purple. It is clear that the design has

evolved over time.

Some bus stops are signed with one of the signs shown here. However, many are not signed at all.



In total, Lake Transit's on-street visual presence could be both more consistent and bolder. In particular, bus stops could be better identified and play a much greater role in the system's visibility.

The other key elements of the system's marketing presence are its passenger guides and website shown here.

A set of three passenger guides provide information about local service in Clearlake and Lower Lake, local service in Lakeport, and Regional Routes. The passenger guides are attractive and engaging, and effective in a number of ways:

- The guides include route maps and schedules for each individual route.
- The Clearlake and Regional guides also include "system maps" to show how the routes work as a network – these are very important.
- All guides include fare and pass information, holidays and transfer policies, while the local route guides also include information about local Dial-a-Rides and complementary ADA paratransit service.

In the past, Lake Transit published a single comprehensive guide instead of three separate brochures. Many riders interviewed preferred this format, since they use a combination of local and regional routes for their trips.

Lake Transit's website has been recently revamped and does an excellent job of meeting the needs of riders. The design is rider focused, providing easy access to maps and schedules, Dial-a-Ride information, fares and pass information, plus ADA service info and application.

It should be noted, however, that information about the NiteRider service in Lakeport has not, nearly a year after implementation, been added to the website. Likewise, there are other recent changes that could be more clearly communicated – such as how the family fare works.

The website does highlight the availability of and provides easy access to the RouteShout app and web portal for real-time information. Everything can be easily accessed in a single click from the homepage,

without scrolling. In addition, the website uses responsive design, so it can be viewed on a tablet or mobile phone and includes a Google Translate function for viewing in alternate languages.

Beyond the addition of information about the NiteRider and clarification of other details, the primary enhancement that would strengthen the website is an automated trip planner. Lake Transit expects to be live in Google Transit in the Spring of 2015, and at that time a trip planner window can be added to the Lake Transit homepage. It will allow passengers and gatekeepers to easily plan trips that use multiple Lake Transit routes as well as those that involve transferring to neighboring systems.

During the data collection for this project, it was observed that route and schedule information is not provided at Lake Transit bus stops (beyond the phone number and website at those stops which are signed). The transfer locations in Clearlake and Lakeport provide shelter and benches, but no passenger information was posted in the information panels that are part of the shelter (Photo at right of Ray's transfer point). This may have been a temporary situation, as staff has noted that these panels are generally used to post the post current promotional flyers. However it is important to note that key bus stops, particularly transfer centers, should have information displayed.

Customer Experience

Many aspects of Lake Transit's customer experience are very positive. When riding the buses, both consultants observed a diverse ridership and a friendly environment. However, three specific elements need to be improved - bus stop identification, on-time reliability and safety at the Clearlake Transfer Center.

- For new passengers, figuring out where to catch the bus can be challenging when many stops are not signed and the location of stops is only generally defined in the schedules. One driver admitted, "I'm not sure how they know where to wait."
- For both new and long term passengers, the unreliability of some schedules makes counting on the service to get to work or school difficult. Specific problem areas include routes in Lakeport and along the North Shore that have been impacted by the Mendocino College and Casino stop, as well as service to Yuba College which is not well timed for class hours.
- The transfer location in Clearlake at Ray's had a decidedly negative impact on the systems image and raises safety concerns among seniors who must transfer there.

These issues have been addressed in this TDP.

Marketing Objectives

The primary goal of the Lake Transit marketing program is increasing ridership and productivity of the transit services. The service disruption in August 2013 led to a 25% drop in ridership which needs to be regained. In pursuit of this goal, there are four specific objectives which should be guide marketing efforts. This plan will address strategies for accomplishing each of these objectives.

Increase Visibility and Awareness of the Transit System and Services

To maximize utilization, Lake Transit must first maximize visibility and awareness of the transit services among both potential riders and gatekeepers for those riders. This can be accomplished through bold, consistent branding on buses, at bus stops and at transfer centers.

Enhance Ease of Use of Transit Services

The goal should be to make the system as easy as possible for novice riders to understand and use. This can be accomplished by continuing to provide passenger information that is easy-to-understand and readily available. This information needs to be broadly available through printed materials, on the internet, on smart phones, at bus stops and at key destinations.

Build On Relationships with Community Organizations

Social service agencies, senior centers and complexes, schools and colleges, medical facilities and other organizations that work with constituents with transportation needs can act as a "sales force" for public transit. By building on the positive relationships that Lake Transit already has with these organizations, you can better educate them about Lake Transit services and enlist their aid in promoting transit use among their clients and customers.

Promote Trial Ridership Among Lost Riders and New Ridership Segments

Marketing of transit services needs to be an on-going effort. It is critical to continually attract new riders to the system, in order to maintain ridership as well as to expand it. This can be accomplished through a combination of community wide promotion such as advertising and public relations and targeted programs focused on high-potential market segments.

Target Markets

Current Riders

While attracting new riders is important, retaining existing riders is critical if the overall ridership base is to be expanded. In Lake County's case, some riders were lost during the 2013 labor strike and need to be re-attracted to the system.

Lake County currently provides about 1000 passenger trips per day. Given the distribution of ridership frequency found in the survey, this likely represents a pool of about 2000 riders who use the bus each week.

About half of Lake Transit riders live in the Clearlake/Lower Lake area, while the other half live in communities throughout the service area with concentrations in Lakeport, Lucerne and Clearlake Oaks.

Lake Transit serves a diverse ridership base in terms of age and lifecycle status.

- 36% of riders are employed full or part time
- 31% are students – college or high school
- 20% are retired

Most riders are relatively low income – 84% have annual household incomes of $25,000 or less. Similarly, the vast majority (94%) rely on Lake Transit for transportation because they lack a driver's license, vehicle or both.

Riders use Lake Transit for diverse trip purposes. When intercepted for the survey, 23% were traveling to or from work, 21% school or college, 26% shopping, 19% recreation, 17% medical appointments, 7% social service appointments and 4% long distance travel.

Nearly half (46%) of riders ride daily (5-6 days per week), while 33% ride 3-4 days and 21% ride two days per week or less often.

Low Income Families

Nearly one quarter (23%) of Lake County's 64,000 residents live below the poverty level, and about 16% of households have household incomes of $25,000 or less (comparable to most Lake Transit riders). Hence there is a large low income population that can benefit from the low-cost mobility offered by Lake Transit.

Census data was reinforced by input from a wide variety of stakeholder who noted the high level of transportation need among Welfare-to-Work participants, persons with disabilities and probation program clients.

Workers

Just over a third (36%) of Lake Transit riders are employed and about a quarter of riders were on their way to or from work when surveyed. Getting to work is a critical use of transit, particularly for low wage and part time workers who can ill afford the cost of owning, maintaining and operating a vehicle.

College Students

College students are traditionally a key ridership segment for public transportation nationally. The eco-focus of the millennial generation has increased this tendency. In Lake County, college students are already a major user group. About 14% of current riders surveyed were students at Yuba College or Mendocino College.

Yuba College has about 1500 students at the Clearlake campus, while Mendocino College has about 3,775 students between the Ukiah and Lakeport campuses. The new Marymount College in Lucerne is starting with 80 students but expects to grow to 500 in five years. These groups represent significant target segments for maintaining and building Lake Transit ridership.

Youth/Secondary Students

Lake County has nearly 8000 residents in the 10-19 age range. Many of these are middle and high school students who could benefit from the independent mobility offered by Lake Transit either for school trips or for after school, Saturday and summer recreation. Currently, secondary students make up about 12% of the system's ridership. The International Charter School buys bus passes for its low-income students.

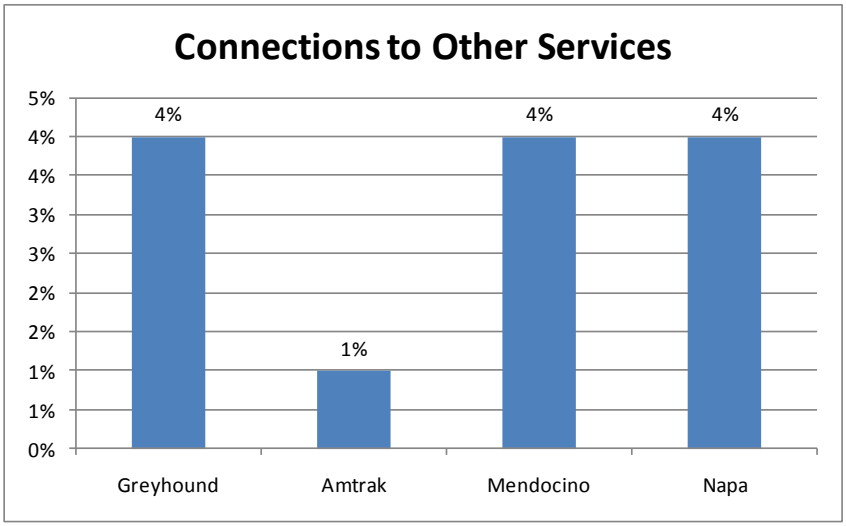
Older Adults/Retirees

About 8% of the respondents to the on-board survey were aged 65 or older, while 20% of riders classified themselves as retired. According to the census, Lake County is home to more than 11,000 persons aged 65 and over – almost 18% of the population. While this is a population with significant ridership growth potential, it is not an easy sale. Many older adults lack the mobility to get to the bus stop or fear using transit because of lack of experience. However, within this large population are sub-segments with a higher level of need and easy access to Lake Transit who represent higher potential targets.

Intercity Travelers

Route 7 has a higher percentage of riders with modal choice (10%) than any of the other routes.

Route 7 to Ukiah and Route 3 to Calistoga and St. Helena have significant segments of long distance travelers – 10-11%, who are taking advantage of connections to Greyhound, Amtrak or local transit services.



Marketing Strategies

Fundamental Strategies

We will first address strategies that are fundamental to the effective operation of a transit system – user friendly service design and policies, branding and passenger information. Lake Transit already has a very strong base on which to build in each of these areas.

User Friendly Service Design

The Transit Development Plan includes a number of strategies for making Lake Transit's service design more user friendly. Implementation of these strategies will insure that new rider's trying Lake Transit for the first time will have a positive customer experience and that riders lost over the last year will have a reason to reconsider using the system.

Factors which affect the user-friendliness of transit service, and should be considered in all decision making, include:

- Clear identification of bus stop locations
- Amenities and information at transfer points
- Ease of getting passenger information and planning trips
- On-time performance and reliability – knowing that you will get to your destination on time and that the bus will not leave the stop early
- Consistent schedules without large gaps in service that result in overly long trips
- Span of service that facilitates work/school trips – getting there and getting back
- Affordable, easily obtainable fare media

Branding

Maximize Visibility of the Transit System and Services using vehicles and bus stop signage

Branding is marketing at its most basic. It is how we identify a service and everything associated with it using a name, logo, and packaging. The objective of branding is to create a unified image in the mind of the potential customer and to create immediate recognition of all facets of the service.

For a transit system, the key elements of its visual brand are its name, logo, vehicle colors, vehicle graphics, bus stop signage and bus stop facilities (shelters, benches, etc.). The vehicles and bus stops are in essence a transit system's "packaging."

Buses and bus stops are a transit system's most visible marketing tools. They are seen by thousands of people every day and are an opportunity to use capital investments to achieve long term communications value.

Bus Stop Signage

Sign all bus stops (to the extent possible) with a consistent, high visibility bus stop sign.

Bus stop signage serves two valuable purposes. First and most obviously, it lets passengers know where they can catch the bus. Second, and equally important, it advertises the fact that transit service is available within a given corridor or to a specific destination. Unlike an ad which is here today and gone next week, signage is a marketing strategy which, once implemented, provides value day in day out. Lake Transit's bus stops are seen by thousands of people every day. However, they are not currently communicating as effectively as possible.

As noted in the market research report, many Lake Transit bus stops are not signed at all. During outreach for this plan, the need for bus stops signage was the most often expressed concern. Lack of bus stops signs is a difficulty for both riders and new bus drivers. In addition, it is a lost opportunity to promote the service.

Stops that are signed, utilize one of the signs shown at the right. Ideally, a bus stop sign should prominently display four elements:

- System logo
- large international bus symbol
- Phone number
- Web address

Additional elements which can enhance the usefulness of a sign include:

- A bus stop number to facilitate access to real-time information
- Decals to show the routes that serve the stop, their destinations and days/hours of service

It is recommended that Lake Transit enhance signage at bus stops by signing all stops with a consistent, high visibility bus stop sign which is two-sided to provide easy identification from both directions.

Vehicle Graphics

Establish a consistent design for Lake Transit vehicles that uses the logo and color to create visibility while also communicating key pieces of information.

Lake Transit vehicles are attractively graphic-ed using one of the two quite different designs shown here. In both cases the buses are

largely white and space is reserved for advertising sales. It would be advantageous to move towards a single consistent look for all vehicles and to utilize a base color for the buses other than white. A bold base color (e.g. one of the logo colors) would greatly increase the visibility of the buses and more clearly distinguish them from social service vehicles, RVs and delivery vehicles with similar profiles.

Other factors which could make the buses serve a greater communications role would include:

- Prominent display of the web address and phone number on the vehicle.
- Inclusion, as part of the graphics, of the key communities or areas served by Lake Transit – e.g. Clearlake, Lakeport, North Shore, Kelseyville, Cobb Valley, Ukiah, Napa County

As noted above, buses are a transit system's most prominent communication tool and are seen by virtually everyone in the community on a daily basis. In order to use the vehicle graphics to more boldly market the transit system, Lake Transit may want to reconsider the on-going value of selling advertising on buses. The revenue generated by ad sales is quite modest compared to the potential value of increased visibility and enhanced image for the system. At a minimum, advertising should be limited to the interior and rear of the buses. This will allow the passenger and street sides of the vehicle to be used to promote the transit service itself, while the rear of the bus (the most lucrative advertising space) will continue to generate some revenue.

Passenger Information

Enhance ease of use by providing passenger information in easy-to-use, readily available forms.

Passenger information is the "directions" for using public transportation and is the basis of any transit marketing program. Interacting with a system's passenger information tools is often a transit customer's first experience with the system. Ease of planning a trip may determine whether a person goes on to ride the bus.

Lake Transit passengers use a variety of information sources to learn about the service. Printed passenger guides are used by the largest segment (37%) of current riders, followed by the telephone (26%) and website (16%). Many riders rely on less formal sources – family and friends (16%) or the bus operator (13%). About 10% say they get information from an institution – school, college or social service agency. Information sources vary among the riders of the different routes. For example, the riders on regional routes 7 and 3, as well as rural routes 2 and 4A, are much more likely to use the website as a source of information.

This section will outline strategies for enhancing availability of transit information through both electronic and print methods. Many of these recommendations are already underway.

Electronic Passenger Information

The increasing utilization of mobile phones has transformed the way in which many transit riders get information. A 2014 Pew study found that 90% of US Adults have cell phones and 58% have smart phones. Mobile phone usage is ubiquitous even among rural residents (85%), persons with incomes under $30,000 (86%) and seniors (76%) – groups that have been slower to adopt mobile technology. A recent transit survey in El Dorado County found that 86% of riders had a mobile phone - 45% of had smart phones and 41% had conventional cell phones.

Hence providing information that can be readily accessed on a mobile phone as well as a computer or tablet should be a critical objective of Lake Transit's marketing program. Following are four strategies:

Google Maps

Lake Transit is in the process of becoming part of Google Transit and expects to be live in the spring of 2015. This will allow riders to plan trips using the Google Maps interface that most people are already familiar with for getting driving directions. It offers a number of distinct advantages.

- Provides easy access to Lake Transit information on smart phones and tablets as well as on computers.
- Avoids the difficulty that many potential riders have understanding transit schedules to plan trips, particularly those requiring transfers.
- Provides gatekeepers, such as social service and medical personnel, with an easy way to plan and print trip information for their constituents.
- Google Maps will provide a seamless way of coordinating trips between Lake Transit and connecting transit operators (such as Mendocino Transit Authority) that are already part of Google Transit.

Website

Once Lake Transit is live in Google Maps, a Trip Planner should be added as a prominent feature on the homepage.

Another valuable addition to the website would be alerts regarding service disruptions. These could be posted in a clear location on the website. In addition Lake Transit might consider allowing riders to sign up to receive alerts via text message or email.

Finally, the website needs to be regularly updated to insure it provides information about all available transit services.

Real Time Information - Route Shout

Real time information – where is my bus? – is the ideal for transit users and was once available only to large transit systems with significant resources. However the Route Match technology used by Lake Transit had made real time information available to every rider on a smart phone, tablet, computer or even via automated phone or text. The web portal works quite well and can be accessed through desktop and mobile devices. The Stop Finder App – which allows riders to find the bus stop nearest them - is currently only available for iPhones, but should be expanded to all platforms.

Lake Transit may also want to expand the ways in which riders can access the real time information. Many systems provide next bus information based on a unique bus stop number assigned to each stop. Riders can text or use an automated voice system to access the next bus information. This makes the information easily available to those with conventional cell phones.

Social Media

While Lake Transit's on-board survey did not address social media usage, surveys of transit users in other similar markets have demonstrated broad use of Facebook. This can provide a useful two-way channel of communication with riders. Riders can be encouraged to "like" Lake Transit on Facebook in order to see news about service updates, destinations and promotional offerings. In the other direction, Facebook provides a channel for riders to ask questions and comment on service. If Lake Transit chooses to establish a Facebook presence, it will be important for someone to regularly monitor the page, respond to inquiries and address concerns.

Information at Bus Stops and Transit Center

We have already discussed the importance of signage at bus stops as part of branding and building awareness. However, bus stops are also an important mechanism for providing passenger information. This can be accomplished in one of several ways.

- The bus stop signage can provide information about how to access schedule information via phone, website or real-time app.
- Decals on the base bus stop sign can show what routes serve the stop, their destinations and the days/hours of service (an illustration of this approach was shown under branding).
- Changeable schedule panels can be used to easily display schedule information for the route or routes serving a specific stop. Having information about when the bus will come right at the stop is particularly useful on low-frequency routes. The displays can be the full route schedule pulled from the passenger guide artwork (with the appropriate stop highlighted) or simply the route number and a list of times when a bus serves that particular stop. NOTE: These panels (made of high impact plastic and lexan) come in a variety of sizes and accept standard sized,

laminated inserts. They are available from Transit Information Products (transitinformationproducts.com).

Key transfer locations where routes converge are particularly important places for providing passenger information displays. Transfer locations should be equipped with a passenger information display which includes a system map (with "you are here" designation), schedules for all route serving that stop, fare information and instructions for accessing real-time information. These locations include:

- Clearlake
  - Ray's
  - Lakeshore & Old Highway 53
  - Austin Park/City Hall
  - Burns Valley Mall
  - Yuba College
- Lakeport
  - 3rd & Main
  - Mendocino College
  - KMART
- Sutter-Lakeside Hospital
- Middletown – Hwy 29 & Young St.
- Kit's Corner

Printed Guides & Displays

Passenger Guide

During on-bus interviews, some riders expressed a preference for a single comprehensive passenger guide. As passenger guides are updated, Lake Transit should consider the advantages of returning to a single guide versus those of having three guides.

Advantages of one guide:

- Passengers who transfer between local and regional routes would have all the information they need in a single location.
- There would be the potential to include an "intercity schedule" which specifically highlights and promotes use of the selected "through trips" which connect across Lake County. An example of such a schedule used by Trinity Transit is shown here.

Eastbound Intercity Schedule: Humboldt County – Trinity County – Redding ***Mon thru Fri***

Eureka (RTS Mainline)	Arcata (Transfer to) RTS 299)	Arrive Willow Creek (Transfer to Trinity Transit)	Depart Willow Creek	Arrive Weaverville (Library)	Depart Hwy. 299/Martin (Tops)	Douglas City	Redding
—	—	—	—	—	7:40	7:48	8:43
7:44	8:20	9:15	9:45	11:10	11:50	11:58	**12:53**
2:45	**3:32**	**4:30**	**4:30**	**5:54**	—	—	—

Westbound Intercity Schedule: Redding – Trinity County – Humboldt County ***Mon thru Fri***

Redding (RABA Transit Center)	Douglas City	Arrive Hwy. 299/Martin (Tops)	Depart Hwy. 299/Martin (Tops)	Arrive Willow Creek	Depart Willow Creek	Arcata (Transfer to RTS Mainline)	Eureka
—	—	—	7:40	9:07	9:25	10:20	10:57
11:40	**12:35**	**12:43**	**2:40**	**4:08**	**4:45**	**5:30**	**5:45**
4:10	**5:10**	**5:18**	—	—	—	—	—

- The task of distributing guides would be simplified, with only a single piece to inventory and distribute.
- The guide would promote the system as a whole, including the demand response services.

Advantages of three guides:

- Passengers using only local services in Clearlake or Lakeport can access that information without having to wade through maps and schedules for routes not of relevance to them. The passenger survey found that nearly 80% of riders were using a single route for the trip on which they were surveyed.
- If only a single route changes, it will be more cost-effective to update a smaller individual guide than a systemwide book.

If Lake Transit stays with a multi-guide guide system, it is recommended that only two guides be published:

- Local Clearlake guide. This would satisfy the needs of the many riders who use Lake Transit simply to travel within Clearlake and Lower Lake. However, this guide should include a small version of the regional systemwide map to put the local routes in context of the overall system and cross promote the services.
- Systemwide regional guide which would include all other routes and would reference the local Clearlake guide. A regional systemwide map which clearly communicates the route network should be the focus of the guide, which should include schedules for all routes outside of Clearlake. In addition, the concept of an intercity schedule described above should be integrated into the regional guide.

The guides should also, of course, be updated to provide information about the new Google Transit trip planner and the real-time information provided via RouteShout.

Whether one guide or two, broad distribution of passenger information is strongly recommended. The distribution list for passenger guides should be reviewed at least annually to insure that it includes both good geographic coverage and high traffic locations for all of the target groups Lake Transit is seeking to reach. Counter top displays (as shown at the right) with the system logo and phone number can greatly increase of visibility of passenger information. These should be systematically repleneshed and a contact at each distriubtion location should be encouraged to call if guides are depleted more quickly than expected.

Community Information Displays and Distribution

Attractive, easy-to-understand transit information can have a promotional as well as educational value. During outreach for this plan, stakeholders responded very positively to the concept of establishing transit information displays at high traffic locations including colleges, social service offices, senior centers, medical clinics, etc. These displays would provide permanent low-cost advertising for the

system and be seen by hundreds of people each week. In addition, they would provide a focus for the distribution of the new passenger guides.

These displays can be created using the graphics from the passenger guides and pre-fabricated display units. There are many styles of displays which can be purchased on line at sources such as:

www.beemak.com www.displays2go.com www.display-world.com

The fixtures can be purchased in small quantities and customized with the addition of a digital print and a supply of Lake Transit passenger guides.

Different formats (counter top, wall mounted, free standing, etc.) may be needed at different locations. Below are several examples of information display types. Ideally, the displays should:

- Visibly and attractively communicate the Lake Transit brand
- Include the regional or local system map with a "you are here" designation for specific location to help readers orient
- Provide pockets for passenger guide distribution
- Promote the web-site for additional information, including Google trip planning and real-time information.

Again, keeping the displays updated and replenished with passenger guides should be part of the systematic distribution system discussed above.

Community Based Ridership Promotion Strategies

On-Going Gatekeeper Outreach

Lake Transit has an excellent reputation and good relationships with stakeholders throughout the service area. Many of these stakeholders serve as "gatekeepers" for potential transit riders. These include social service agencies, schools and colleges, youth programs, support organizations for the disabled and medical services. These organizations, and particularly their front line employees, are often charged with identifying transportation options for getting their clients to programs, appointments, training, classes, interviews and jobs. As a result, they have the potential to serve as "salespeople" for public transit.

To capitalize on the strong gatekeeper relationships which already exist, there are several things that Lake Transit can do.

- Create a simple database that includes the organization, contact person and contact information, including e-mail. These individuals should be provided with regular e-mail updates about changes in transit services, availability of new passenger guides and other updates. When appropriate, E-mails can include an 8 ½" X 11" PDF flyer for printing and posting or distributing to co-workers and/or clients.
- Conduct "training" sessions at meetings of front line staff who need to understand how transit works so they can pass the knowledge on to constituents. These trainings would be most relevant when service changes are made. They should include an overview of the routes and where you can go on transit, how to use the schedules and Google Transit to plan trips, how the real-time information system works and information about paratransit services and certification.
- Continue to facilitate purchase of passes by these organizations to give or resell to their constituents.
- Work with organizations to implement targeted promotional programs to encourage transit ridership among their constituents, by providing them with customized marketing "tools."

Targeted Marketing through Gatekeepers

When attempting to attract new riders, the more targeted the appeal and information provided, the more likely you are to generate a trial ride. For example a general appeal in a newspaper ad which simply says "Ride the Bus, It's Easy" and provides a web address for more information is much less likely to get a response than a targeted flyer/poster distributed on campus at Yuba College that says "Ride the Bus to Campus for Only $1.25" then provides the exact location of the bus stop and the times each hour when the bus serves the campus, as well as a reference to Google Transit for easy trip planning.

Therefore it is recommended that Lake Transit work through gatekeepers to communicate directly with key target groups. Several types of communication channels can generally be accessed through partnerships with gatekeepers:

- Permanent information displays in their facilities – these displays, as described above, provide long term communications value (unlike an ad that exists for only day or a week) and they can be customized to provide the information most relevant to the target group.
- Bulletin board posters and flyers – this is a very low cost communications medium which can deliver appeals and information specific to the target group (what seniors and college students want to know is likely different).
- Website links – ask gatekeepers to provide a link to the Lake Transit website as a resource from their own website.
- Inclusion of transit information in orientation packets – schools, social service agencies and medical facilities often provide their new clients/students with packets of relevant information. Ask them to include a targeted flyer in this information that tells the reader how they can use transit to travel to the relevant destination.
- E-mail blasts – some gatekeepers (particularly schools/colleges) communicate with their constituents via email and can distribute transit updates in this way.
- Newsletter Articles – some gatekeepers publish e-mail or hard copy newsletters and can include articles about the evolving transit services.
- Staff or client travel training – as previously referenced, gatekeepers can often offer opportunities to conduct travel training with front line staff (such as caseworkers) or directly with constituents (such as seniors at the senior centers).

Following are several targeted marketing possibilities that arose during outreach for this plan.

Lucerne Marketing Partnership with Lucerne Alpine Senior Center

The Lucerne Alpine Senior Center, which recently took delivery of a 5310 vehicle, is very interested in being both a marketing partner and a feeder service for Lake Transit. They hope to use the new vehicle to get Lucerne area residents "out of the hills" and deliver them to local destinations and to Lake Transit bus stops. The Senior Center provide services, not only to seniors, but to youth and low income families in the Lucerne area, and is anxious to help Lake Transit to reach out that community with information about enhanced services.

It is recommended that Lake Transit staff meet with them to identify specific communications channels. Some discussed during our stakeholder interview included:

- Travel training for seniors at the Senior Center to help them see how they can use local Dial-a-Ride (provided by senior center) in combination with Lake Transit to access medical appointments, shopping and other services.
- Potential to distribute targeted promotional flyers to clients of various programs – Food Pantry, Youth events and home delivery meals.

Yuba College and Mendocino College

Yuba and Mendocino Colleges are two key destinations for Lake Transit riders. Yuba College has about 1500 students at the Clearlake campus, while Mendocino College has about 3,775 students between the Lakeport and Ukiah campuses. This represents a significant pool of potential riders for Lake Transit. Recent service improvements (e.g. later night service) and electronic passenger information tools will make Lake Transit more attractive to students. To capitalize on this potential market Lake Transit should:

- Ensure that schedules are timed to meet the needs of students
- Work with the administration at each college to implement targeted communications strategies such as:
    - Permanent transit information display at bus stop and at high traffic location on each campus
    - On-campus poster campaign
    - Transit information in new student orientation sessions and packets
    - Ask for link from college websites to Lake Transit website

Ultimately, it would be ideal if Lake Transit could establish a pre-paid program with Yuba College, (and possibly Mendocino College), under which students would ride fare free with their student IDs. This will likely require a vote by students to add a charge to their student fees. To jump start this effort, Lake Transit might consider using it's available Cap and Trade funding to implement a one-year pilot program for the students at Yuba College. At the end of the year, students could be ask to vote to continue and fund the program as an on-going pre-paid fare program. It will be very important that such a pilot program be supported with an aggressive marketing campaign and the schedule adjustments necessary to better serve student needs.

CalWorks/Job Zone

The Department of Social Services works with about 3000 CalWorks participants who are in job training or job search. These constituents are provided with bus passes. Job Zone is a one-stop career resource center for CalWorks participants and anyone seeking employment in South Lake County.

There are a variety of ways in which Lake Transit can work with these organizations to promote ridership among job seekers.

- Provide an information display with passenger guides at the Social Services office lobby and at Job Zone.
- Conduct training with staff at the two organizations to insure that they fully understand the services available for getting clients to training, job interviews and employment.
- If opportunities exist, conduct travel training sessions with CalWorks participants.

- Improve the bus stop at Job Zone and provide information at the stop.

Lake County Probation Department

The Lake County Probation Department works with about 800 individuals on felony probation. Many of these are part of a program which requires them to travel regularly to the Adult Day Reporting Center in Lakeport. Probation purchases and provides bus passes to the clients. Ways in which Lake Transit might work with the probation staff to facilitate ridership among its clients include:

- Provide an information display with passenger guides at the Adult Day Reporting Center.
- Conduct an in-service training with probation staff to inform them about the service improvements recently implemented, and how to use Google Transit and the real-time information portal.
- Add the probation staff to the gatekeeper email list previously discussed, so that they receive regular updates about Lake Transit.

Public Relations and Promotional Activities

News Releases

Lake Transit's on-going program of service enhancements and new information tools are newsworthy. To maximize the amount of earned media (news articles and mentions on radio news programs) received, Lake Transit should maintain and implement a systematic news release calendar. The calendar should identify topics for news releases during the coming 3-6 months and be updated periodically to reflect changes and new story ideas. Possible news topics might include:

- Implementation of the expanded North Shore Service
- Other service enhancements
- Launch of Google Transit
- Real-time Information/StopFinder App available for Android
- New vehicles
- New bus stop signage
- 20th Anniversary

News releases should be prepared and issued in a timely manner to all local media:

- Lake County News
- Lake County Record-Bee
- Clear Lake Observer-American
- Lake County Magazines
- Local radio stations (KNTI-FM , KXBX-AM/FM, KQPM, KMOB, KPFZ)

When appropriate, digital photographs should be included with news releases to newspapers and on-line publications.

News releases should also be distributed in a number of other non-traditional ways:

- Posted on the Lake Transit website under a "What's New" link.
- Distributed to the gatekeeper e-mail list with a request that they share the information with constituents via in house channels or social media.
- Distributed to local organizations that have newsletters for inclusion in their own publications.

Promotional Campaigns

During the next two years, three specific promotional campaigns are recommended. These are described below. Beyond that period, it is recommended that Lake Transit implement an annual systemwide Try Transit campaign to encourage new ridership; plus more localized service specific efforts to promote service enhancements.

This first campaign should be launched in conjunction with the expansion of service on the North Shore.

Lake Transit is Staying Out Late…So You Can Too

The intent of the campaign is to introduce later service on the North Shore while also promoting the other evening services that have been implemented over the past year. By combining the messages, countywide print and radio advertising will be viable media for the campaign, along with on-board posters, bus side advertising and collateral materials.

The basic message for countywide communications will be: *Lake Transit Is Staying Out Late…So You Can Too.*

In addition to the broad message of later service, target communications to residents in each community should be used to promote the local service improvements. This can best be accomplished with a direct mail post card which can include the core message along with localized information.

- North Shore – Route 1 route and schedule
- Clearlake – Routes 5 and 12 routes and schedules
- Lakeport – Night Rider hours, reservations and fares

Draft text for the promotional pieces has been developed.

Lake Transit Is Staying Out Late these Nights…So You Can Too.

- *North Shore – extended evening service on Route 1 between Clearlake and Lakeport via Lucerne, Nice and Upper Lake. Last buses leave Clearlake and Lakeport as X:00 PM*
- *Clearlake – Route 5 now provides service throughout Clearlake until 11 PM.*
- *Lower Lake – Route 12 now connects Clearlake and Lower Lake until 10 PM.*
- *Lakeport – Nite Rider offers on-call evening transit service throughout greater Lakeport from 6:00 PM to 9:30 PM.*

The order of the next two campaigns will depend on the timing of the anniversary in relation to the various service enhancements.

20th Anniversary Campaign - Look How We've Grown

During the coming year, Lake Transit will mark its 20th Anniversary. This is an occasion for celebration internally and promotion and public relations externally.

For the theme of this campaign, "Look How We've Grown" would provide the opportunity to focus on:

- The broad reach of Lake Transit - service throughout Lake County as well as routes connecting to Mendocino and Napa Counties
- Longer service hours that help people get to work, school and recreation opportunities.

The 20th Anniversary would also be a natural time to introduce a new, bolder, more consistent look for the buses.

Give Lake Transit a Try - We think you'll like the changes we've made.

Too woo back riders lost due to the labor strike and service limitations, Lake Transit should consider a broad campaign to encourage trial ridership. The focus of the campaign should be on the steps Lake Transit has taken to improve service and ease of use:

- Later evening service
- Improved schedules – more consistent and reliable
- Signed bus stops
- Google trip planning
- Real-time information
- Family friendly fares

Communications channels for the campaign might include: newspaper, radio, on-line news sites, bus side advertising plus targeted direct mail post cards to residences along routes with significant capacity.

Incentives to encourage trial ridership could include free-round trip coupons in ads (valid only during a target week to limit revenue losses). A stronger incentive could be offered through direct mail – a 10 ride punch ticket – to encourage people to really give Lake Transit a serious try.

Testimonial Campaign

There is a desire by Lake Transit staff to convey the positive message that "you meet the nicest people on Lake Transit." This can be most effectively achieved through a testimonial campaign that features real riders who represent the various target markets Lake Transit wishes to attract:

- College Students
- Local Workers
- Active Seniors
- Youth
- Young Families

Testimonial ads can be easily created for newspaper and radio. Each ad can feature a single rider talking about why they ride Lake Transit and what the benefits are to them. By using real people, the ads will demonstrate that "people like you" are already riding the bus and liking it. The Testimonial approach could be combined with the "Give us a Try" campaign

above. Current riders would be inviting new riders to experience the benefits of Lake Transit that they have already discovered.

Special Events

There are two annual events in Lake County which were recommended by stakeholders and appear to offer particular promotional advantage for Lake Transit.

- The Lake County Fair attracts 38,000 attendees and is an opportunity to build general visibility for the system through a display which includes a vehicle, information display, personalized trip planning and incentive such as a transit game or raffle to encourage participation.
- The Lakeport Concerts in the Park are a particular opportunity to promote the Lakeport Nite Rider. For a weekly sponsorship cost of $400, Lake Transit can reach 1000-3000 participants with the message that there is a new way to get around Lakeport at night (including getting to the concerts and home).

Resources for Implementation

The marketing strategies outlined will require both financial and staff resources to implement.

The rule of thumb for rural transit systems is that they should spend about 1% of their operating budget on promotional expenses. These are the expenses of printing passenger guides and promotional materials, buying media advertising, implementing information displays, and other direct expenses of marketing. It does include the staff time required to implement these efforts, conduct outreach or generally oversee the marketing effort.

Lake Transit has a total operating budget of about $2.7 million. For Lake Transit this would point to a marketing budget of $27,000. It appears in recent years that actual expenditures for passenger information and promotion are relatively close to this level.

Some of the marketing strategies called for in this plan –particularly the one-time expenses for bus stop signage and establishing consistent vehicle graphics. – can be paid for with capital funding.

What Lake Transit does not have is staff time dedicated to the marketing and community outreach. Staff time to conduct outreach, work with gatekeepers and ensure that marketing efforts are on-ongoing is a critical resource. For a system of this size, a quarter to one half of an FTE should be devoted to the marketing and outreach program. The Mobility Manager will provide enhanced potential for these types of activities. In developing the job description for that position, outreach to potential users and gatekeepers should be key tasks.

10. Transit Management Considerations

Purpose and Overview

During the time frame of the five-year Transit Development Plan, it is possible that the existing Transit Manager of Lake Transit Authority will retire. There is a need for a transition plan from the existing arrangement with the contract Transit Manager when he retires or is no longer available to provide the transit management services. This chapter provides an overview of the existing transit management contract, stakeholder and peer transit system input on succession planning, a discussion of key issues and variables that the Lake Transit Authority Board should consider, and the pros and cons of viable organizational options. No recommendations are provided as this chapter is meant to be a resource for the LTA Board when it is necessary to move forward with succession plans for a new Transit Manager.

Existing Organizational Structure

Lake Transit Authority (LTA) is a Joint Powers Authority (JPA) formed in 1996 to administer public transportation service for the Lake County area. The three entities of the Joint Powers Authority are Lake County, the City of Clearlake, and City of Lakeport. The LTA Board has eight members, including two members of the Board of Supervisors, two City Council members from the City of Lakeport, two City Council members from the City of Clearlake, and two citizen members selected by the Board of Supervisors.

The same members of the LTA Board also sit as the governing Board of the Lake County/City Area Planning Council (Lake APC), which was established in June 1972 by a Joint Powers Agreement with the same entities as Lake Transit Authority. The Lake APC is the designated Regional Transportation Planning Agency that, among other duties, administers and allocates Local Transportation Funds and State Transit Assistance funds to Lake Transit, the brand name for public transportation fixed route and demand response services in Lake County.

LTA is also the designated Consolidated Transportation Services Agency (CTSA) for Lake County. As the CTSA, Lake Transit is responsible for coordination of public and social service transportation programs in Lake County.

Lisa Davey-Bates is the Executive Director of Lake Transit Authority, one of the duties of Davey-Bates Consulting (DBC), the contractor for the Lake APC Administrative and Fiscal Services contract with Lake County. The contract to provide Administrative and Fiscal Services for Lake APC became effective October 1, 2014, and is a five-year contract. The work plan for the DBC contract to provide Administrative and Fiscal Services for the Lake APC includes the following work element:

"Lake Transit Authority administration including the preparation of funding agreements, involvement with the Consolidated Transportation Service Agency (CTSA), coordination and management of consultant contracts, LTA meeting preparation, distribution of meeting packets, attendance and follow-up."

In carrying out the Lake Area Planning Council duties, including administering and overseeing Lake Transit Authority, DBC provides a Principal, Lisa Davey-Bates, at 32 hours per week and three part-time employees who spend from 8 to 24 hours per week on Lake Area Planning Council business.

Existing Transit Management Contract

Lake Transit Authority contracts for transit management services. The Transit Manager contract is a continuously renewable agreement that has been on a year-to-year basis since it was competitively procured in 1996. Since that time, Lake Transit Authority has contracted with Mark Wall as an independent contractor.

Each year the contract terms including the scope of work, level of effort, and increases in the rate per hour, which has typically been adjusted based on the California Consumer Price Index (CPI).

The Transit Manager, as a contract position, is responsible for all costs associated with performing the specified duties. The duties are typical of a Transit Manager and are summarized below:

- Coordinate the planning and direct the development of efficient and responsive public transit services in Lake County.
- Executive administrative functions of the system including fiscal management, negotiation of contracts, preparation of budget and works plan.
- Carry out the service plan and budget, monitor transit development and results.
- Coordinate and monitor accounting, procurement, property and operating records and procedures.
- Carry out fleet and equipment monitoring, replacement and acquisition program.
- Represent the transit authority to federal, state and local agencies, business and community groups, and the general public.
- Monitor legislative and regulatory issues to ensure agency compliance with applicable laws and regulations, and disseminate information to the Board of Directors regarding matters of interest to the Transit Authority.
- Direct transit system operations, monitor and evaluate contract services, analyze service utilization and operation, and receive and respond to complaints.
- Coordinate development and implementation of marketing activities and fare adjustments.

- Continue effort to provide a local presence in Lake County.
- Serve as the Executive Director of the of Lake Transit Authority as the Consolidated Transportation Services Agency (CTSA).
- Periodically prepare the Request for Proposals and manage the procurement process for the transit operations and maintenance contract.

The FY 2014/15 contract was signed by Lisa Davey-Bates, the Executive Director of the Lake Transit Authority, and Mark Wall, Independent Contractor.

The level of effort in the contract has been historically at 1,200 hours per year. However, Mark Wall and key stakeholders interviewed all recognize that significantly more hours are spent on Lake Transit Authority than the historic level of effort stated in previous contracts. In FY 2014/15, with the procurement of the transit operations and maintenance contract anticipated, the level of effort was increased to 1,460 professional hours. In FY 2014/15, the contract amount is $134,997.53. The contract is inclusive of salary benefits, telecommunications, office expense, travel, training, conferences, and insurance.

The contract has been historically renewed on an annual basis since the contract was competitively procured in 1996 when Lake Transit Authority first started operating Lake Transit. According to Davey-Bates Consulting, the Transit Manager contract may be competitively procured again once the procurement for the Lake Transit operations and maintenance contract procurement has been completed.

Transit planning elements of the Lake APC Overall Work Plan are under a separate agreement between the Lake APC and Mark Wall, Independent Contractor. The contract amount for FY 2014/15 is $14,500. It should be noted that the contract with Lake APC for transit planning services is independent of the transit management contract, the subject of this chapter.

Cost Implications of Existing Organizational Structure

It's important to repeat the Chapter 3 finding here that the outsourcing for Executive Director of Lake Transit Authority, the Transit Manager and the Operations and Maintenance contract has resulted in a very cost-effective transit system with a very low overall cost per vehicle service hour when compared to peers. While a peer analysis was not part of the scope of work for the Lake Transit TDP, the consulting team recently conducted a peer analysis for two smaller California rural transit systems. Figure 10-1 below indicates that Lake Transit is substantially below the cost per vehicle service of many other California rural transit systems.

Figure 10-1 Comparison of Cost Per Vehicle Service Hour with Rural Transit Systems

Rural Transit Agency	Cost per Vehicle Service Hour
Lake Transit Authority	*$63.96*
Lassen Transit (Lassen County)	$65.53
Sage Stage (Modoc County)	$70.72
Mountain Area Regional Transit Authority (Big Bear Lake)	$78.52
Siskiyou Stage (Siskiyou County)	$85.89
Tuolumne Transit (Tuolumne County)	$91.55
Trinity Transit (Trinity County)	$107.19
Amador Transit (Amador County)	$107.86
Calaveras Transit (Calaveras County)	$114.51

Lake Transit Authority has the lowest cost per vehicle hour for the systems compared. This enables Lake Transit to operate significantly more vehicle service hours than comparable systems with an equivalent budget.

One of the reasons why Lake Transit Authority has a very low overall cost per vehicle service hour is that the comparable administrative costs per vehicle service hour are very low compared to peers. For four peer small rural transit agencies with contracted operations, the average administrative cost per vehicle service hours was $16.64 and Lake Transit's was $4.02. For contracted operations, the average administrative cost of four peer agencies was 22% and Lake Transit's was just 6.3%. Figure 10-2 below summarizes the comparison with other California rural transit agencies.

Figure 10-3 Comparison of Administrative Costs with California Rural Transit Systems

	Lake Transit	Peer Agencies	Average	Low	High
Administrative Cost Per Vehicle Service Hour					
Contracted Operations	$4.02	4	$ 16.64	$ 12.51	$ 23.01
Directly operated	N/A	4	$ 27.61	$ 21.31	$ 40.31
Administrative Cost Percentage of Total Cost					
Contracted Operations	6.3%	4	22%	12%	33%
Directly operated	N/A	4	24%	19%	37%

Stakeholder Input

The Transit Development Plan has a planning horizon of five years. Stakeholder interviews were held with several elected officials to receive input on succession planning.

Elected officials believe that the existing management arrangement works well. The Transit Manger, Mark Wall, received very high marks from those interviewed, with one official commenting that his explanation of HR and union issues during the strike was very useful in helping them understand what Lake Transit could and couldn't do. The elected officials expressed a clear consensus in wanting a future Transit Manager to have the type of transit management expertise that the current Transit Manager provides.

The contract between the Lake Transit Authority (LTA) and the Transit Manager has been historically for 1,200 hours, but was increased to 1,460 hours in FY 2014/15. Elected officials are uncertain about going to a full time manager. They need to evaluate trade-offs between benefits and costs. One official expressed a desire to have a manager that "lives in Lake County," but understands that that would require providing an "enticement package" to get a qualified manager to move there. Several other elected officials were open to having a contract manager similar to the existing arrangement, where the Transit Manager lives outside Lake County. In order to attract a high quality Transit Manager, there is a need to have an excellent benefits package.

Overall sentiment is that that elected officials would like to better understand what others in similar counties are doing, and based on that lay out options for consideration. While the current system has worked well, they don't really know if this is the best. They need a basis for comparison.

Based on this input, a series of additional stakeholder interviews were held with Lisa Davey-Bates, Joe Meer from Morongo Basin Transit Authority, Dan Baxter from the Mendocino Transit Authority, and George Sparks from the Pomona Valley Transit Authority. The insights provided during these interviews are included in the review of options and key issues provided below.

Overview of Organizational Options

Based on TDP contractor knowledge, interviews with key stakeholders, and interviews with peer transit agencies, there are essentially four categories of organizational options. These are presented here because they are referenced in the next section on key issues and variables. After the key issues and variables are discussed in the next section, the pros and cons of each of these organizational options are provided at the end of the working paper and consider the key issues and variables discussed in the next section. The four potential categories of options are:

1. Keep the status quo, and contract for a part-time or full-time Transit Manager with a management firm or independent contractor.

2. Hire a full-time employee of the Lake Transit Authority and provide CalPERS retirement and health benefits.
3. Modify the scope of work of the Lake APC Administrative and Fiscal Services contract to provide the Transit Manager position as part of the current or future contract.
4. Lake County hires the Transit Manager.

Before discussing these organizational options in any detail, the following key issues and variables should be considered.

Key Issues and Variables

Discussion with stakeholders and consultant knowledge defined the following key issues which translate as variables to consider when crafting a succession plan for the Lake Transit Authority Transit Manager. These are discussed in turn, and where there was consensus on a particular variable or issue, it is so stated.

- Skills and experience requirements
- Part time versus full-time
- Resident versus non-resident
- Compensation package
- Contract versus employee relationship
- Recruiting considerations
- Back-up capabilities

Skills and Experience Requirements

The full range of the job duties of the Lake Transit Manager were summarized earlier. In rural transit systems, there was general consensus among the peer Transit Managers interviewed on the four most important skills and experience requirements and these are described below.

Government experience with Federal contracting and compliance requirements. Lake Transit Authority has received federal grants through both formula and discretionary grants including FTA 5311 formula funds, and discretionary FTA 5310, FTA 5311 (f), FTA 5316, FTA 5317 (the latter two funding sources have been merged with other FTA funding sources) for both operating and capital purposes. Skills required include grant granting, relationship building and communication skills with Caltrans, the administrator of rural funding sources, federal regulation compliance, and monitoring and reporting skills. Negotiating skills for complying with gray areas as well as being able to negotiate with details of implementing the various aspects of procurement processes are also very important related skills. One peer transit manager accurately portrayed this as significant “federal hoop jumping” at meeting the regulatory requirements of Federal grants. This is a polite way of saying that there is a great deal of red tape that a Transit Manager has to work through on a regular basis in order for transit funding

and operations to run smoothly. At a minimum, peer Transit Managers believe that experience and skills with government grant processes are a prerequisite for a Transit Manager position.

The second important skill and experience prerequisite is the administrative and political skill of managing a joint powers authority. Skills and experience in writing agendas, communication with elected officials on the Joint Powers Authority business, and writing succinct staff reports with the appropriate tone are all very important skills for the Transit Manager.

The third consensus area is procurement skills, the most important of which are generally bus procurements and contracting for the operations and maintenance contractor. Over the next five years, Lake Transit Authority is expected to procure over 20 buses. Skills and experience in the overall procurement process including bus specifications, purchasing, delivery, and warranty issues were all mentioned as something that a skilled Transit Manager should have. In addition, the procurement for the operations and management contract and overall contract management in terms of monitoring the day-to-day issues that go with the oversight of contract operations and maintenance contracting is a core function of the Transit Manager position.

A fourth very important area that did not surface as a consensus area of skill and experience in the peer transit management interviews, but is being added based on TDP consultant experience is budgeting and financial planning. Having the skills and experience to understand the uncertainties of transit funding sources, establishing and managing operating and capital reserves, and determining when fare increases and what types of fare increases should be considered is a very important function of the Transit Manager position.

There are of course many other duties and skills of a Transit Manager that are important, such as the understanding of labor laws, marketing, and service planning, but there was consensus in considering future Transit Manager recruitment, that the above skills sets are the most important.

There was general consensus among the peer Transit Managers that it takes a minimum of five years experience in working within a transit agency to develop the prerequisite skills and experience to meet the Lake Transit management requirements. In smaller rural transit systems, there is often a general appointment with a County department to become the Transit Manager, often as a promotion. Lake Transit has become a larger rural transit agency, and while such an arrangement is possible, it would need to be supported with technical support and training for a number of years. One peer Transit Manager pointed to the steep learning curve required for the job.

The TDP Project Manager has consulted in small-urbanized areas and small to larger rural transit agencies for 29 years. He has witnessed and has sometimes been called in to evaluate and potentially recommend solutions to issues that could have been avoided with better decisions up front on hiring a Transit Manager with the skills and experience. The results of hiring

someone with the wrong skills resulted in bankruptcy of one transit agency in one case and extreme operating cost per vehicle hour escalation in another recent case.

Part-Time Versus Full-Time, Resident Versus Non-Resident

These two variables are inter-related and discussed together.

As mentioned previously, Mark Wall has been the Transit Manager for Lake Transit Authority since 1996 at a work level of 1,200 annual hours until recently. Full-time would be considered at least 1,900 annual hours with 2,080 hours possible for a 40 hour work week.

With the fleet size, vehicle service hours, and vehicle service miles provided by Lake Transit Authority, most Transit Managers in peer agencies are assigned full-time to the Transit Manager position. Transit Managers interviewed for the succession planning task were all full-time employees.

However, there are duties of a Transit Manager outside the core duties that could be handled by the Operations and Maintenance Contractor in order for the LTA Board to keep the Transit Manager Position less than full time. This could include work scope items such as Mobility Management (recently awarded to Paratransit Services), marketing and outreach, and operations planning including scheduling.

Therefore, it is possible to maintain a work level of 1,300-1,500 annual hours if the division of responsibilities among a competent operations and maintenance contractor are delegated accordingly.

The pros of having full-time resident Transit Manager are:

- Ability to recruit skilled Transit Manager desiring full-time work.
- The full-time Transit Manager would need to reside within commuting distance of Lower Lake., and therefore would encourage a Transit Manager to be hired to either re-locate in Lake County or hire somebody from the local community.
- Can be responsive to immediate needs or a crisis.

The pros of having a part-time Transit Manager are:

- Lower management costs.
- Flexibility in hiring a Transit Manager in a status quo arrangement where a very skilled and experienced manager works for Lake Transit Authority but does not reside in the area.
- Could be attractive to a Transit Manager or key staff person in a larger transit agency who might want to retire in Lake County, but would not desire a full-time position.

Contract Versus Employee Relationship

This is also a variable that is somewhat interrelated to the above. Outsourcing is a very common practice for the County of Lake. The region of Lake County contracts for regional transportation planning agency. The Executive Director of Lake Transit Authority is provided as part of the Lake APC Administrative and Fiscal Services contract. Lake Transit Authority contracts for the Transit Manager position.

In general, contracting for the Transit Manager position is feasible in the following circumstances:

- Similar to the status quo, with a part-time remote Transit Manager who has the opportunity to work on other contract assignments. The current arrangement provides a very high caliber Transit Manager with significant skills and experience while providing flexibility to live where he wants to live, and decide what to spend on wages, retirement benefits, health benefits, vacation, etc.
- A part-time local Transit Manager, who can also work on other related transit management or transit planning assignments outside of Lake County.
- A Transit Manager who is an employee of a transit management firm such as McDonald, First Transit, or Veolia. In this case, the contract is with a transit management firm.
- In the organizational alternative that amends the Lake APC Administrative and Fiscal Services contract to provide a Transit Manager, the Transit Manager function could potentially become part of an existing contract, thereby reducing the overall number of contracts with LTA.

There are two organizational options where the Transit Manager would work as an employee. For Transit Managers who work directly for a Joint Powers Authority such as Lake Transit Authority, an employee relationship with an employment contract is the norm. IRS regulations generally prohibit a contractor relationship when all work of the contract individual is directed by the employer, in this case the LTA Board. Obviously, if the Transit Manager were an employee of the County of Lake, It would be an employee relationship.

<u>Pros of contracting are:</u>

- Competitively contracting can provide market place options and pricing that have historically been favorable to Lake Transit Authority.
- Can contract for the amount of services and scope of services desired.
- Benefits and payroll taxes are part of the contract arrangement.

Pros of employee relationships:

- For many agencies, employees of the transit agency are viewed as part of the local ownership of the transit agency.
- Employment contracts including benefits, especially CalPERS can be an important recruiting incentive according to the peer Transit Managers. CalPERS is discussed more in the next section under compensation.
- Many of the qualified transit agency personnel are CalPERS employees and are only interested in re-locating if they can retain the CalPERS benefits.

It is important to acknowledge that there are a range of options available, and most of these options have worked well for different organizations. The options are therefore presented with a series of pros and cons for each option.

Compensation Package

All peer Transit Managers pointed to the compensation package as critically important in recruiting a qualified Transit Manager. There are three primary parts to the compensation package:

1) Wages
2) Benefits and payroll taxes
3) For contract Transit Managers, considerations of travel, lodging, overhead and profit need to be considered as part of the compensation package.

Wages

For full-time employees, peer Transit Managers recommend direct salary compensation levels in the $100,000 to $120,000 range, depending on experience and qualifications. The $100,000 salary threshold was the consensus of the peer transit managers interviewed.

The existing contract with Mark Wall bundles wages, payroll taxes benefits, direct costs and profit into a single cost per hour. The 2014/15 cost per hour for the Transit Manager is $92.46. Direct wages are not isolated. However, at $120,000 salary level, pro-rated to 1,460 annual hours, the hourly wage rate equivalent would be $57.60 per hour. This leaves $34.86 or 37.7% of the full rate of $92.46 for retirement benefits, health benefits, direct costs (such as insurance, travel and lodging) and profit.

Benefits

Benefits include retirement benefits, health benefits, holidays, vacation and comp time.

Retirement Benefits

In the status quo organizational option, the contract Transit Manager is responsible for obtaining retirement benefits on his own.

For retirement benefits, all of the peer Transit Managers interviewed were members of CalPERS. As a Joint Powers Authority, LTA can contract with CalPERS if the decision were to have LTA directly hire an employee to manage the transit system. CalPERS is a defined benefit retirement plan. Retirement benefits are based on the member's years of service, age, and highest average final compensation. While specific data was not requested, the peer Transit Managers reported that the administrative costs are not significant. According to the CalPERS website, the annual fee is based on a percentage of the total member payroll, as determined by an actuarial evaluation. The actuarial valuation fee is $900. In order to provide a sample benchmark of what it might cost LTA to provide a CalPERS defined retirement benefit, the Mendocino Transit Authority employer contribution is 7.9% of the employee salary, but is based on the plan benefits defined by Mendocino Transit Authority. The Morongo Based Transit rate is 8.3%. Most public agencies pay all or some of the employees' PERS contribution.

Under the option of modifying the scope of work of the Lake APC Administrative and Fiscal Services contract, the benefits would be provided by the contractor if that person is an employee. The current contractor, DBC consulting provides 7.5% of employee compensation towards a retirement plan, very comparable to CalPERS.

In the organizational alternative where the County provides the Transit Manager as an employee, the Transit Manager would be eligible for County benefits, including retirement. The County of Lake is a member of CalPERS and the employee contribution amounts vary by bargaining unit, classification and prior qualifying service.

Health Benefits

Under the status quo option, the contractor is required to obtain health benefits and is included in the $92.46 hourly rate.

If LTA were to hire an employee as the Transit Manager, it would likely contract with CalPERS to also provide health insurance. CalPERS offers a number of health benefit options, and the costs would need to be determined.

Under the Lake APC contract option, the current contractor provides 100% of health insurance to the employee.

Under the County, medical, dental and vision coverage is available to employees and dependents. The County contributes $800 of the monthly premium options for the insurance plan option.

Other Benefits

Vacation, holidays, sick leave and the options for life and disability insurance can vary greatly. In the status quo option, the contractor compensation for these other benefit is part of the $92.46 hourly rate. The Lake APC contractor provides 4 weeks of vacation and sick leave for employees

up to five years, and six weeks thereafter. The County offers two weeks up to five years and three weeks after five years. 11-12 paid holidays are typical.

Other Compensation Factors to Consider

The status quo arrangement with an individual Transit Manager has been financially advantageous for Lake Transit Authority. It has allowed LTA to provide a sufficient compensation package that has retained the Transit Manager since 1996. The hourly rate provides the Transit Manager significant flexibility in determining how much of compensation is spent on direct wages, retirement and health benefits, and other direct costs such as travel.

Two peer Transit Managers cited examples of rural transit agencies that had tried to recruit Transit Managers within the last five years at a salary of $80,000 per year and were largely unsuccessful. Setting an appropriate salary level based on a more detailed salary survey at the time of recruitment would be an important step to take.

The peer Transit Managers all reported that for them, having CalPERS was a very important reason for retaining the job they have. Having CalPERS retirement benefits helps with Transit Manager recruitment. If the organizational option chosen does not allow for CalPERS benefits, then then comparable retirement and health benefits are important.

Hiring the Transit Manager as a County of Lake employee would likely be the most expensive option based on data from other California rural transit systems. As a benchmark comparison, the consulting team has data from other rural transit systems where the Transit Manager is a public employee of the county. In one illustrative example, the value of fringe benefits for a County employee Transit Manager was 129%. While this is likely at the high end, it illustrates the point that the contract arrangement for the status quo Transit Manager has minimized the cost of fringe benefits compared to public agency employment.

In general, in larger transit management firms where a Transit Manager would be provided, such firms have higher overhead rates than the status quo and the cost per hour could be higher than the status quo. However, this is admittedly speculative and cannot be accurately determined until a procurement process enables candidate firms to respond.

Back-up Capabilities

The status quo arrangement is such that the Transit Manager is the only individual with the skills and experience to manage Lake Transit. There are no back-up capabilities or cross-training of other individuals if the Transit Manager were to resign, or a long-term disability or death did not make it possible for the Transit Manager to perform the functions. There have been recent efforts between the Transit Manager and the LTA Executive Director to share important files in a password protected cloud format.

Two of the Transit Managers interviewed for this chapter are directly operated systems and provide operations and maintenance functions with transit authority employees. In such an organizational structure, the operations manager and maintenance manager are both employees of the authority and provide back-up capabilities to the Transit Manager. When an agency such as LTA contracts for operations and maintenance and the Transit Manager is the only person who provides oversight to the operations and maintenance contract, there is no such back-up capability.

In a temporary situation, the operations and maintenance contractor could provide temporary management oversight from their corporate office, but would need to report to the LTA Executive Director during the interim period between when the existing Transit Manager is no longer available and when a new Transit Manager is retained.

If LTA were to contract with a large transit management firm, the contract could specify that such back-up capabilities are provided by the parent organizational structure. However, in this arrangement, it would be necessary to specify in the contract terms how much on-site presence would be required before a new Transit Manager is assigned.

In the organizational option where the Administrative and Fiscal services contract scope of work is amended to include the Transit Manager, back-up capabilities could be developed in the local contractor team. This would specifically include the LTA Executive Director, but would include other staff of DBC, the current contractor.

Organizational Structure

The above sections provided the key decision-making issues and factors that should be considered in the succession planning for the Transit Manager. As discussed above, there are essentially four main categories of organizational options.

1. Keep the status quo, and contract for a part-time or full-time Transit Manager with a management firm or independent contractor.
2. Hire a full-time employee of the Lake Transit Authority and provide CalPERS retirement and health benefits.

3. Modify the scope of work of the Lake APC Administrative and Fiscal Services contract to provide Transit Manager position as part of the current or future contract.
4. Lake County hires the Transit Manager.

The following is a discussion of the pros and cons considering the key factors and issues for succession planning discussed above.

Status Quo Arrangement

This arrangement has worked quite well since 1996 when LTA was first formed. The compensation structure of an hourly rate has provided a high caliber Transit Manager the flexibility to live where he wants to live while at the same time providing very cost-effective transit management services to the Lake Transit Authority. As discussed above, Lake Transit Authority only spends 6.3% on administrative costs compared to an average of 22% for four peer transit systems with contract operations. The current contractual arrangement has significant financial benefits for LTA.

The time spent by the Executive Director of LTA on LTA oversight has been minimal. The scope of work of the Lake APC Administrative and Fiscal service contract seems to assume the status quo relationship as the scope is very minimal on the duties and responsibilities for the Executive Director role of LTA. One likely reason for this is the long-term trust relationship has been established among LTA, Lake APC and the Transit Manager since 1996.

The scope of work could change significantly where there is a need to determine the succession from Mark Wall to a new Transit Manager. The Executive Director has also indicated that the Transit Manager position may be competitively bid in FY 2015/16.

One possible suggestion that surfaced during interviews with peer Transit Managers is the option of including a Deputy Transit Manager in the annual Transit Management contract a year before retirement or succession planning is needed. This suggestion would enable the current Transit Manager to train a potential successor.

Another potential suggestion from peer Transit Managers was to keep the current Transit Manager under a limited part-time contract for 400-600 hours per year in order to maintain institutional continuity for a period of 3-4 years. It is not known whether the current Transit Manager would be interested or willing for such a limited part-time assignment after retirement, but if the status quo option is selected, it is worth further exploration and discussion.

The following are the primary pros and cons of the status quo option.

Pros

- The current organizational structure has worked very well since 1996.

- The current organizational structure has been extremely cost effective, with an administrative cost as a percentage of total operational costs of just 6.3% compared to a peer average of 22%.
- The existing hourly rate provides significant flexibility to a qualified Transit Manager in living where they want to live while at the same time allowing the Transit Manager to decide how much of the compensation to allocate towards wage, retirement, health and other benefits.

Cons

- There is not a significant market of sole proprietors with transit management experience and skills available to bid on such a contract. The Transit Managers interviewed only knew of a couple individuals who might respond to a RFP for such a contract.
- There are at least three larger transit management firms that provide Transit Managers to mostly much larger urbanized areas: Veolia, First Transit, and McDonald Transit Associates. All three are part of large international firms that provide an array of transit operations, maintenance, and transit management services. It is not known whether these firms would bid on a smaller transit management contract. In discussing this with three peer Transit Managers, there was general consensus that a Transit Manager from one of these firms would likely be a "springboard" to a larger transit management assignment and that it would be difficult to achieve any longevity in this arrangement. The cost structure is not known for this option and would only be determined by competitive procurement.
- The current Transit Manager has been in the position since 1996 and has significant firsthand experience in Lake County. A new contract Transit Manager would not have that community experience. During the elected official stakeholder interviews, there was some sentiment expressed that it would be desirable when a new Transit Manager is considered, that the person be part of the community.
- The current Transit Manager arrangement does not have back-up capabilities built in.

Hire Transit Manager as Full-Time Employee of Lake Transit Authority

Hiring the Transit Manager as a full-time employee of the Joint Powers Authority is the most common organizational structure for rural and small-urbanized transit systems. Under this scenario, LTA would contract with CalPERS to provide retirement and health benefits for the Transit Manager. The following are the pros and cons of this organizational option.

Pros

- Lake Transit Authority has a dedicated full-time staff person that reports directly to the LTA Board with 100% attention to LTA business.

- This option would likely attract the largest candidate pool of individuals with the skills and experience required for a Transit Manager as described above. Many potential candidates for the Transit Manager position are currently receiving CalPERS. It was the consensus of the peer Transit Managers that individuals who are currently under CalPERS are very likely going to want to stay with CalPERS in a new position.
- A full-time employee would likely live in Lake County and would be part of the community on a full-time basis.

Cons

- Assuming the Transit Manager would receive a salary in the $100,000 to $120,000 range as a full-time position, overall transit management costs would increase with a full-time salary, the CalPERS retirement and health benefit costs, vacation, holidays and sick leave. Policies on the latter would need to be established by the LTA Board.
- There is uncertainty as to whether there would be enough qualified and experienced candidates who would be willing to relocate to Lake County. It is unlikely that a local candidate living in Lake County would have the skills and experience for the Transit Manager position.
- Such an organizational structure does not provide back-up capabilities.

Scope of Work for the Lake APC Administrative and Fiscal Services Contract Includes the Transit Manager

In this organizational option, the scope of work for the Administrative and Fiscal Service contract and budget would be amended to include the Transit Manager function. In many ways, since the Executive Director of LTA is part of the Lake APC Administrative and Fiscal service contract, hiring an employee for the Transit Manager position is a logical extension of the existing organizational structure. This option would include the Transit Manager as an employee of DBC to fulfill the function of the Transit Manager

DBC has just been awarded a five-year contract for the Administrative and Fiscal service contract. The status quo option is to have the Executive Director contract with an outside entity for the Transit Manager position.

There are several California Regional Transportation Planning Agencies (RTPAs) that provide staffing for both the RTPA and the transit agency. Tuolumne County and Modoc County are two examples. In both cases, the shared staff are government employees of the RTPA Joint Powers Authority (JPA) and the Transit Agency JPA. Both have realized excellent management oversight and cost efficiencies by sharing staff. The only difference in Lake County would be that the Transit Manager would be an employee of the Lake APC contractor and not a government employee.

Pros

- Takes advantage of the existing organizational structure that was recently adopted by the Lake APC.
- Provides excellent back-up capabilities if the Transit Manager terminates the position or is unable to continue the function due to illness, disability, or death.
- A full-time employee of the Lake APC Administrative and Fiscal service contract would likely live in Lake County.

Cons

- A Transit Manager is typically involved with administrative and financial issues, but is also in charge of planning functions. Based on the January 2014 Caltrans audit, the administrative and fiscal function would be a separate contract than the Lake APC planning function in order to avoid potential conflicts of interest. It is not known whether a Transit Manager who has both administrative planning responsibilities would be viewed as conflict of interest by Caltrans if he or she is an employee of DBC, the contractor for the Lake APC Administrative and Fiscal services contract.
- While the Lake APC Administrative and Fiscal contractor offers excellent benefits, the candidate pool could be smaller with the lack of CalPERS retirement benefits.
- Since the Transit Manager would be an employee that reports to Lake APC management, there would be a loss of independence from reporting directly to the LTA Board.

County of Lake Hires Transit Manager

Lake County used to be the administrator of Lake Transit Authority. In this option Lake Transit Authority would have an agreement with the County of Lake to provide the Transit Manager. The Lake Transit Authority would continue to be the governing body. This staffing option is similar to Lassen County, who also contracts with Paratransit Services to provide contract operations. The Transit Manager is an employee of Lassen County. The Lassen County Public Works Department provides administrative staffing to both the Lassen Transit Services Agency (LTSA) and the Lassen County Transportation Commission (LCTC).

Similarly, the City of Redding has hired a Transit Manager in the Department of Public Works. The City Redding Department of Public Works provides the administrative, planning, and fiscal functions for the Redding Area Bus Authority, an independent Joint Powers Authority.

Pros

- With County benefits including CalPERS, the candidate pool is likely going to be larger than staffing options without CalPERS benefits.

Cons

- This staffing option is not consistent with the decision by the County of Lake to contract for Lake APC Administrative and Fiscal Services. In both the Lassen and City of Redding examples, the Executive Director is the Department of Public Works Director. In Lake County, the Executive Director of LTA is the Principal of DBC.
- Based on experiences and evaluation of cost structures of both the City of Redding and Nevada County, the overall cost of providing the Transit Manager as a County employee is likely to be significantly more expensive than the status quo or other staffing options.

There are other potential hybrid combinations of one or more options above. One possible hybrid alternative would where the Transit Manager is a separate contractor, but has some staff that is with the APC administration. This might help to maintain the separation of planning and administration.

11. Financial Plan

The financial plan provides details on the operating and capital costs and revenues from FY 2015/16 to FY 2019/20, based on the discussion and service level priorities recommended in the previous chapters. The financial plan is founded both on known facts and projections based on historical precedence. There is a great deal of uncertainty facing public transportation financing. Three financial scenarios were developed to provide the possible potential outcomes, particularly for operating revenues.

The chapter is divided into six sections:

- Operating Revenue Funds, Scenario Assumptions and Scenario Outcomes
- Baseline Operating Costs
- Estimated Cost of Service Plan Improvements
- Financial Scenario Outcomes: Service Level Adjustments
- Capital Costs
- Capital Revenues

Operating Revenue Funds and Scenario Assumptions by Financial Scenario

Scenario Overview

Three potential scenarios bracket the potential availability of operating revenues:

Pessimistic Scenario: The assumptions utilized in the pessimistic scenario are as the name implies. The assumptions are not the worst-case scenario, but provide a reasonable lower end bracket for operating revenues.

Best Estimate Scenario: The best estimate scenario would maximize the use of transit funding sources to achieve the highest potential transit service levels in Lake County. The best estimate scenario implies the utilization of assumptions based on currently available information or historical precedent.

Maximum Funding Scenario: The maximum funding scenario assumes that federal, state and LTF funding assumptions turn out to be better than expected.

Farebox Revenues

Ridership on Lake Transit declined from 395,013 in FY 2011/12 to 294,761 in FY 2013/14. Despite the fare increase, the decrease in ridership has meant that fare revenues have declined from $558,762 in FY 2011/12 to $512,638 in FY 2013/14 and are expected to increase to $555,000 based on the first quarter of 2014/15 results.

Pessimistic Scenario: The fare structure remains the same and ridership levels remain flat or decline. The FY 2013/14 average fare would be utilized. Under this scenario, the farebox recovery ratio would continue to decline.

Best Estimate Scenario: The first quarter FY 2014/15 fare revenue statistics as base fare revenues are utilized for best estimate scenario.

Maximum Funding Scenario: Increased ridership would be realized based on improved service levels to achieve 80% of target farebox recovery requirements.

A hybrid farebox revenue scenario would be to lower fares in hopes of finding the optimal balance of ridership and fares. The price elasticity of demand is typically not great for very income ridership similar to Lake Transit, so the revenue impact could be negative. However, the revenue impact would not be know unless fares were lowered.

Local Transportation Funds (LTF)

LTF funds are derived from ¼ cent of the sales tax. LTF revenues are therefore dependent on the sales tax revenues generated in the Lake County economy. Total LTF funds received in Lake County declined from $1.49 million in FY 2006/07 to approximately $1.15 million at the height of the Great Recession in FY 2009/10 when sales tax revenues overall declined. Since 2009/10, total LTF revenues have increased slowly back to $1.38 million, but are still below FY 2006/07 levels.

Like other RTPAs, administration, bicycle and pedestrian, and CTSA allocations are taken off the top by the Lake County/City Area Planning Council (Lake APC) before the allocation is made to Lake Transit Authority. In addition, the Lake APC also utilizes LTF for planning purposes, which has ranged from $50,000 to $254,000 per year over the past 8 fiscal years. No LTF monies are utilized for streets and road purposes.

At the low point of LTF funds in FY 2009/10, LTA received $977,096 in LTF funding, or 85% of the total.

Pessimistic Scenario: Over the next five years, there is another recession and sales tax revenues decline, but not as sharply as during the Great Recession. In this scenario, LTF funds would drop to 2011/12 levels in FY 2015/16 and increase just 2% per year thereafter.

In this scenario, all APC administrative costs, bicycle allocations and 5% for CTSA are taken off the top before an allocation to LTA is made.

Best Estimate Scenario: In this scenario, LTF continues to grow at an average of 3% per year, slightly below the 4% average rate of growth in LTF funds over the past five fiscal years. In this scenario, APC costs do not include the Program Manager which reduces administrative costs off the top by about $28,000 per year. Bicycle and CTSA allocations continue to be taken off the top.

Maximum Funding Scenario: In this scenario, LTF funds grow at a rate of 5%, exceeding by 1% the average 4% growth rate in LTF funds over the past five years. In this scenario, 75% of the APC Administrative Costs come off the top and there are no bicycle allocations.

State Transit Assistance (STA) Funds

While STA funding had been on a roller coaster ride for several years prior to 2010, the gas tax swap in March 2010 and subsequent legislation guaranteed the STA share of the Public Transportation Account to be 50 percent of sales tax on diesel fuel revenues. Proposition 22 restricted the use of the fuel excise tax for transportation purposes. Importantly it also prohibited borrowing from the fuel excise tax revenues. This seems to have had a reasonable stabilizing effect on STA funds the past four fiscal years compared to the volatility of the previous four years. Lake Transit budgeted $355,974 in FY 2010/11, and STA funding has fluctuated from a low of $294,916 in FY 2011/12 to a high of $379,249 in FY 2012/13.

Pessimistic Scenario: Sales tax revenues on diesel fuel, the source of STA funds, decline and STA funding declines to the Lake Transit FY 2011/12 levels ($294,916) by FY 2016/17 and decline by 2% per year thereafter. Due to the sunset of PTMISEA, STA funds are utilized for vehicle replacements of non-FTA 5311 (f) vehicles and not for operating purposes.

Best estimate scenario: STA funds received utilize the FY 2013/14 actual as a base and increase at 3% per year. In this scenario, STA funds are only utilized for capital as a source of last resort, if vehicle replacements are not possible with FTA 5311 (f) or STIP funding.

Maximum Funding Scenario: STA funds utilize increase at 5% per year, utilizing FY 2013/14 actuals as base.

Federal Transit Administration 5311

Section 5311 is a non-urbanized area formula funding program. This federal grant program provides funding for public transit in non-urbanized areas with a population fewer than 50,000 as designated by the Bureau of the Census. FTA apportions funds to states for rural areas and Caltrans administers the funds in California. This operating assistance allows for a maximum of 55.33% federal share. FTA 5311 funds can be utilized for either operating or capital purposes.

In FY 2010/11 and FY 2011/12, the Caltrans Standard Agreement was for $239,588 in FTA 5311 funds. In FY 2012/13, the original regional apportionment was $240,056 and then increased by a budget amendment by $184,864 for a total budgeted amount of $424,920. In FY 2013/14, $434,526 in FTA 5311 funds was utilized by Lake Transit.

Pessimistic Scenario: With the new Congress and federal budget authorizations, FTA 5311 funds are reduced by 30% based on the pre-Map 21 House-led reauthorization bill proposal. It assumes decline of the federal operating commitment for transit.

Best Estimate Scenario: FTA 5311 funding is continued at historic levels back to FY 2012/13 original apportionments of $240,056. The revenue spike in FTA 5311 funding is not continued. FTA 5311 funds increase at 3% per year on the FY 2012/13 base.

Maximum Funding Scenario: Federal funding is continued at historical levels over the past 10 years, and there is a 10% increase from the base funding when federal funding is reauthorized based on historic precedent. Historically, there has been a 15% jump in federal funding for transit when a 6-year authorization bill has been passed, but the assumption of 10% is utilized here.

Federal Transit Administration 5311 (f)

The purpose of FTA 5311 (f) funding is to provide supplemental financial support for rural intercity transportation services. Caltrans administers FTA 5311 (f) funds. The current guidelines adopted in California have a criterion of intercity services that have a one-way route length of 50 miles or more. However, the federal authorizing legislation does not have such a stipulation and emphasizes "program goals of providing a 'meaningful connection' to the national intercity bus network." Lake Transit provides these meaningful connections in Ukiah in Mendocino County and Calistoga in Napa County.

FTA 5311 (f) is grant based funding for both operating and capital purposes. Lake Transit has successfully applied for both operating and capital purposes. The following are a list of recent grants:

- FTA 5311 (f) operating assistance from January 1 to December 31, 2009 for $191,738, 55.53% of the total project cost of $346,536.
- FTA 5311 (f) operating assistance between January 1, 2010 and December 31, 2012 for $415,614, 55.53% of the $751,158 total two-year cost.
- FTA 5311 (f) operating assistance for $375,322, 55.53% of the total project cost of $678,137 for the period between January 1, 2012 to June 30, 2013.
- FTA 5311(f) operating assistance in FY 2013/14 was $300,000 on total expenditures of $575,330 or 52.14%.

For "new" services, Caltrans has provided Toll Credits for local match. Lake Transit Authority has not been able to utilize the Toll Credits since the FTA 5311 (f) grants because Lake Transit has reached the maximum FTA 5311(f) amount of $300,000.

Pessimistic Scenario: The maximum FTA 5311 (f) project amount is reduced from $300,000 to $250,000.

Best Estimate Scenario: Lake Transit continues to receive historic levels of FTA 5311 (f) funding. Lake Transit is also able to receive FTA 5311 (f) capital grants to replace the FTA 5311 (f) service buses.

Maximum Funding Scenario: Lake Transit provides splits the existing single FTA 5311(f) application for routes 3/4/7 into two applications for routes 1/3 and 4/7 qualifies for Toll Credits for local match. In this scenario one additional FTA 5311 (f) application is successful for up to $300,000 additional funding per year to $600,00 total for operating purposes, and assumes Toll Credits continue for local match.

Operating Revenues

Figure 11-1 provides the operating revenue range outcomes for the scenarios described above. In FY 2015/16, the first year of the TDP planning horizon, the best estimate scenario is that there will be $2.9 million in operating funds available for Lake Transit. Based on the analysis on operating costs discussed in detail below, this would provide funding for 42,000 vehicle service hours. The best estimate is that once service reductions are made and fully realized in FY 2016/17, operating revenues would slightly increase and vehicle service hours would remain flat at approximately 41,500.

Figure 11-1 Revenue Scenario Summary

	FY 2014/15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
	Projected	Projected	Projected	Projected	Projected	Projected
1. Fares						
Pessimistic		$ 513,619	$ 506,239	$ 498,969	$ 491,808	$ 484,755
Best Estimate	$ 555,299	$ 551,738	$ 554,112	$ 562,405	$ 577,041	$ 592,072
Maximum Funding		$ 594,947	$ 699,660	$ 856,157	$ 936,490	$ 1,022,854
2. Partnershps						
Pessimistic		$ 69,031	$ 73,235	$ 75,432	$ 77,695	$ 80,026
Best Estimate	$ 71,102	$ 71,102	$ 73,235	$ 75,432	$ 77,695	$ 80,026
Maximum Funding		$ 96,747	$ 146,584	$ 196,664	$ 231,997	$ 267,597
3. Local/State						
Pessimistic		$ 926,095	$ 953,496	$ 975,813	$ 998,378	$ 1,021,410
Best Estimate	$ 1,373,756	$ 1,505,339	$ 1,556,015	$ 1,608,071	$ 1,661,529	$ 1,716,656
Maximum Funding		$ 1,783,083	$ 1,876,150	$ 1,973,841	$ 2,076,385	$ 2,184,078
4. Federal						
Pessimistic		$ 540,056	$ 385,858	$ 393,275	$ 400,916	$ 408,785
Best Estimate	$ 885,667	$ 731,944	$ 674,862	$ 686,108	$ 697,691	$ 709,622
Maximum Funding		$ 771,424	$ 937,496	$ 954,370	$ 972,089	$ 990,693
5. Total Operating Funds						
Pessimistic		$ 2,048,801	$ 1,918,828	$ 1,943,490	$ 1,968,797	$ 1,994,976
Best Estimate	$ 2,885,824	$ 2,860,122	$ 2,858,224	$ 2,932,016	$ 3,013,957	$ 3,098,376
Maximum Funding		$ 3,246,201	$ 3,659,890	$ 3,981,032	$ 4,216,960	$ 4,465,222

For the purposes of the Transit Development Plan, the best estimate scenario is the financial scenario with known available financial resources. However, Lake Transit should work to achieve the maximum funding scenario in a sustainable manner. In Chapter 6, one option would provide an additional $300,000 FTA 5311 (f) funding by separating the FTA 5311 (f) applications into one application for Routes 4 and 7 and a second application for Routes 1 and 3. If successful, this could mean an additional $300,000 in available revenue and could enable significantly more vehicle revenue hours. In practical terms it could offset the impact of the discontinuation of the JARC grant funding at the end of FY 2014/15. Likewise, a Yuba College Fee program could provide additional funding to support the service improvements made during the phased implementation of the JARC grant. In FY 2017/18, the maximum funding scenario would enable over 12,000 additional vehicle service hours than the best estimate scenario. The 12,000 additional vehicle service hours assumes additional FTA 5311(f) funding, approval of a Yuba College Student fee program, Medi-Cal funding, and increased TDA funding. While all of the additional revenue may not be feasible and sustainable, it does point to the importance of working towards securing funding from as many of these potential revenue sources as possible over the next five years.

Best Estimate Funding Scenario

Figure 11-2 is the best estimate of available revenues based on what is known at the beginning of 2015. Fares are estimated based on first quarter 2014/15 ridership figures. Other revenues are based on currently available information and are inflated based on assumptions described above.

In the best estimate scenario, based on the assumptions described above, after the JARC grant ends in FY 2014/15, total available revenues would be approximately $2.9 million. The largest funding source would come from the Local Transportation Fund, the ¼ cents sales tax with almost $1.07 million in funding. Without the JARC grant, federal funding for operating purposes would decline to $675,000 in FY 2016/17.

Maximum Funding Scenario

Figure 11-3 provides a breakdown of estimated revenues for the Maximum Funding Financial scenario. The scenario increases available Lake Transit operating revenues from $3.25 million in FY 2015/16 to $4.5 million annual operating revenues in FY 2019-20. The primary increases in operating revenues are due the following successful efforts:

1. In FY 2016/17, funding from FTA 5311(f) and Toll Credits increase from $300,000 to $600,000 based on two separate applications from Routes 4 and 7 and Routes 1 and 3.

2. Partnership funding is successful for both Medi-Cal funding and the Yuba College Student fee program. If the recommended pilot program is successful and the Yuba College student body approves a to-be-determined student fee increase, the funds would be utilized to match available Cap and Trade funding from the Low Carbon Transit Operations Program (LCTOP). Partnership funding increases from $96,247 in FY 2015-16 to $267,597 in FY 2019/20. However, it should be stressed that the both the Yuba College student fee program and Medi-Cal funding are rough estimates, and would need to be refined with more detailed implementation planning.

3. Significantly more Local Transportation Funds are available for Lake Transit. This is based on a 4% growth rate of LTF funds, and a significant reduction in the “off the top” monies that are currently taken by Lake APC and assumes, for example, no bicycle funding allocations from LTF funds.

Figure 11-2 Best Estimate Operating Revenue Breakdown

Best Estimate Revenues	FY 15-16 Projected	FY 16-17 Projected	FY 17-18 Projected	FY 18-19 Projected	FY 19-20 Projected
1. Passenger Fares					
Fixed Route Fares	$ 526,782	$ 526,196	$ 539,351	$ 552,835	$ 566,656
DAR Fares	$ 24,956	$ 27,915	$ 23,053	$ 24,206	$ 25,416
Subtotal, Fares	$ 551,738	$ 554,112	$ 562,405	$ 577,041	$ 592,072
2. Partnerships					
Article 4.5 CTSA	$ 71,102	$ 73,235	$ 75,432	$ 77,695	$ 80,026
Medi- Cal Funding		$ -	$ -	$ -	$ -
Yuba College Student Fee Program	$ -	$ -	$ -	$ -	$ -
Subtotal, Partnerships	$ 71,102	$ 73,235	$ 75,432	$ 77,695	$ 80,026
3. Local/ State					
Local Transportation Fund (LTF)	$ 1,068,772	$ 1,108,101	$ 1,148,475	$ 1,189,906	$ 1,232,652
State Transit Assistance	$ 357,858	$ 368,594	$ 379,652	$ 391,041	$ 402,772
Cap and Trade	$ 23,109	$ 23,109	$ 23,109	$ 23,109	$ 23,109
Reimbursement from APC	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000
Advertising Revenue	$ 30,600	$ 31,212	$ 31,836	$ 32,473	$ 33,122
Subtotal, Local and State	$ 1,505,339	$ 1,556,015	$ 1,608,071	$ 1,661,529	$ 1,716,656
4. Federal					
FTA 5311	$ 363,944	$ 374,862	$ 386,108	$ 397,691	$ 409,622
FTA 5311(f)	$300,000	$300,000	$300,000	$300,000	$300,000
FTA 5316/JARC					
FTA 5317	$ 68,000				
Subtotal, Federal	$ 731,944	$ 674,862	$ 686,108	$ 697,691	$ 709,622
5. Total	$ 2,860,122	$ 2,858,224	$ 2,932,016	$ 3,013,957	$ 3,098,376

Figure 11-3 Maximum Funding Scenario Revenue Breakdown

Maximum Operating Revenues	FY 15-16 Projected	FY 16-17 Projected	FY 17-18 Projected	FY 18-19 Projected	FY 19-20 Projected
1. Passenger Fares					
Fixed Route Fares	$ 572,933	$ 677,913	$ 833,137	$ 911,357	$ 996,250
DAR Fares	$ 22,014	$ 21,747	$ 23,020	$ 25,133	$ 26,604
Subtotal, Fares	$ 594,947	$ 699,660	$ 856,157	$ 936,490	$ 1,022,854
2. Partnerships					
Article 4.5 CTSA	$ 72,483	$ 76,107	$ 79,912	$ 83,908	$ 88,103
Med-iCal Funding		$ 45,000	$ 90,000	$ 120,000	$ 150,000
Yuba College Student Fee Match	$ 24,264	$ 25,478	$ 26,752	$ 28,089	$ 29,494
Subtotal, Partnerships	$ 96,747	$ 146,584	$ 196,664	$ 231,997	$ 267,597
3. Local/ State					
Local Transportation Fund (LTF)	1,337,512	1,409,550	1,485,161	1,564,521	1,647,871
State Transit Assistance	$ 364,807	$ 383,047	$ 402,199	$ 422,309	$ 443,425
Cap and Trade	$ 24,264	$ 25,478	$ 26,752	$ 28,089	$ 29,494
Reimbursement from APC	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000
Advertising Revenue	$ 31,500	$ 33,075	$ 34,729	$ 36,465	$ 38,288
Subtotal, Local and State	$ 1,783,083	$ 1,876,150	$ 1,973,841	$ 2,076,385	$ 2,184,078
4. Federal					
FTA 5311	$ 321,424	$ 337,496	$ 354,370	$ 372,089	$ 390,693
FTA 5311(f)/Toll Credits	$450,000	$600,000	$600,000	$600,000	$600,000
FTA 5316 JARC/Toll Credits					
Subtotal, Federal	$ 771,424	$ 937,496	$ 954,370	$ 972,089	$ 990,693
5. Total	$ 3,246,201	$ 3,659,890	$ 3,981,032	$ 4,216,960	$ 4,465,222

Service Supply

The best estimate and maximum funding scenario service supply are shown year by year over the next five years in subsequent sections. The potential service supply in vehicle service hours available under each funding scenario are significantly different. As discussed above, it is very important for Lake Transit to aggressively pursue additional operating revenues beyond the JARC grant funding, or many of the service expansions implemented would need to be significantly reduced.

Best Estimate Scenario

The available vehicle service hours in the best estimate scenario by route are shown below in Figure 11-4.

Figure 11-4 Service Supply Route by Route and Plan Year

Vehicle Service Hours	**FY 14-15**	**FY 15-16**	**FY 16-17**	**FY 17-18**	**FY 18-19**	**FY 19-20**
Best Estimate Scenario	**Projected**	**Projected**	**Projected**	**Projected**	**Projected**	**Projected**
Local						
Clearlake						
Route 5	957	619	506	506	506	506
Route 10	3,980	3,980	3,980	3,980	3,980	3,980
Route 11	3,969	3,969	3,969	3,969	3,969	3,969
Route 12	4,369	3,341	2,998	2,998	2,998	2,998
Lakeport						
Route 8	3,150	3,052	3,020	3,020	3,020	3,020
Regional Route						
Route 1	7,592	6,682	6,378	6,378	6,378	6,378
Rural Routes (2 and 4A)						
Route 2	1,698	1,698	1,698	1,698	1,698	1,698
Route 4A	1,466	1,466	1,466	1,466	1,466	1,466
Intercity Routes						
Route 3	3,633	3,633	3,633	3,633	3,633	3,633
Route 4	4,522	4,143	4,016	4,016	4,016	4,016
Route 7	3,449	3,449	3,449	3,449	3,449	3,449
Dial-A-Ride (Clearlake and Lakeport)						
Clearklake DAR	4,196	3,498	2,798	2,798	2,798	2,798
Lakeport DAR	3,460	2,596	2,308	2,308	2,308	2,308
Nite Rider	781	0	0	0	0	0
Fixed Route Total	38,784	36,031	35,113	35,113	35,113	35,113
Dial-A-Ride Total	8,436	6,094	6,492	5,106	5,106	5,106
Grand Total	47,221	42,125	41,605	40,219	40,219	40,219
619	Change in vehicle service hours from previous year					

FY 2015/16

Service reductions are required in FY 2015/16 and Figure 11-4 assumes the following service reductions:

- Route 5 cuts the last two runs of the evening, ending service at 9 pm
- Elimination of Route 12 evening service after 9 pm
- Elimination of Route 12 Saturday service
- Elimination of Nite Rider service
- Reduction of Clearlake Dial-A-Ride service to ADA Paratransit and seniors 65 and older
- Reduction of Lakeport Dial-A-Ride service to ADA Paratransit and seniors 65 and older
- Reduction of Route 1 and 8 late evening runs, eliminating the last two runs in each direction

- Reduction of a deadheading run on Route 4

It is assumes that service reductions would occur in late August 2015.

FY 2016/17

The service hour reductions in FY 2016/17 reflect a full calendar year of service reductions implemented in August 2015.

The best estimate service supply is based on the best estimate funding revenues presented earlier. Currently known available resources allow Lake Transit to sustain the service supply levels of FY 2016/17 through FY 2019/20.

Maximum Funding Scenario Service Supply

The Maximum Funding Scenario provides additional funding based on assumptions of increased LTF funding, a doubling of FTA 5311 (f) funding based on separate applications for Routes 4 and 7 and Routes 1 and 3, as well as additional Medi-Cal funding and matching funds from Yuba College.

Figure 11-5 shows that Lake Transit can sustain expanded and evening services in Clearlake, North Shore, and Lakeport, including the implementation of the Lakeport circulator route described in Chapter 5, if approximately 50% of the additional funding from the Maximum Funding Scenario is realized.

Figure 11-5 Maximum Funding Scenario Service Supply

Maximum Funding Vehicle Service Hours	FY 14-15 Projected	FY 15-16 Projected	FY 16-17 Projected	FY 17-18 Projected	FY 18-19 Projected	FY 19-20 Projected
Clearlake Local Routes						
Route 5	957	820	820	820	820	820
Route 10	3,980	3,980	4,388	5,265	5,265	5,265
Route 11	3,969	3,969	4,377	5,253	5,253	5,253
Route 12	4,369	3,341	3,341	3,341	3,341	3,341
Route 8	3,150	3,052		-	-	-
Lakeport Local Route			2,657	3,065	3,065	3,065
Regional Route		-				
Route 1	7,592	6,682	12,132	12,132	12,132	12,132
Rural Routes		-				
Route 2	1,698	1,698	1,698	1,698	2,547	2,547
Route 4A	1,466	1,466	1,466	1,466	2,198	2,198
Intercity Routes		-				
Route 3	3,633	3,633	4,092	4,092	4,092	4,092
Route 4	4,522	4,143	4,551	4,551	4,551	4,551
Route 7	3,449	3,449	3,908	3,908	3,908	3,908
Dial-A-Ride		-				
Clearklake DAR	4,196	3,498	2,798	2,798	2,798	2,798
Lakeport DAR	3,460	2,596	2,308	2,308	2,308	2,308
Expanded Sunday DAR			408	408	408	408
Nite Rider	781	-	-	-	-	-
NEMT			571	650	700	750
Fixed Route Total	38,784	36,232	43,429	45,590	47,171	47,171
Dial-A-Ride Total	8,436	6,094	5,514	5,514	5,514	5,514
Grand Total	47,221	42,326	48,943	51,104	52,685	52,685

FY 2015/16

A number of the efficiency measures implemented in the best estimate service supply are carried forward in the maximum supply funding scenario. These include:

- Elimination of Route 12 evening service
- Elimination of Route 12 Saturday service
- Elimination of Nite Rider service
- Reduction of Clearlake Dial-A-Ride service to ADA Paratransit and seniors 65 and older
- Reduction of Lakeport Dial-A-Ride service to ADA Paratransit and seniors 65 and older
- Reduction of a deadheading run on Route 4

In this scenario, only the last Route 5 run is eliminated, and Routes 1/8 are allowed to continue to operate as implemented in January 2015.

Route 12 Saturday service is eliminated as Routes 10 and 11 have adequate coverage on Saturdays. Route 12 ridership on Saturdays was a total of 28 compared to 82 and 88 for Routes 10 and 11.

Route 12 evening service is eliminated and Route 5 would become a Flex Route with 3 evening runs instead of 4 in order to enable the flex stops. This eliminates the need for ADA Paratransit service in Clearlake during the evenings.

FY 2016/17

This scenario assumes that the separate applications for Route 1/3 and Routes 4/7 are approved. Route 1 is continued from Upper Lake to Konocti Vista Casino as a single route. Route 8 is replaced by a single local route circulator in Lakeport. Details for Route 1 are provided in Chapter 5 and the Lakeport circulator route in Chapter 4.

This scenario assumes that Medi-Cal NEMT service is implemented and expanded each fiscal year thereafter.

In the Maximum Funding Scenario, the additional revenue sources enable the implementation of Sunday service on all routes except Routes 12, 2 and 4A. Sunday service was the most important service level improvement desired by passengers from the onboard survey. The Maximum Funding Scenario enables Sunday service to be implemented in FY 2016/17.

FY 2017/18

In response to approval of the Yuba College Student Fee match, supplemental service is implemented to improve peak period frequencies on Routes 10 and 11.

FY 2018/19

Service levels on Routes 2 and 4A are expanded by 50%.

Operating Expenditures

Baseline Operating Costs

The baseline operating costs are Lake Transit's operating expenditures if vehicle service hours and vehicle service miles remain constant between FY 2015/16 and FY 2019/20. There are four categories of cost listed in descending order:

- Operations and Maintenance Contract
- Fuel
- Transit Management Contract
- Other Costs

The Operations and Maintenance contract is by far the largest expense item for Lake Transit. In FY 2013/14, the contract with Paratransit Services was approximately $1.9 million. The contract at this writing currently terminates on June 30, 2015, but efforts are underway to extend the contract for one additional year.

This will be a competitive procurement and the procurement process will determine the actual increase in both fixed costs (monthly management fee) and variable costs (mostly driver costs). The baseline operating costs assume that fixed costs increase at 2% per year and variable costs increase at 3% per year. With these assumptions, the baseline operating costs with the same vehicle service hours and vehicle service miles would increase from $1.9 million in FY 2013/14 to about $2.4 million in FY 2019/20. Factors that could increase costs beyond the assumed percentage are increases in wages or benefits beyond the assumed 2-3% level. The minimum wage in California increases to $10 in FY 2015/16, but this is not expected to have a significant impact on Lake Transit costs. Health care costs could have more of an impact, but this will depend on the health care benefits proposed in the operations and maintenance procurement process.

Fuel costs have been on a roller coaster ride in the past several years. Gasoline costs in particular have spiked high but are now relatively low compared to several years ago. The average fuel cost per vehicle service mile over the past four fiscal years was $0.57 per mile, with a low of $0.52 in FY 2012/13 and a high of $0.66 per vehicle service mile in FY 2013/14. The average over the past four years has been $0.57. It is assumed that gasoline prices over the five year period utilize the average of $0.57 and are inflated at 5% per year over a five year period.

The contract for the Transit Manager is $134,998 in FY 2014/15 and is assumed to inflate at 3% per year. Chapter 10 is a detailed discussion of Transit Management considerations, including succession planning and organizational alternatives.

Best Estimate Operating Costs FY 2015/16 to FY 2019/20

Figure 11-6 is the project operating cost per vehicle service hour based on the best estimate of vehicle service hours and miles discussed in service supply above. Overall operating costs are anticipated to increase from $2.94 million in FY 2015/16 to $3.23million in FY 2019-20.

The operations and maintenance represents about 70% of the total operating costs. The operations and maintenance contract, based on known factors today, is expected to increase from $2.07 million in FY 2015/16 to $2.23 million in FY 2019/20.

It should be noted that the increases for service improvements that require both additional vehicle service hours and vehicle service miles are estimated based on the marginal costs of the improvements or reductions in service. Fixed costs include maintenance costs, and extensive increases or decreases in vehicle service miles would require an adjustment to the fixed costs in operations and maintenance. However, since vehicle service hours and vehicle service miles

actually decline over the five years of the Best Estimate Financial Scenario, fixed costs are only increased by the projected California CPI.

Fuel projections may need to be revised after the recommendations from the Energy Use Reduction Plan are considered and adopted. Fuel costs are based on the average over the past four years for 2015/16 and then inflated at 5% per year.

Figure 11-6 Best Estimate Scenario Operating Costs: FY 2015-16 to FY 2019-20

Best Estimate Operating Costs	FY 15-16 Projected	FY 16-17 Projected	FY 17-18 Projected	FY 18-19 Projected	FY 19-20 Projected
Ops/Maintenance Contract	$ 2,068,762	$ 2,107,457	$ 2,125,149	$ 2,177,668	$ 2,231,538
LTA Administration Contract	$ 139,048	$ 143,219	$ 147,516	$ 151,941	$ 156,500
Fuel	$ 527,392	$ 546,927	$ 555,143	$ 582,900	$ 612,045
Marketing/Printing	$ 28,977	$ 29,581	$ 30,202	$ 30,840	$ 31,495
Professional Services	$ 6,695	$ 6,896	$ 7,103	$ 7,316	$ 7,535
Mobility Management	$ 68,000	$ 70,040	$ 72,141	$ 74,305	$ 76,535
Utilities	$ 18,025	$ 18,566	$ 19,123	$ 19,696	$ 20,287
Facilities Maintenance	$ 7,210	$ 7,426	$ 7,649	$ 7,879	$ 8,115
Security Services	$ 61,800	$ 63,654	$ 65,564	$ 67,531	$ 69,556
Non-vehicle insurance	$ 15,450	$ 15,914	$ 16,391	$ 16,883	$ 17,389
Total	**2,941,359**	**3,009,680**	**3,045,980**	**3,136,958**	**3,230,994**

Capital Expenditures

Capital expenditures for Lake Transit over the next five years can be categorized into four main categories:

- Vehicle Procurement
- Passenger Amenities
- Equipment and Security
- Clearlake Transit Center

Vehicle Procurement

Figure 11-7 is the fleet inventory and includes the make, model, year, seating capacity, vehicle replacement year, October 2014 mileage and annual mileage accumulation between October 2013 and 2014. In general, the Dial-A-Ride cutaway buses are typically listed as an ambulatory capacity of 17 or less and have a useful life of 5 years or 150,000 miles, whichever comes first. The larger vehicles are typically vehicles with a useful life of 7 years or 200,000 miles, whichever comes first. However, it's not unusual for these vehicles to be in service for 8 or 9 years and more than 250,000 miles.

The Energy Use Reduction Plan will likely have recommendations that will change the makeup of the Lake Transit's fleet. The recommendations from that study effort will not be available until

after the adoption of the Transit Development Plan. In the meantime, it is assumed that buses are replaced with the same type of vehicle.

Figure 11-8 is the interim bus replacement schedule until the Energy Use Reduction Plan is complete. This figure will be need to be amended to incorporate the recommendations of the new fleet recommendations. A total of 22 buses would be replaced between FY 2014/15 and FY 2018/19.

Figure 11-7 Fleet Roster

Bus #	Model	Chassis	Year	Ambulatory Capacity	Wheel-chair Capacity	Fuel	Original Source of Funding	Scheduled Replacement Date	October 2014 Mileage	Annual miles Accumulation
0801	Eldorado Elite	Chevrolet	2008	28	2	Gasoline	5311(f)	2012/13	215,129	9,349
0802	Eldorado MST II	Cummins FRT	2008	30	2	Diesel	PTMISEA	2014/15	170,240	12,036
0803	Eldorado MST II	Cummins FRT	2008	30	2	Diesel	PTMISEA	2014/15	168,805	18,349
0901	Eldorado Aerotech	Ford	2009	16	2	Gasoline	PTMISEA	2013/14	185,729	10,307
0902	Eldorado Aerotech	Ford	2009	16	2	Gasoline	PTMISEA	2013/14	178,065	12,524
0501	Optima Opus	Optima	2005	27	2	Diesel	5311(f)	2014/15	167,585	5,345
0502	Optima Opus	Cummins	2005	27	2	Diesel	5311(f)	2014/15	162,288	48
1001	Glaval Titan	GM 5500	2010	29	2	Diesel	PTMISEA	2016/17	250,083	42,148
1002	Glaval Titan	GM 5500	2010	29	2	Diesel	5311(f)	2016/17	227,779	37,546
1003	Glaval Titan	GM 5500	2010	29	2	Diesel	5311(f)	2016/17	213,778	40,201
1004	Glaval Titan	GM 5500	2010	29	2	Diesel	5311(f)	2016/17	202,067	39,952
1005	Glaval Titan	GM 5500	2010	29	2	Diesel	5311(f)	2016/17	161,901	34,459
1006	Eldorado Aerotech	Ford	2010	17	3	Gasoline	ARRA	2016/17	114,552	11,238
1007	Eldorado Aerotech	Ford	2010	17	3	Gasoline	ARRA	2016/17	111,111	13,894
1008	Eldorado Aerotech	Ford	2010	17	3	Gasoline	ARRA	2016/17	122,873	13,342
1101	Glaval Entourage	Ford	2010	28	2	Gasoline	STIP	2016/17	191,451	53,694
1102	Glaval Entourage	Ford	2010	28	2	Gasoline	STIP	2016/17	188,314	53,168
1103	Glaval Entourage	Ford	2010	28	2	Gasoline	STIP	2016/17	192,626	47,295
1104	Glaval Universal	Ford	2011	18	2	Gasoline	STIP	2017/18	176,995	47,150
1105	Glaval Universal	Ford	2011	18	2	Gasoline	PTMISEA	2017/18	210,828	43,809
1106	Glaval Universal	Ford	2011	18	2	Gasoline	STIP	2017/18	204,057	45,153
1107	Glaval Universal	Ford	2011	18	2	Gasoline	STIP	2017/18	195,288	55,856
1108	Glaval Universal	Ford	2011	18	2	Gasoline	TDA	2017/18	207,084	55,051
1301	Glaval Universal -190	Ford	2013	18	2	Gasoline	PTMISEA	2019/20	95,474	69,630
1302	Glaval Universal -190	Ford	2013	18	2	Gasoline	PTMISEA	2019/20	106,849	83,575
1303	Glaval Universal -158	Ford	2013	12	4	Gasoline	PTMISEA	2019/20	29,713	17,576
1304	Glaval Legacy 37'	Cummins FRT	2013	32	2	Diesel	5311(f)	2019/20	52,067	45,070
1401	Glaval Titan II	Chevrolet	2014	16	2	Diesel	STIP	2020/21	37,630	N/A
1402	Glaval Legacy 32'	Cummins FRT	2014	27	3	Diesel	STIP	2020/21	14,077	N/A
1403	Glaval Legacy 32'	Cummins FRT	2014	27	3	Diesel	STIP	2020/21	17,749	N/A
1404	Glaval Legacy 32'	Cummins FRT	2014	27	3	Diesel	STIP	2020/21	9,352	N/A
1405	Glaval Legacy 32'	Cummins FRT	2014	27	3	Diesel	STIP	2020/21	5,484	N/A

Figure 11-8 Fleet Replacement Plan

Order Years (Number)	Service Type	Length	Ambulatory Seating	Wheelchair Stations	Luggage?	Fuel Type	Caltrans Vehicle Class	Vehicle (s) Replacing	Delivery Year
FY 2014/15									
Two	FTA 5311 (f)	35'	30	2	Yes	Diesel	Class E	501, 801	FY 2015/16
FY 2015/16									
Two	FTA 5311 (f)	35'	30	2	Yes	Diesel	Class E	1002-1003	FY 2016/17
Three	Dial-A-Ride	25'	17	3	No	Gas	Class C	1006-08	FY 2015/16
Four	Regional/Local	32'	28	2	No	Gas	Class E	1001, 1101-1103	FY 2016/17
FY 2016/17									
Two	FTA 5311 (f)	35'	30	2	Yes	Diesel	Class E	1004-1005	FY 2016/17
Five	Regional/Local	27'	18	2	No	Gas	Class E	1104-1108	FY 2017/18
FY 2018/19									
One	FTA 5311 (f)	35'	30	2	Yes	Diesel	Class E	1304	FY 2019/20
One	Dial-A-Ride	21-25	12	4	No	Gas	Class C	1303	FY 2019/20
Two	Regional/Local	27'	18	2	No	Gas	Class E	1301-1302	FY 2019/20

Passenger Amenities

Improvements to bus stop amenities, including signage, information, benches and shelters was one of the top two recommendations from passengers in making improvements to Lake Transit. Basic signage of the bus stops and lack of amenities was a prevalent topic during interviews with key stakeholders.

A site visit was undertaken on Routes 1 and 8 to provide input to the locations of bus stops, and the amenities required for each stop. Unfortunately, boarding activity and on and off counts were not available at the stop level and were only estimated in the February 2014 sample counts at scheduled timepoints. This is not sufficient to make informed recommendations on passenger amenities.

Observations along Route 1 in particular provided insight into the complexities of making bus stop recommendations. In many cases, drainage canals and state highway right of way issues need to be addressed to determine if a bus stop can be upgraded to ADA Paratransit standards. Lake Transit's experience with the upgrade of the bus stop at People Services is indicative of the complexities and costs of such improvements.

The partnership and capital improvements required for the bus stop improvement at St. Helena Hospital is another example of the complexities of the issues involved. In general, Lake Transit should be responsible for upgrades to the bus stop location itself, and property owners and/or the jurisdiction owning the right of way should be responsible for accessible pathways to and from the bus stop.

It is recommended in FY 2015/16 that Lake Transit undertake a comprehensive study of bus stop improvements and retain the services of a firm that would include a licensed traffic engineer and licensed civil engineer to provide sound recommendations on the priority improvements to bus stops, recommended amenities and their respective costs. Data from RouteMatch at the stop level for at least six months would be provided to the consultant. This information would be utilized to prioritize the locations for bus shelters and benches. Lake Transit does have a bus stop inventory with basic information as a foundation to work from, but requires significant updating. The Capital Plan includes $90,000 in FY 2015/16 for preparation of a comprehensive Bus Stop Improvement Plan. Affordability of the improvements will be a key issue, and $150,000 for three years is utilized as a placeholder value until the actual prioritized costs are determined.

Equipment and Security

In FY 2015/16 there is a need to replace the shop lift in the maintenance facility. Other maintenance equipment may also need to be replaced during this time period, and a small placeholder amount is incorporated into the capital plan.

Over the next five years, there will likely be a need to upgrade farebox technology. In FY 2017/18, $15,000 is incorporated for a detailed farebox technology assessment. The capital plan assumes that the purchase of farebox equipment would be phased in over time.

Normal replacement of computer office equipment, furniture, and copiers is included with an estimate of $5,000 per year.

Mobile data terminals need to be replaced at regular intervals, and $20,000 is included for replacement purposes.

Clearlake Transit Center

The Lake APC has submitted a Caltrans Sustainable Transportation Planning Grant Application for $95,000 to develop a Transit Hub Location Plan in Clearlake for the Lake Transit Authority. The elements of the planning process are repeated verbatim from the grant application below.

Project Summary

The project will involve extensive, interactive community engagement with a broad range of stakeholders to identify locations and options for a new transit hub in the City of Clearlake. A consultant team selected through a competitive process will translate community input into design concepts, assess their feasibility, and prepare a final prioritized plan and cost estimates. The new transit hub will improve inter-regional connectivity, mobility, access and safety as well as help reduce greenhouse gases.

Project Justification

Lake Transit Authority does not currently have a dedicated transit hub. The existing transfer point in the City of Clearlake is located in the middle of a large retail parking lot and only has enough room to accommodate up to three buses at one time. The current Lake Transit Authority bus schedule (not including extended hours) shows that there are between four and six buses that can stop at this point at the same time. Attachment A shows an aerial photo of the three existing bus shelters and four buses; three are picking up passengers and one is waiting for a space to open up. The lack of room at the transfer point causes delays across the bus routes throughout the City and County. Buses not able to pull into the transfer point sit idling. This results in increased greenhouse gas emissions. The new transit hub will be large enough to accommodate all six buses at one time. This will eliminate the delay caused by having to wait for a spot to open up, therefore making the system more efficient and improving local and regional connectivity. It will also lessen the amount of greenhouse gases released into the atmosphere since bus idling time will be reduced.

Other problems with the current transfer point include a lack of bicycle and pedestrian facilities, rider and driver safety, and proximity with respect to the riders' destination.

There are pedestrian facilities at the exact location of the transfer point however there is no continuity between this point and destinations (except Ray's Food Place) where the riders travel to and from. Transit riders, many of which are families with children, the elderly, and the disabled, currently navigate through a large commercial parking lot. This leaves them at risk with vehicular traffic. The Transit Hub Location Plan will identify the preferred location(s) of a dedicated transit hub. The new facility will be fully compliant with the Americans with Disabilities Act and will include pedestrian and bicycle facilities that will improve the connectivity of the existing system. These new facilities will provide a safe path of travel for all riders traveling to and from the new hub.

The current transfer point is located in an area that is known for illicit activities, thefts and assaults. Between the 15th and 23rd of October, there were three reported thefts and three reported fights in the area surrounding the transfer point. One of the reported victims was a LTA bus driver. The new transit hub will be built with improved lighting and security, creating a safer environment for passengers and drivers. To further improve local connectivity, the new location will be adjacent to the impending Phillips Avenue Extension project, programmed in the STIP for construction in 2019. This will directly link the transit hub to the "Avenues" neighborhood to the north, making it easier to access the transit system.

The new transit hub will be more centrally located to nearby services (social services, St. Helena Hospital – Clearlake, & Lake County Superior Court), educational facilities (Yuba College – Clearlake Campus & Highlands Academy), and area businesses (Walmart & Ray's Food Place). This area is home to some of the major employers in the City of Clearlake, with approximately 250 employees at Walmart, 50 employees at Ray's Food Place, 50 employees at Yuba College along with 700 students enrolled during the school year, and 400 employees at St. Helena Hospital - Clearlake. The new hub will make traveling to and from these destinations easier and more efficient, by improving on-time performance and eliminating some transfers. It will also increase access to jobs to support economic development.

A consultant detailed scope of work is included in the grant application. For purposes of the Capital Plan in the TDP, the grant application is assumed to be successful and is included in FY 2015/16.

The potential costs of land acquisition, project engineering, and construction are not known. Placeholder values are included in the capital plan and will need to be updated once the Transit Hub Location Plan is completed

Summary of Capital Costs

Figure 11-9 is a summary of capital costs by plan year. A total of $3.03 million is programmed for vehicle replacement and $657,000 for passenger amenities. $2.4 million is set aside for the Clearlake Transit Center.

Figure 11-9 Summary of Capital Costs

Capital Expenditures	FY 15-16 Projected	FY 16-17 Projected	FY 17-18 Projected	FY 18-19 Projected	FY 19-20 Projected	TDP Total
Vehicle Procurement*						
35 foot with Luggage 5311 (f)	$ 316,643	$ 326,142	$ 335,927		$ 178,192	$ 1,156,904
32 foot Regional/Local		$ 530,450				$ 530,450
27 foot Regional/Local			$ 628,318		$ 258,867	$ 887,185
Class B and C Dial-A-Ride	$ 262,650				$ 101,494	$ 364,144
FTA 5310 Vehicles		$ 120,000			$ 300,000	
Support vehicles		$ 92,000				$ 92,000
Subtotal Vehicle Acquistions	$ 579,293	$ 1,068,592	$ 964,245	$ -	$ 838,554	$ 3,030,684
Passenger Amenities						
Bus Stop Improvement Study	$ 90,000					$ 90,000
Informations Panels	$ 12,500	$ 12,500	$ 1,000	$ 1,000	$ 1,000	$ 28,000
Bus Stop Signs	$ 15,000	$ 15,000	$ 3,000	$ 3,000	$ 3,000	$ 39,000
Bus shelters and benches		$ 150,000	$ 150,000	$ 150,000	$ 50,000	$ 500,000
Subtotal Passenger Amenities	$ 27,500	$ 177,500	$ 154,000	$ 154,000	$ 54,000	$ 657,000
Equipment & Security						
Fare equipment upgrades			$ 15,000	$ 38,000	$ 38,000	$ 91,000
Mobile data terminal replacement		$ 10,000		$ 10,000		$ 20,000
Office equipment, computers	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 25,000
Shop equipment replacement	$ 33,000		$ 25,000		$ 25,000	$ 83,000
Subtotal, Equipment and Security	$ 38,000	$ 15,000	$ 45,000	$ 53,000	$ 68,000	$ 219,000
Clearlake Transit Center						
Feasibility Study	95,000					$ 95,000
Land Acquisition		210,000				$ 210,000
Design and Environmental			125,000			$ 125,000
Construction				1,000,000	1,000,000	$ 2,000,000
Subtotal Clearlake Transit Center	95,000	210,000	125,000	1,000,000	1,000,000	2,430,000
Capital Expenditures Total	**$ 739,793**	**$ 1,471,092**	**$ 1,288,245**	**$ 1,207,000**	**$ 1,960,554**	**$ 6,666,684**
* Cost accrued in vehicle delivery year						

Capital Revenues

State and Local Funds

As approved by the voters in the November 2006 general election, Proposition 1B enacts the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006. Statewide, this is a $19.925 billion state general obligation bond that is meant to fund high priority projects. There are 16 different programs under Proposition 1B, including two with for transit purposes. Overall, Lake Transit has a balance remaining for PTMISEA funds of $1,473,978.

The Transit System Safety, Security, and Disaster Response Account of Proposition 1B, commonly referred to as CalEMA, can be utilized for safety and security projects. A total of $26,803 in safety and security procurements is included In FY 2014/15, as this capital funding program is ending.

State Transit Assistance (STA) funds were described earlier in the Operating Revenues section. These funds can be utilized for either operating or capital purposes. This funding source is utilized as a last resort after all available federal, state and local funds are utilized.

The Local Transportation Fund is derived from ¼ cent of the sales tax. This funding source supports both operating subsidies and capital procurements. As described above, the use of LTF funds for capital funding is the funding of last resort and split evenly with STA funds. A total of $857,000 in LTF funds is currently programmed for capital procurements over the next five years. If other Federal or state funding sources become available, they will be utilized. The monies would be utilized to partially fund the operations and maintenance facility.

Federal Funding

The purpose of FTA 5311 (f) funding is to provide supplemental financial support for rural intercity transportation services. Caltrans administers FTA 5311 (f) funds and these funds are grant based. FTA 5311 (f) capital grants for preventive maintenance and vehicle procurements totaling $925,000 are included in the five-year capital plan.

Section 5310 guidelines were previously reviewed for the purposes of Mobility Management. FTA 5310 traditional funds will also be utilized for six vehicle replacements.

A placeholder grant is provided for funding of the Clearlake Transit Hub and will need to be amended when the study is completed.

Figure 11-10 is a summary of the capital revenues over the next five years.

Figure 11-10 Capital Revenues

Capital Revenues	FY 15-16 Projected	FY 16-17 Projected	FY 17-18 Projected	FY 18-19 Projected	FY 19-20 Projected	TDP Total
Transportation Development Act	$ -	$ 81,070	$ 313,096	$ 115,600	$ 347,361	$ 857,128
Caltrans Sustainable Tran. Plng	$ 84,016					$ 84,016
State Transit Assistance (STA)				$ 41,400	$ 35,638	$ 77,038
FTA 5310 Traditional		$ 96,000			$ 240,000	$ 336,000
FTA 5310 Mobility Management			$ 50,000	$ 50,000	$ 50,000	$ 150,000
FTA 5339 or successor	$ 48,984	$ 89,016	$ 145,000		$ 145,000	$ 428,000
FTA 5311(f)	$ 253,314	$ 260,914	$ 268,741		$ 142,554	$ 925,523
PTMISEA (Proposition 1B)	$ 353,479	$ 734,092	$ 386,407			$ 1,473,978
Grant to Fund Clearlake Transit Center		$ 210,000	$ 125,000	$ 1,000,000	$ 1,000,000	$ 2,335,000
Capital Revenues Total	**$ 739,793**	**$ 1,471,092**	**$ 1,288,245**	**$ 1,207,000**	**$ 1,960,554**	**$ 6,666,684**

Appendix A

Lake Transit Development and Marketing Plans
Fare Analysis Working Paper

This is a working paper for the Transit Development Plan and Marketing Plan. Lake Transit fares were increased in February 2012. This working paper evaluates the ridership and revenue impact of the fare increase. It also reports on the results of the market research effort relevant to the fare increase, including stakeholder interviews, focus groups and onboard passenger surveys. The working paper then provides alternatives and recommended changes to the February 2012 fare levels in order to address some important issues articulated to both Lake Transit management as well as the consulting team during the November 2013 site visit.

The working paper is divided into several sections:

- Background on the February 2012 fare increase
- Input from stakeholder interviews and onboard passenger surveys
- Impacts on overall ridership and farebox revenues
- Identification and evaluation of key fare policy issues
- Recommendations for fare adjustments in 2014

Background on February 2012 Fare Increase

Work was conducted by Lake Transit management in 2011 to both evaluate the Lake Transit fare structure and to conduct a public hearing to receive public input on a proposed fare increase on September 7, 2011.

Prior to the February 2012 fare increase, fares for the general public for a local bus route trip had not changed since 2005. Fares for seniors and disabilities had not changed since 1996.

The increase in fares was needed to balance the 2011/12 budget and assumed a fare increase of a minimum of 5% and a service reduction of at least 1.5%. Due to fiscal uncertainties at the state and federal levels and the lack of contingency funds to complete necessary projects, it was determined that a fare increase was desirable to increase funding beyond the revenue minimums assumed in the FY 2011/12 budget.

Significant analysis was undertaken in order to establish the fare pricing and three alternative fare structures were developed and reviewed by the LTA Board. The key findings of that analysis concluded:

- A survey of fare pricing in 27 transit agencies, including six that are highlighted as peer systems, found that "Lake Transit prices are lower than average in every fare price category" for both rural transit systems and neighboring transit agencies. The recommended fares were set at the typical level for comparable systems. The typical fare that ended up being implemented was a $1.25 local fare and $0.75 local fare for senior and disabled. This was an increase from $1.00 and $0.50 respectively.
- The 2011 analysis included a regional fare, but only included the general public fare in the analysis. A review of senior and disabled regional fares was not included in the peer review. In implementing the new fares, it kept the fare for the general public at the average regional fare of $2.25 for the 27 peer transit agencies, which meant the existing $2.25 fare for the general public would remain the same. However, the regional fares for seniors and disabled increased from $1.50 to $2.25, a 33% increase.
- The 2011 analysis discussed transfers and the potential for fare evasion, particularly in Clearlake. One way to prevent fare evasion is to charge for transfers. Of the 27 peer California transit agencies, two charge $0.25 for a transfer. The other direction that some transit agencies have moved is to a day pass that is good for unlimited travel on a single day. The February 2012 fare increase kept the free transfers. However, the issue of free transfers is being addressed in this working paper as part of the Transit Development Plan.
- Both the mean and average price of a monthly pass for the 27 California transit agencies was $50.00 and in February 2012, the monthly pass price increased from $35.00 to $40.00.

Figure 1 is a summary of the fare increases by fare category which were implemented in February 2012.

Figure 1
February 2012 Fare Changes

	Fare Price		
	FY 2010-11	**FY 2012-13**	**%Change**
CASH FARES			
Local Fixed Route			
General Public	$1.00	$1.25	25%
Senior 60 plus	$0.50	$0.75	50%
Disabled	$0.50	$0.75	50%
Flex Stop Local ADA/Senior	$0.75	$0.75	0%
Regional and Intercity Fixed Route			
General Public	$2.25	$2.25	0%
Senior 60+	$1.50	$2.25	50%
Disabled	$1.50	$2.25	50%
Intercity (Mendocino and Napa)	$3.50	$5.00	43%
Flex Stop Regional ADA/ Senior	$1.25	$1.25	0%
Dial-A-Ride			
General Public 1-day Adv.Reservation	$3.50	$5.00	43%
General Public Same Day	$6.00	$10.00	67%
Senior 1-day Adv. Reserv	$2.00	$2.50	25%
Senior Same Day	$2.00	$3.00	50%
Disabled 1-day Adv Reserv	$2.00	$2.50	25%
Disabled Same Day	$2.00	$3.00	50%
Senior Center Meal Program	$0.75	$0.75	0%
TICKETS AND PASSES			
Base Fare Ticket (Social Agencies)			
Local Routes, Flex Stops (one ticket ea.)	$1.00	$1.25	25%
Regional Routes, Sr./Disabed DAR (2 tickets)	$2.00	$2.50	25%
Out of County (4 tickets)	$4.00	$5.00	25%
General Public DAR (6 tickets)	$6.00	$7.50	25%
Transfers			
Lake Transit	$0.00	$0.00	0%
MTA	$0.00	$0.00	0%
Napa VINE	$0.00	$0.00	0%
Multiple Rides			
Punch Pass	$10.00	$10.00	0%
Weekly Pass	$15.00	$20.00	33%
Monthly Pass	$35.00	$40.00	14%
Summer Cruisin' Youth Pass	$20.00	$20.00	0%

Overview of Onboard Passenger Surveys and Stakeholder Input

This section is an overview of the results of the onboard passenger survey and stakeholder interviews. More detailed analysis of the survey results in particular are utilized when evaluating the ridership and fare revenue impact of the 2012 fare increase.

Figure 1 below shows how passengers currently pay for fares. Some passengers had multiple responses to the question "How did you pay the fare for this trip?" which explains why some fare categories have higher than 100% for their responses. A slight majority (51%) of passengers pay a cash fare. On Route 2, 83% of passengers pay cash fares. The out-of-county routes 3 and 7 also have a relatively high percentage of cash fares. The lowest percentage of cash fares is on Route 4, where only 31% pay cash.

Figure 1

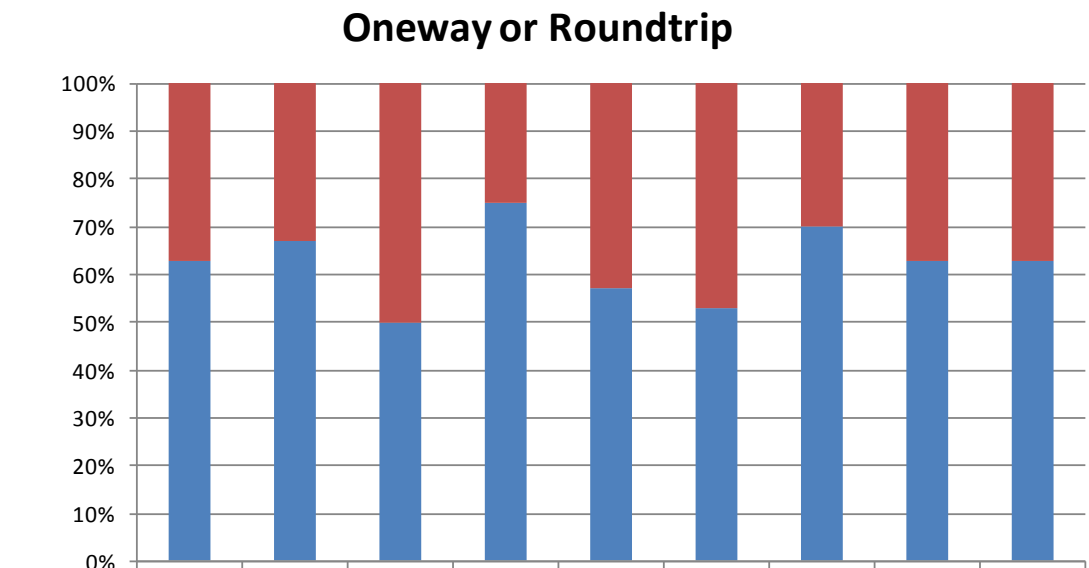
	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Cash	48%	83%	61%	31%	40%	70%	58%	48%	51%
Monthly Pass	23%	8%	33%	45%	40%	10%	35%	29%	29%
Punch Pass	18%	8%	6%	24%	33%	10%	6%	18%	16%
Weekly Pass	3%	0%	0%	3%	13%	25%	0%	3%	4%
Soc Serv Ticket	7%	0%	0%	0%	0%	0%	6%	4%	4%
Transfer	4%	0%	3%	3%	0%	5%	3%	2%	3%

About 29% of Lake Transit passengers utilize a monthly pass for their trip. Route 4 has 45% of its passengers utilizing a monthly pass. The lowest percentage of passengers utilizing a monthly pass is on Route 2, with just 8%.

Another 16% of passengers utilize a punch pass, 4% utilize a social service ticket and just 3% reported a transfer as their payment method.

One of the factors that needs to be considered in evaluating the potential for a day pass is how many of the trips are one-way trips. A person who is making a one-way trip and transfers between buses would need to pay two fares for the single trip as a day pass would be too expensive. Therefore, the cash price of the one-way trip with a transfer would double.

Figure 2

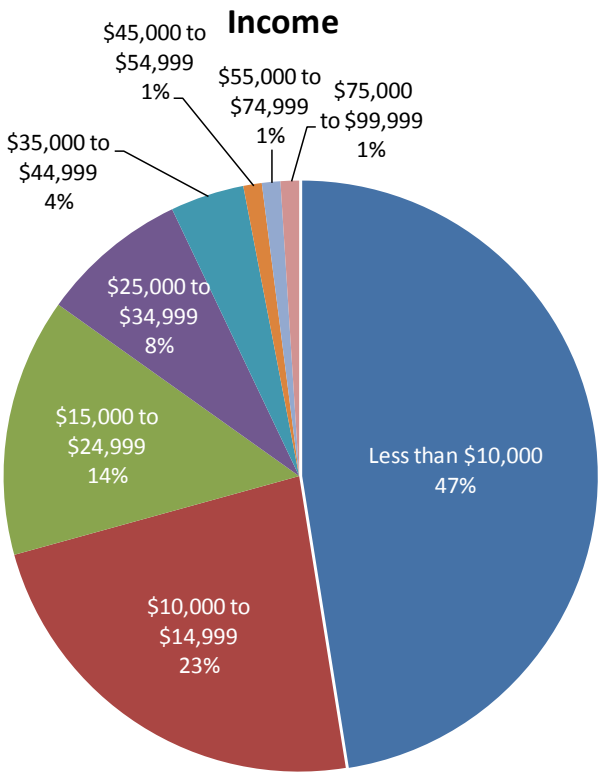


	Rt 1	Rt 2	Rt 3	Rt 4	4A	Rt 7	Rt 8	Clearlake	Total
Oneway	37%	33%	50%	25%	43%	47%	30%	37%	37%
Roundtrip	63%	67%	50%	75%	57%	53%	70%	63%	63%

Slightly over one-third (37%) of all trips are one-way trips. This is a relatively high percentage, and is particularly high on Routes 3 and 7, which provide connections outside Lake County. However, even in Clearlake, over one-third of the trips are one-way. This information will be utilized more extensively in evaluating alternatives to free transfers, including a day pass.

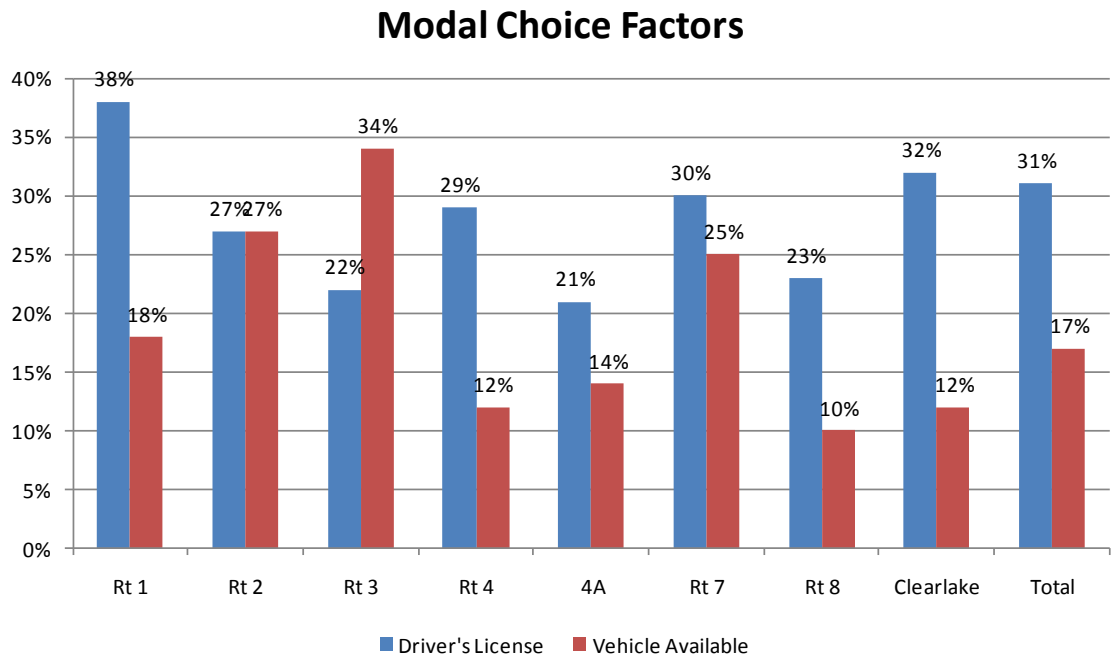
While significantly more information is provided on the demographics of the Lake Transit ridership in the companion Research Report, it is important to note that Lake Transit passengers are overall very low income and highly transit dependent. Almost one-half (47%) of the Lake Transit passengers are very low income with household incomes of less than $10,000. Another 23% have household incomes of between $10,000 and $14,999. Fare increases can have a substantial financial impact on the household budget.

Figure 3



Most Lake Transit riders are very dependent on Lake Transit to meet their mobility needs. Overall, while 31% of Lake Transit passengers have a driver's license, only 17% had a car available to make the trip. On the Clearlake routes, only 12% had a car available for the trip, and only 8% had a car available on Route 8 in the Lakeport area.

Figure 4



Despite the low income and high transit dependency of Lake Transit riders, there is generally good satisfaction with the cost of fares. When asked to "please rate Lake Transit in each of the following areas:" on a scale from 5 being excellent to 1 being poor, 34% ranked fares as "5", another 22% as a "4" and 29% as "3". Only 14% of passengers ranked the cost of fares as being a "2" or "1" (poor).

Stakeholder Input.

In the stakeholder interviews, stakeholders did not comment on the impact of the fare increase on the general public. However, several stakeholders did comment that the fare increase had the most impact on seniors and persons with disabilities. In addition, comments were received that individuals who are ADA eligible should be given additional discounts. As mentioned previously, the general public regional fare remained at the same price of $2.25, but the senior/disabled regional fare increased from $1.50 to $2.25. Alternatives and recommendations for addressing this issue are discussed later in the working paper.

There was also some discussion that the special summer pass program needed better advance publicity. Another stakeholder suggested a family pass to make trips with families more affordable.

Impacts of Fare Increases on Ridership and Revenues

In evaluating the impacts of the February 2012 fare increase, several different benchmarks have been utilized for the analysis:

1. National experience of ridership responses to fare increases, commonly called fare elasticities.
2. The ridership response of fare increases in adjacent Mendocino Transit Authority.
3. The systemwide performance trends over the past five years including ridership, fare revenues and farebox recovery ratio.
4. A comparison of ridership and revenues before and after the February 2012 fare increase.

National Research of Ridership Responses to Fare Increase

The ridership response to a fare increase is commonly referred to as fare elasticity. Ridership generally declines when fares are increased; therefore the elasticity is typically a negative number. In general, if the elasticity of transit ridership with respect to transit fares is –0.3, this means that each 1.0% increase in transit fares causes a 0.3% reduction in ridership, so a 10% fare increase will cause ridership to decline by about 3%. This is frequently used as the "Curtin rule of thumb" for fare elasticities that was utilized in 2011 analysis of fares prior to the 2012 fare increase.

However, national research has shown several factors influence how elastic or inelastic the ridership response might be. A ridership is considered inelastic if the ridership response to a fare increase has minimal effect on ridership, such as -0.1 value. Contrast this to a more elastic response, meaning that ridership has a much stronger decline when fares are increased, such as -0.5 value. Some factors that affect transit fare elasticities are summarized below.

Degrees of Transit Dependency: Transit dependent riders are generally less price sensitive than choice or discretionary riders (people who have the option of using an automobile for that trip). Certain demographic groups, including people with low incomes, non-drivers, people with disabilities, high school and college students, and elderly people tend to be more transit dependent. A large majority Lake Transit ridership is transit dependent.

National research has shown that the price elasticity for people without a car is -0.10, which incorporates 83% of the Lake Transit ridership. Low-income individuals in general have a price elasticity of -0.19. As mentioned previously, the Lake Transit ridership is very low income with 47% having household incomes of less than $10,000.

Trip Types: Non-commute trips tend to be more price sensitive than commute trips. Elasticities for off-peak transit travel are typically 1.5-2 times higher than peak period elasticities, because peak-period travel largely consists of commute trips.

Summary Conclusion: Based on national research, due to the very low income and high transit dependency of Lake Transit ridership, the effects of moderate increases in fares such as the fare increase from $1.00 to $1.25 should have a fare elasticity of approximately -.15 to -.20. This would mean that for a cash fare, this 25% increase would result in a 3.5% to 5% drop in ridership. As will be explained later in more detail, general public cash fare ridership actually dropped by 13% and senior and disabled local cash fare ridership dropped by 4% and 3% respectively. The recent fare increases of Mendocino Transit Authority are shown next because it shows that when affordable punch passes and monthly passes are available, it significantly helps to mitigate overall ridership loss.

Ridership Response to Two Mendocino Transit Authority Fare Increases

Mendocino Transit Authority (MTA) has a mix of community and intercity routes and has some similarities in services to Lake Transit. While the majority of riders are transit dependent, the level of transit dependency is not as high as Lake Transit ridership.

MTA had significant reductions in funding amounts available to it during the Great Recession and had to take mitigating actions to balance the budget. Actions taken to address budget shortfalls included raising fares, reducing service hours and spending reserves. In order to balance the budget, MTA also reduced services and vehicle service hours were reduced by 9.3%. The base fare for a single zone local trip was increased from $.75 to $1.00 in June 2009, and then again from $1.00 to $1.25 in June 2010. Punch passes and monthly passes provided passengers with significant savings. For example, the 16-ride punch can be used for local, general public trips. At a price of $15, it is equivalent to $.94 per trip. This is a very popular option as 42% of those surveyed were utilizing the punch pass in the main service area of MTA, and another 14% were utilizing a monthly pass. In an area with a long intercity route, 29% were utilizing a punch pass and only 2% were utilizing a monthly pass.

The 9% decrease in vehicle service hours partially explains a 9% drop in ridership over a three-year period. However, the service reduction occurred in FY 2010/11 at the same time as the second fare increase. With the first increase of $.25 per zone, ridership dropped by 2.9%, with fare elasticity of -.11.

Systemwide, the two fare increases resulted in an overall 15% increase in fare revenues. The average fare increased from $1.15 to $1.46 between FY 2008/09, (before the first fare increase), and 2010/11, (after the second fare increase). The average fare increased by 27.7% with the two fares increases. It is important to note that the average fare is calculated as the total fares divided by number of passengers. The number of passengers includes both fare paying passengers, free rides for children and transfer passengers. Seniors and disabled individuals only pay 50% of the base fare for that trip.

The lessons learned from MTA is that a two-step fare increase resulted in a 27.6% increase in average fares and an overall 15% increase in fare revenues over two years.

After the first fare increase, the average fare increased by 10% and fare revenues increased by 7.4% the first year. The relatively low drop in ridership of 3% after the first year can be at least partially explained by passengers choosing to utilize the punch pass and monthly passes which offered a lower per ride ticket. As will be shown next, Lake Transit experienced a significant increase in monthly pass ridership that more than offset ridership losses of the cash fares.

Comparison of Lake Transit Ridership and Revenue Before and After Fare Increase

In evaluating the impacts of the February 2012 fare increase, statistics were utilized in comparing the impacts for the full fiscal year before the fare increase (FY 2010/11), and the fiscal year after the fare increase (FY 2012/13). Lake Transit ridership did increase significantly between FY 2010/11 and FY 2011/12, from 326,874 to 395,013. When the fares were increased in February of 2012, it did have a negative impact on overall ridership. However, evaluating the impacts of the fare increase based on the full fiscal year before the fare increase and the full fiscal year after the increase provides a longer-term basis for comparison. There were no significant service level changes or other factors that would adversely affect ridership in either FY 2010/11 or FY 2012/13.

Figure 6 provides the information of ridership and revenue impact by fare category between FY 2010/11 and FY 2012/13. The following are the primary highlights of the analysis. One would expect that the riders who pay cash fares would be most affected by the fare increase. For local fares, general public ridership of fare paying customers declined by 1%, but due the 25% fare increase, general public cash fare revenues increased by 9%. There was also some impact on the senior and disabled local fare ridership, with declines of 4% and 3% respectively.

The regional cash fares remained the same at $2.25 for the general public, but increased from $1.50 to $2.25 for the senior 60+ and disabled category. Overall ridership increased 13% for the regional fare, and regional fare revenue increased by 26% between FY 2010/11 and FY 2012/13. What this means is that all passengers were paying the $2.25 cash fare, including seniors and disabled individuals. As discussed earlier, despite the increase in overall ridership and fare revenues, it did have an impact on many seniors and disabled individuals who rely on Lake Transit. Alternatives for addressing the senior and disabled regional fares are discussed later in this working paper.

Figure 6

See attached .pdf file

Riders who were issued and utilized a transfer increased by 24% to 52,198 between FY 2010/11 and FY 2012/13. Users of monthly passes also transfer, but they are not included in the ridership statistics. The level of issued and utilized transfers is just 14.4% of all passengers, which is still quite low for a transit system. On the onboard survey, passengers were asked which buses they utilized for the trip they made. The onboard survey found that 31% of passengers utilize more than one bus, which includes all fare media including monthly passes, weekly passes and punch passes. With the changes in routes 5 and 6 to Routes 10, 11, 12 and 5 for evening service, more passengers have one-seat ride opportunities and the number of transfers has likely declined. In general, a 31% calculated transfer rate from the onboard survey is considered at the low end as most transit systems have 30-40% or more of passenger trips involving at least one transfer.

The most significant impact of the fare increase is the effect on the utilization of monthly passes. The monthly pass utilization increased by 38% and revenues increased 42%. The annual trips by monthly pass were 65,623 in FY 2010/11 and 90,278 in FY 2012/13.

It is important to note that the average fare for a monthly pass was $2.00 in FY 2012/13. This means that the average monthly pass user is only utilizing the monthly pass for about 20 trips monthly, or the equivalent of 10 round trips. It should be noted that 45% of monthly passes (2,052 of 4,511) sold in FY 2012/13 were purchased by the Lake County Department of Social Services. From the survey results, it's not possible to distinguish the utilization patterns of monthly passes purchased by individuals and those purchased by social service agencies. However, it can be concluded that overall, monthly passes are not being utilized to their full potential.

The final benchmark provides the "big picture" context of the impact of the fare increase on overall systemwide performance trends.

Lake Transit Systemwide Performance Trends

The evaluation of fares should be viewed in context of overall performance of Lake Transit. Figure 7 shows that the overall ridership trend is quite positive, despite the fare increase in February 2012. Ridership has ebbed and flowed, but over the five-year period between FY 2008/09 and FY 2012/13, ridership has increased by 14% with essentially the same service supply.

The positive effect of the fare increase has been on fare revenues and the farebox recovery ratio. Fare revenues have increased by 29% over the five-year period. Since the operating cost per hour has increased by 17% over the past five years, the growth in fare revenue due to both increased ridership and fare increases has bolstered the farebox recovery ratio systemwide to 23.6%. This is a ratio that is significantly higher than the state required 10% and is higher than many small-urbanized areas with populations of 50,000 or more.

Overall, the "big picture" trends are quite positive and enable Lake Transit to make minor adjustments to fare pricing without adversely affecting the overall positive trends shown below.

Figure 7
Lake Transit Systemwide Performance Trends

Systemwide

	FY 2008/09	FY 2009/10	FY 2010/11	FY 2011/12	FY 2012/13*
Base Statistics (Annual)					
Ridership	317,619	305,589	326,874	395,013	362,217
Service Hours	38,737	38,979	38,566	38,897	38,530
Fare Revenue	451,703	458,031	462,095	558,762	581,060
Operating Costs	2,126,657	2,260,147	2,307,731	2,443,883	2,464,431
Performance					
Passengers/Service Hour	8.20	7.84	8.48	10.16	9.40
Average Fare/Passenger	$ 1.42	$ 1.50	$ 1.41	$ 1.41	$ 1.60
Farebox Recovery	21.2%	20.3%	20.0%	22.9%	23.6%
Cost/Service Hour	$ 54.90	$ 57.98	$ 59.84	$ 62.83	$ 63.96
Cost/Passenger Trip	$ 6.70	$ 7.40	$ 7.06	$ 6.19	$ 6.80
Subsidy/Passenger Trip	$ 5.27	$ 5.90	$ 5.65	$ 4.77	$ 5.20

Evaluation of Specific Fare Issues

Alternatives to transfers

The current policy for transfers is that when passengers board a bus, they may request a transfer between routes to complete a single trip. Transfers are not valid for return trips. Passengers can transfer free of charge to an equal or lower priced route. A passenger must pay the difference in price when transferring to a route with a higher priced fare.

The onboard survey found that 31% of passengers currently utilize more than one bus and transfer at least once, including trips taken with monthly, weekly and punch passes. This is at the low end of transfer rates which are typically in the 30-40% range. The transfer data for FY 2013/14 compared to 2012/13 will likely drop since the implementation of Routes 5, 10, 11, and 12 offers passengers in Clearlake with more one-seat ride opportunities. As will be discussed in the Research Report, passengers are very satisfied with the route changes.

While there is undoubtedly some level of transfer abuse, the data available does not show a substantial problem to date. In the 2011 fare analysis, there were two

alternatives to the free transfers: 1) charge a $0.25 surcharge and 2) implement a day pass. The analysis below utilizes current ridership and revenue data along with the onboard survey results to determine if these policy changes would have benefit for Lake Transit.

Analysis of Transfer Surcharge

In the 2011 peer review of fares, Salinas and Stanislaus transit systems charged a $0.25 surcharge for transfers. In the 2011 analysis, it was concluded that a $0.25 transfer surcharge would generate $9,400 in fare revenues. The transfer surcharge was part of the original staff recommendation but ended up not being implemented.

The onboard survey data show that most transfers from Clearlake buses are on Route 1, which would require a $1.00 surcharge when presenting the transfer to the Route 1 driver. Likewise a transfer from the Clearlake routes to Route 4 also require a $1.00 surcharge. Therefore many transfers already involve a transfer surcharge.

The Lake Transit system makes the potential implementation of a fare surcharge inequitable in some cases. A person on Route 1 who wants to transfer to Route 4 has to change buses and therefore needs a transfer and would be subject to a transfer fee. However, a person who transfers from Route 1 to Route 8 is not issued a transfer presently, as Route 1 becomes Route 8 and then becomes Route 1 again on the return trip. These passengers are not issued a transfer. From Route 8 to Route 1, passengers either pay the full Route 1 fare when boarding, or pay the additional amount when the bus becomes Route 1.

While the restructuring of Routes 5 and 6 make it easier for a one-seat ride, there are still origin and destination pairs that require a transfer for a relatively short trip. For example, in the evening a person travelling from Lower Lake to the Park area would need to transfer from Route 12 to Route 5 because Route 10 is not operating. Based on onboard survey data, about one-quarter of the passengers on Route 4A transfer to Route 4. Since Route 4A is essentially a local community route serving Kelseyville and Lakeport with connections at Kit's Corners and in Lakeport, the route is designed to be a feeder route to Routes 4 and 8 in particular. A transfer surcharge would penalize these passengers.

The data on actual paper transfers received since the implementation of Routes 10, 11, and 12, and evening Route 5 in September 2013 are not currently available. The hypothesis above is that the number of transfers issued and utilized would drop between FY 2012/13 and FY 2013/14, regardless of the numbers for the strike.

Based on this hypothesis, the data currently available from 2012/13, the onboard survey data, and the overall revenue benefits from the February 2012 fare increase, there is not evidence for a need for a transfer surcharge. This conclusion could change if the number of transfers among Routes 5, 10, 11, and 12 does increase, counter to the hypothesis above.

If the numbers of transfers does increase, instead of a transfer surcharge, Lake Transit might consider changing the transfer policy and the transfer instrument. The transfer policy could be changed such that a transfer is only good within two hours of issuance. The transfer instrument currently provides the date and time when the transfer is issued, but has no expiration.

Analysis of potential for day pass

A day pass allows passengers to make as many trips in one day as they desire. Passengers who normally pay cash fares can economize and group trips on a single day. Similar to a weekly or monthly pass, passengers can make unlimited trips for the day the day pass is issued. A day pass is typically priced at three times the base fare which would be $3.75 for local fares and $7.75 for the regional fares.

The onboard survey revealed the following key findings:

- On Route 7, of those surveyed, 47% take one-way trips and 50% of passengers utilize multiple buses. Therefore about 25% of the passengers are taking a one-way trip and utilize multiple buses requiring a transfer.
- In Clearlake on Routes 5, 10, 11, and 12 combined, 37% are taking a one-way trip and 21% of the trips involve multiple buses for trips outside Clearlake. If transfers were eliminated in favor of a day pass, it would penalize these passengers.
- 47% of student trips are one-way trips. This is particularly true for high school students who reported 62% utilize Lake Transit for one-way trips.
- Day Pass ranked third as most important improvement desired by Lake Transit passengers at 15%, well behind the desire for Sunday service (31%) and more bus shelters (30%).
- Occasional riders who utilize the service 2-3 days a week have a higher propensity for making one-way trips.
- Day pass is more attractive to those who ride Lake Transit 1 to 3 days a week, which is just 35% of Lake Transit passengers according to the survey results.

A day pass is advantageous to passengers who want to pay a single fare for the day and make multiple trips. For Lake Transit, it would be necessary to have a day pass for general public local and regional fares, and as will be discussed later, also a separate day pass for seniors and the disabled for both the local and regional fares. This would add quite a bit of complexity to the fare structure.

From a transit agency perspective, one of the important advantages of implementing a day pass is to eliminate transfers and the potential for abuse of transfers. A transit agency only really cares about eliminating transfers for those who pay cash fares, the ones who are issued paper transfers and use the transfer for the return trip. In FY

2012/13 only 14% of trips were by paper transfer systemwide. For Routes 5 and 6, the number of transfers as percent of total boardings was even less at below 10% on each route. This number is likely to go down in FY 2013/14 with the implementation of Routes 10, 11, and 12, which provides more opportunities for one bus trips compared to the old Routes 5 and 6.

The conclusion is that a day pass for Lake Transit would create more problems than it would solve. The relatively high number of one-way trips (37%) on the Lake Transit system makes the day pass problematic if you were to also eliminate transfers. For those who do transfer, for many there is a need for a transfer between local and regional routes, and such trips are not conducive to a day pass. With the added complexity of having different day passes for local and regional trips as well as general public and senior/disabled fares, a day pass is not recommended for Lake Transit.

Senior and Disabled Fares

Senior and Disabled Ridership Levels Compared to Census Data

In Lake County, seniors are defined as age 60 and over and qualify for discount fares with any valid proof of age.[1]

From the 2010 Census, 8% of the population in Lake County is between 60 and 64 and 17.7% population is 65 and older. In FY 2010/11, 7% of riders paid local senior or regional senior cash fares for a fixed route.

The proportion of seniors between ages 60 and 64 riding Lake Transit is 7%, almost the same as the 2010 Census count for persons 60 to 64. For Lake Transit, 8% of fixed route riders are 65 and over based on the survey, compared to the 2010 Census which found 17.7% of the population countywide is 65 and older. Therefore, seniors 65 and older riding Lake Transit are less than half the proportion of the senior population from the 2010 Census. However, compared to the 2008 Transit Development survey results, the proportion of seniors 60 or over has increased slightly from 13% to 15% in the 2013 onboard survey.

In the 2012/13 annual ridership figures, 2.9% of riders on local fixed routes were disabled. There is no way to determine the number of disabled riders from the regional fare statistics in 2012/13, as only the total ridership was recorded. In FY 2010/11, slightly less than 1% of the annual passenger counts were regional fare discounts for disabled passengers. 2% of the passengers on the onboard survey were wheelchair passengers.

There are a number of factors that contribute to the fact that in general, seniors 65 and over and disabled individuals who ride Lake Transit are less than the proportion of senior and disabled individuals in the general population. One of the factors is the cost

[1] This was accurate when the working paper was written in December 2013. In Feburary 2014, the LTA Board changed the policy to 65 and over.

of transportation for many seniors on a fixed income. Senior and disabled passenger can purchase a punch pass for $10.00 for use for $11.00 worth of fares for either fixed route or Dial-A-Ride service, a 9% discount. This discount is also available to the general public. It is a very popular program, with 7,640 punch passes purchased in FY 2012/13.

The cost of the regional fare for seniors and the disabled are an important issue that was discussed extensively during the stakeholder interviews for the Transit Development Plan and Market Plan.

Alternatives for Senior and Disabled Fares

The following are alternatives for addressing the equity issues for seniors and disabled for regional fares:

Regional Cash Fares

1. Keep the status quo, which has shown the $2.25 across the board fare has both increased overall ridership by 13% and fare revenues by 26%.

2. Roll back the cash fare for seniors/disabled to $1.50 for regional fares. In February 2012, there was no change to the $2.25 regional fare for the general public. This alternative would roll back the regional route senior/disabled fare to $1.50, so there would also be no change to the senior/disabled regional fares.

3. Reduce the cash fare to $1.75 for seniors and disabled, which represents the same $0.25 increase on the local routes.

The recommendation is to roll back the regional cash fare for senior/disabled individuals to $1.50. This is the same price for regional fares before the February 2012 fare increase. At that time, the cash fare for the general public remained the same at $2.25.

There are two primary reasons for the recommendation. A primary rationale for rolling back the regional cash fare to $1.50 is to encourage more utilization of the fixed routes by seniors and disabled individuals. A second important reason is one of equity. As discussed previously, senior and disabled regional fares increased while the general public regional fare stayed the same. With the recommendation, there would effectively be no fare increase for regional fares for all fare categories.

The recommendation will have a negative fare revenue impact. In FY 2010/11, senior/disabled regional fare ridership represented 29.7% of the total regional fare ridership of 28, 356 in FY 2010/11. The February 2012 fare increase did result in a 26% increase in regional cash fare revenues, from $57,472 in FY 2010/11 to $72,333 in FY 2012/13.

The regional cash fare revenue increase was partly due to the 13% increase in regional cash fare ridership. The 3,792 new regional cash fare riders paid $2.25, representing a

total of $8,532 in new regional fare revenue. It is not known how much of the new regional cash fare ridership was seniors and disabled.

The regional cash fare revenue was also due to seniors and disabled individuals increasing their fare payment from $1.50 to $2.25. Approximately $6,300 of additional regional cash fare revenue was from the additional $0.75 seniors and disabled individuals had to pay.

At a minimum, the fare revenue loss could be as low as $6,300, but is likely around $7,100 accounting for some proportion of new riders being senior/disabled individuals.

One way of mitigating the loss of fare revenues from rolling back senior/disabled regional cash fares to $1.50 is targeting the senior/disabled discount to target populations with the greatest propensity for need of the discount. The next section reviews the discount eligibility for seniors and disabled individuals.

Review of Senior and Disabled Discount Policies

Senior Discount Eligibility

The policy rationale for providing a fare discount for seniors is that many seniors who want to utilize Lake Transit are on limited fixed incomes. There are three options regarding the eligibility for the age discount.

1. Keep the eligibility age at 60. The current policy is “age 60 and over qualify for discount fares with any valid proof of age."
2. Increase the eligibility age to 62. This is the eligibility age of Mendocino Transit Authority and Humboldt Transit Authority. Yuba-Sutter Transit also has a senior discount eligibility at age 62 but requires both disabled and seniors who do not possess a Medicare card to purchase a $5.00 Yuba-Sutter Discount ID card annually.
3. Increase the eligibility of seniors from age 60 to age 65. Seniors are issued Medicare cards at age 65, and many seniors start Social Security about the age of 65, but this does vary by the individual. Many seniors under age 65 are employed or are looking for work. It helps to avoid questionable use by older adults and minimizes the policing required by drivers.

The recommendation is to increase senior discount eligibility from 60 to 65 at the same time as regional cash fares are reduced from $2.25 to $1.50. There are three primary rationales for this policy change. The first rationale is that the propensity for need for a senior discount is much greater at age 65 than at age 60. The second rationale is that it will minimize the fare revenue loss from young seniors taking advantage of the senior discount. According to the passenger survey, about 7% of the passengers were aged 60 to 64 and 8% were seniors age 65 and above. Since the senior age discount will apply to all fare categories, the senior discount would be targeted to the 8% of the Lake Transit ridership who most need the discount. The third rationale is one of easy driver enforcement. It is much easier for a driver to check for a Medicare ID card than check for age on a driver’s license.

The change in senior age discount will have a positive fare revenue impact. For local fares, the change in policy should increase revenues in the $3,000-$3,500 range, and assumes that some individuals 60-64 would take fewer trips or may purchase monthly passes. For regional fares, there would be an approximately $2,000 positive fare revenue increase. This assumes that the proportion of seniors utilizing the regional fare approximate the percentage seniors who utilized the regional fares in FY 2010/11.

Although the estimates are not certain, the best estimate is that approximately $5,000 in fare revenues would be restored with an increase in the age from 60 to 65.

With the combined rollback in regional fares for seniors and disabled individuals coupled with an increase in the senior age eligibility from 60 to 65, the net annual fare revenue loss is estimated at approximately $2,000.

Disability Discount Eligibility

The disabled discount is currently available to anyone displaying a valid Medicare ID card, California DMV Disabled Person, Disabled Veteran ID Card, or a Lake Transit ADA Paratransit Eligibility ID card.

As part of the Transit Development Plan process, the eligibility and certification process for the Lake Transit ADA Paratransit Eligibility process will be reviewed and recommendations provided in Phase 2 of the project, when service alternatives are proposed. There are no recommendations for eligibility for the disability discount at this time.

Fare Incentives to Encourage Additional College Ridership

National Experience with College Fare Incentive Programs

At present, 9% of the Lake Transit ridership is Yuba College students and 5% are Mendocino College students. There are a number of partnership concepts between colleges/universities and local transit agencies. Most of the examples are from 4-year universities, but there are several examples of partnerships that provide fare incentives in California.

In a nationwide survey of 94 transportation providers serving university and colleges[2] it was found that about half had “U-Pass” programs. U-Passes are a form of a transit access agreement between a university and a transit provider. Typically, a school will

[2] Gail Murray and Tara Krueger, *Transit Systems in College and University Communities, A Synthesis of Transit Practice.* TCRP Synthesis 78, Transit Cooperative Research Program, Washington D.C. 2008

pay for members of the school community (students and/or faculty and staff) to have free or discounted access to transit services provided by a local transit provider. These programs vary widely and are typically funded by semester/student fees or parking fees. The typical student fee program is where all students pay fees as part of their registration fee. The fee is typically approved with a student vote. Once approved, all students are eligible to ride an unlimited amount with their student ID. On some campuses, this is also extended to staff and faculty.

Current Status of Clear Lake Community College Fare Incentives

Locally, Mendocino Transit Authority is currently in negotiations with Mendocino College for a student fee program. Once a fee amount is settled upon, a student body vote would need to approve the fee. According to the MTA staff, Mendocino College in Lake County has been discussed, but would likely be implemented in a subsequent phase. Due to relative campus sizes, it is likely that if an agreement is worked out and approved in Ukiah, then something could be developed in Lake County. There are significant transit service level differences in Ukiah and Lake County campuses.

Yuba College's main campus is in Marysville, CA and Yuba-Sutter Transit provides 30-minute service on their mainline route and 60 minute service on two other routes. The cash fare is $1.00 and the monthly pass is $30.00 per month for adults 18 or over ($5 for students under 18). There is currently no transit student fee at Yuba College in the Yuba-Sutter Transit service area.

Service levels to the Clearlake Yuba College campus have improved significantly with the September 2013 route and schedule improvements in Clearlake. Hours have been expanded and the last departure from Yuba College to the rest of Clearlake is now at 9:49 pm.

Alternatives to Student Fee Programs

There are several alternatives to the student fee program. In Merced, The Bus offers a student pass at $45 month compared to $60.00 for the full pass. A semester pass is offered for a semester at $180 per semester or a five- month pass for the price of four monthly student passes.

In the past what has stalled many of student fee programs is the student fee amount. Copper Mountain Community College in San Bernardino County decided not to put a student fee to a vote, but instead contributes $15,000 to Morongo Basin Transit Authority and students pay $0.25 per boarding.

Recommendations

Lake Transit management should join the discussion that Mendocino Transit Authority is currently having with Mendocino College to determine if there is an opportunity to establish a modest student fee program at the Lakeport campus of Mendocino College. While the actual student fee will need to be negotiated, the student fee at the Lakeport

campus will likely be significantly less than the Ukiah to reflect the differences in service levels.

The next phase of the Transit Development Plan and Marketing Plan will evaluate route and schedule changes to better serve both Yuba College and Mendocino College. In particular, there were specific schedule change suggestions by Yuba College student to make the service more convenient for college students. These changes will need to be evaluated in the next phase of the Transit Development Plan. At the same time, there should be formal discussions with Yuba College on the potential for a fare incentive program.

Route Deviation Fares

Lake Transit currently provides a route deviation (commonly called a flex stop) option for passengers who are eligible for senior and disabled fare discounts. A flex stop is within one mile of a local or regional route. The flex stop is a substitute for providing ADA Paratransit service in rural areas. Many of the regional routes provided by Lake Transit are intercity routes and not subject to ADA Paratransit requirements. However, Lake Transit exceeds ADA Paratransit requirement and provides the option of flex stops on all regional routes within Lake County. Lake Transit also provides Dial-A-Ride service in both Clearlake and Lakeport to both eligible seniors and disabled individuals, and this policy also exceeds the ADA Paratransit requirements.

The existing Flex Stop fare is $0.75 for a local route and $1.25 for a regional route. This currently includes a route deviation for both pick-up and drop-off for the passenger. At present the Flex Stop is only available to individuals who qualify for the senior and disabled fare discounts.

The utilization of flex stops in the Lake Transit system is extremely low. In FY 2012/13, there were a total of 200 flex stops recorded, meaning there was less than one a day.

Transit agencies throughout California recently received the following from Caltrans:

" Titles II and III of the American with Disabilities Act of 1990 (ADA) provide that no entity shall discriminate against an individual with a disability in connection with the provision of transportation service. The law sets forth specific requirements for vehicle and facility accessibility and the provision of service, including complementary paratransit service. During the FY 2013, State Management Review (SMR), deficiencies were found with Federal Transit Administration's (FTA) requirements for ADA. A number of subrecipients operated route deviation service but deviated only for persons meeting the criteria for ADA complementary paratransit. In order to be regarded as demand-responsive service (for which paratransit is not required), route deviation services must deviate upon request for any passenger. To be considered demand responsive, the service must deviate for the general public, not just persons with disabilities meeting paratransit eligibility criteria. If deviations are restricted to a particular group, the service ceases to be a form of demand-response service for the general public and ADA

complementary paratransit service is required. In order to comply with the ADA requirements, all subrecipients who provide fixed route service must operate ADA complementary paratransit service."

The primary implication for Lake Transit is that route deviation or flex stops may need to be open to the general public as well as the senior and disabled individuals.

Recommendations

The recommended fare policy for the general public for route deviation service for the general public should be consistent with fares for the general public for next day reservation on Dial-A-Ride. Route deviation requests should be required to be made the previous day. The general public 1-day advance reservation for Dial-A-Ride is $5.00. This should be the fare for general public flex stops. Therefore, for a general public flex stop, the fare would be $1.25 plus $5.00 or a total of $6.25 for local fares or $2.25 plus $5.00 or $7.25 for regional general public flex stops.

The fare policy for flex stops should be for each flex stop made. Therefore if an eligible senior or disabled passenger wants a flex stop for pick-up and drop-off, the fare would be $2.25 ($0.75 base fare plus $0.75 for passenger pick-up and $0.75 for passenger drop-off). For regional fares the fare would be $4.00 for flex stop pick and drop-off for eligible senior and disabled passengers ($1.50 recommended base fare plus $1.25 for passenger pick-up and $1.25 for passenger drop off).

For the general public who wants both a pick-up and drop-off, the local fare would be $11.25 ($1.25 base plus $5.00 for pick-up and $5.00 for drop-off). For regional fares, the fare would be $12.25 ($2.25 base fare plus $5.00 for pick-up and $5.00 for drop-off).

Family Fares

During the stakeholder interviews, there was a request for fares that were more family friendly when adults and children are travelling together on Lake Transit buses. The current policy on Lake Transit is that up to two small children (age 5 or under) may ride free with an adult.

There are several alternatives that are utilized by other transit agencies to provide more family friend fares. In Trinity Transit, for example, children 6 to 11 qualify for discounted fares similar to the fares for seniors and disabled individuals. The Yosemite Area Regional Transportation System (YARTS) receives FTA 5311 (f) funding for service between Yosemite Valley and Merced. For each adult ticket, one child 12 and under rides free. In the San Diego RTS system, on Saturdays and Sundays, two children 12 and under ride free with any paying passenger 18 and over.

The recommended policy is for children 6 to 12 to receive the same discounted fare as seniors and disabled individuals if they travelling with a paying adult. With this policy,

children 6-12 would be able to travel with any adult six days a week on any Lake Transit route and pay the same discounted fare as senior and disabled individuals.

Appendix B Cost Allocation Model

The following is the cost allocation methodology utilized for Lake Transit TDP update. The cost allocation model is utilized in order to provide an approximate allocation of costs by route and mode.

The expenses for FY 2012/13 are shown below. The costs are allocated to vehicle service hours, vehicle service miles or fixed cost per hour.

	FY 2012/13 Actuals*	Vehicle Service Hrs.	Vehicle Service Mi.	Fixed Costs
Expense				
Accounting Services	6,000			6,000
Legal Services	200			200
Management Contract	106,560	$ -		106,560
Oper. & Maint. Contract	1,861,569	$ 861,146	**	1,000,424
Printing	10,309			10,309
Promotional Materials	1,669			1,669
Advertising	2,140			2,140
Promotional Campaigns	1,485			1,485
Fuel	455,713		455,713	
Utilities	15,342			15,342
FacilityMaintenance	3,444			$ 3,444
OPERATING SUB-TOTAL	2,464,431	$ 861,146	$ 455,713	1,147,572

* Source LTA Financial Summary FY 2012/13

** Maintenance costs are typically mileage costs, but maintenance costs are not disaggregated in the Paratransit Services monthly invoices. For purposes here, they are included in fixed costs.

Cost per vehicle service hour	$ 22.35
Cost per vehicle service mile	0.55
Fixed Cost per hour	29.78
Total cost per hour	$ 52.13

The cost per vehicle service hour is $861,146/38,500 vehicle service hours which equals $22.35. The cost per vehicle service mile is $455,713/825,967 which equals $0.55 per vehicle service mile. The fixed costs per vehicle service hours is $1,147,572/38,500 which equals $29.78. The combined cost per vehicle service hour and fixed cost per vehicle service hours is $52.13.

In allocating costs to routes for FY 2012/13, the vehicle service hours are multiplied by $52.13 and the vehicle service miles are multiplied by $0.55 as a means of allocating the costs among the Lake Transit routes. Maintenance costs are not disaggregated and are included in the fixed costs in Paratransit Services monthly reports.

The following table is for FY 2013/14. For FY 2014/15, budgeted numbers were utilized.

Expenses	FY 2013/14 Actuals*	Vehicle Service Hrs.	Vehicle Service Mi.	Fixed Costs
Accounting Services	$ 6,000.0			$ 6,000.0
Legal Services	$ 100.0			$ 100.0
Management Contract	$ 108,888.0			$ 108,888.0
Oper. & Maint. Contract	$ 1,987,337.4	$ 857,840.4	**	$ 1,129,497.0
Printing	$ 14,437.6			$ 14,437.6
Promotional Materials	$ 4,895.9			$ 4,895.9
Advertising	$ 5,808.5			$ 5,808.5
Promotional Campaigns	$ 2,853.1			$ 2,853.1
Fuel	$ 441,053.2		$ 441,053.2	
Utilities	$ 16,838.8			$ 16,838.8
FacilityMaintenance	$ 7,344.4			$ 7,344.4
Other	$ 266.9			$ 266.9
Total	$ 2,595,823.7	$ 857,840.4	$ 441,053.2	$ 1,296,930.2

* Source LTA Financial Summary 13-14 5311(f).xls

** maintenance costs are typically mileage costs, but maintenance costs are not disaggregated in the Paratransit Services monthly invoices. For purposes here, they are included in fixed costs.

Cost per vehicle service hour	$ 22.35
Cost per vehicle service mile	$ 0.54
Fixed Cost per hour	$ 31.71
Total cost per hour	$ 54.06