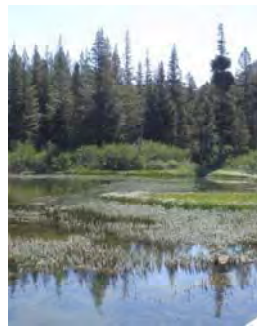


# EASTERN SIERRA TRANSIT



## Eastern Sierra Transit Authority Short Range Transit Plan *Volume 1 Service and Financial Plan*

TRANSIT RESOURCE CENTER

TRANSIT  marketing  
LLC

Final Report  
January 2009



# Eastern Sierra Transit Authority Short Range Transit Plan Table of Contents

**Executive Summary ..... ES-1**

Short Range Transit Plan Objectives ..... ES-1

Overview of Existing Services..... ES-1

Transit Needs ..... ES-1

Transit Dependent Population ..... ES-1

Tourist and Visitor Market ..... ES-2

Seamless Transit System ..... ES-3

ESTA Mission, Goals and Performance Standards..... ES-3

395 Corridor Services..... ES-4

Rural Transit Services..... ES-5

Bishop Local Services ..... ES-6

Mammoth Local Services..... ES-8

Financial Plan..... ES-10

Operating Costs ..... ES-10

Operating Revenues..... ES-11

Capital Expenditures..... ES-11

*Exhibit ES-1* ..... *ES-12*

Capital Revenues ..... ES-13

Seamless Transit System Performance..... ES-13

*Exhibit ES-2* ..... *ES-14*



**1. Introduction..... 1-1**

Short Range Transit Plan Objectives ..... 1-1

Historical Perspective ..... 1-1

Overview of Services Provided ..... 1-2

Focus Areas of Short Range Transit Plan ..... 1-2

Report Organization.....	1-3
<b>2. Transit Needs.....</b>	<b>2-1</b>
Demographics of the Transit Dependent Population .....	2-1
<i>Exhibit 2-1 Census Profile</i> .....	2-1
Needs for Rural Transportation Services in Inyo/Mono Counties .....	2-2
Tourism and Recreation Market.....	2-4
<b>3. Goals and Performance Standards.....</b>	<b>3-1</b>
Introduction.....	3-1
ESTA Mission Statement .....	3-1
ESTA Goals and Performance Standards.....	3-1
<b>Goal #1 .....</b>	<b>3-2</b>
1.1 Accessibility .....	3-2
1.1.1 Mammoth Lakes.....	3-2
1.1.2 Bishop Services .....	3-2
1.1.3 Town-to-Town.....	3-3
1.1.4 Rural Dial-A-Ride.....	3-3
1.2 Total Accidents .....	3-3
1.3 Training and Safety Plan.....	3-3
<b>Goal #2 .....</b>	<b>3-3</b>
2.1 On-time performance.....	3-3
2.2 Frequency .....	3-4
2.2.1 Mammoth Lakes Fixed Route .....	3-4
2.2.2 Bishop Fixed Route.....	3-4
2.2.3 Town-to-Town.....	3-4
2.3 Customer Satisfaction.....	3-4
2.4 Road Calls .....	3-4
<b>Goal #3 .....</b>	<b>3-4</b>
3.1 Marketing Objectives.....	3-4
3.1.1 Establish a regional transit brand.....	3-4
3.1.2 Provide transit passenger information .....	3-5
3.1.3 Create visibility.....	3-5
3.1.4 Educate potential users.....	3-5
3.1.5 Deliver quality customer service .....	3-5

3.2 Service productivity .....	3-5
<b>Goal #4 .....</b>	<b>3-5</b>
4.1 Farebox Recovery.....	3-6
4.2 Subsidy Per Passenger Trip.....	3-6
4.3 Cost Per Vehicle Revenue Hour .....	3-6
<b>4. Transit Services in the 395 Corridor.....</b>	<b>4-1</b>
<b>Historical Development of Intercity Bus Service in the 395 Corridor.....</b>	<b>4-1</b>
<b>Description of Existing CREST Performance.....</b>	<b>4-2</b>
CREST North.....	4-2
CREST South .....	4-2
CREST Ridership and Performance .....	4-2
<u>Exhibit 4-1 Existing 395 Corridor Routes .....</u>	<u>4-3</u>
<b>Town-to-Town Services Along the 395 Corridor.....</b>	<b>4-4</b>
Bridgeport-Carson City .....	4-4
Mammoth Express.....	4-4
Lone Pine-Bishop .....	4-5
<u>Exhibit 4-2 ESTA Statistics for Significant Intercity Service.....</u>	<u>4-5</u>
<b>Improving 395 Corridor Transit Service Levels.....</b>	<b>4-5</b>
ESETS Field Report 2004 .....	4-5
2004 Federal Lands Alternative Transportation Systems Study Summary of Forest Service ATS Needs .....	4-6
2005 Kern COG Eastern Sierra Public Transportation Study .....	4-6
2007 Final Eastern Sierra TAG report.....	4-7
<b>Establishing a 5-Year Financially Unconstrained Vision .....</b>	<b>4-7</b>
<u>Exhibit 4-3 Idealized Winter Schedule: 5-Year Vision .....</u>	<u>4-10</u>
<u>Exhibit 4-4 395 Corridor Transit Services Winter Peak Period</u>	
<u>Long Range Vision.....</u>	<u>4-11</u>
<b>Financially Constrained 395 Corridor Development .....</b>	<b>4-12</b>
<b>5. Rural Transit .....</b>	<b>5-1</b>

<b>Introduction.....</b>	<b>5-1</b>
<b>Description of Existing ESTA Rural Services.....</b>	<b>5-1</b>
<b>Rural Dial-A-Ride Services.....</b>	<b>5-1</b>
Lone Pine Dial-A-Ride .....	5-1
Walker Dial-A-Ride.....	5-1
<b>Town-to-Town Services.....</b>	<b>5-1</b>
Benton to Bishop .....	5-1
Tecopa to Pahrump .....	5-1
Mountain Express .....	5-2
Lone Pine-Olancha-Keeler .....	5-2
Walker-Bishop.....	5-1
<b>Performance of Existing ESTA Rural Services .....</b>	<b>5-2</b>
<u><i>Exhibit 5-1 FY 2007-08 Rural Service Performance.....</i></u>	<u><i>5-2</i></u>
<b>Needs for Rural Transportation Services in Inyo/Mono Counties .....</b>	<b>5-3</b>
<b>Service Options .....</b>	<b>5-3</b>
<i>High Priority Strategy #1 .....</i>	<i>5-5</i>
<i>High Priority Strategy #2 .....</i>	<i>5-5</i>
<i>High Priority Strategy #3 .....</i>	<i>5-6</i>
<b>Recommendations for the Short Range Transit Plan .....</b>	<b>5-7</b>
Building Services.....	5-7
Enhancing information portals .....	5-7
<b>6. Bishop Local Transit Service .....</b>	<b>6-1</b>
<b>Analysis of Fixed Route Services.....</b>	<b>6-1</b>
Description of Existing Services .....	6-1
Observations .....	6-1
<u><i>Exhibit 6-1 Bishop Area Red &amp; Blue Fixed Rte Bus Service.....</i></u>	<u><i>6-2</i></u>
Fixed Route Performance .....	6-3
<u><i>Exhibit 6-2 Bishop Fixed Route Performance .....</i></u>	<u><i>6-4</i></u>
<b>Analysis of Dial-A-Ride Services .....</b>	<b>6-4</b>
Description of Existing Services .....	6-4
Dial-A-Ride Service Levels.....	6-5
Observations .....	6-5
Dial-A-Ride Performance .....	6-6

<u>Exhibit 6-3 Bishop Dial-A-Ride Performance</u> .....	6-6
Analysis of Bishop Public Transportation System .....	6-7
<u>Exhibit 6-4 Bishop Public Transportation System Performance</u> <u>Fixed Route and Dial-A-Ride Services Combined</u> .....	6-7
<b>Peer Analysis of Similar Size Cities</b> .....	<b>6-7</b>
<u>Exhibit 6-5 Peer Comparison of Bishop and Rural Towns under</u> <u>25,000 Population</u> .....	6-8
<b>Options for Improving Service Efficiency and Effectiveness</b> .....	<b>6-9</b>
1. Increase fixed route to 15 minutes on two-way loop .....	6-11
<u>Exhibit 6-6 Bishop Area Two Way Loop Option</u> .....	6-12
2. Increase fixed route serve to every 15 minutes, restrict DAR eligibility to ADA eligible persons. ....	6-12
3. Reduce Weekday and Saturday Hours.....	6-12
4A Streamline Fixed Route and Reduce DAR by Two Buses .....	6-12
4B Option 4A, but add Community Service Route to Highlands/Meadow Farms .....	6-13
5. Keep existing routes; reduce 2 DAR buses.....	6-14
6. Extended Two-Way Route to Meadow Farms; integrated fixed route and dial-a-ride.....	6-14
<u>Exhibit 6-7 Bishop Area Two Way Loop Route With Extension</u> .....	6-15
7. Eliminate Fixed Route Service .....	6-16
8. Keep existing fixed route, restrict DAR to ADA eligible passengers .....	6-16
<u>Exhibit 6-8 Bishop Service Options: Service Levels</u> .....	6-18

## **7. Local Mammoth Lakes Transit Service..... 7-1**

<b>Introduction</b> .....	<b>7-1</b>
<b>Description of Existing ESTA Services</b> .....	<b>7-1</b>
<b>ESTA Summer Service Description</b> .....	<b>7-2</b>
Town Trolley .....	7-2
Lakes Basin Trolley .....	7-2
Midtown LIFT .....	7-2
Old Mammoth LIFT .....	7-2
Dial-A-Ride .....	7-2

	<i>Exhibit 7-1 Mammoth Lakes Summer Routes.....</i>	<i>7-3</i>
<b>ESTA Winter Services.....</b>		<b>7-4</b>
Town Trolley .....		7-4
Lakes Basin Trolley.....		7-4
Midtown LIFT .....		7-4
Old Mammoth LIFT .....		7-4
Dial-A-Ride .....		7-4
	<i>Exhibit 7-2 Mammoth Lakes Winter Routes .....</i>	<i>7-5</i>
Winter Lift .....		7-6
Winter Night Trolley .....		7-6
<b>ESTA Town of Mammoth Lake Performance.....</b>		<b>7-6</b>
	<i>Exhibit 7-3 Town of Mammoth Lakes 2007/08 Performance Statistics.....</i>	<i>7-6</i>
<b>Peer Comparison .....</b>		<b>7-6</b>
	<i>Exhibit 7-4 Tahoe and Vail Benchmarks Performance Statistics</i>	<i>7-7</i>
<b>Summary of Key Issues and Opportunities.....</b>		<b>7-7</b>
1. Bus stop signage .....		7-7
2. Vehicle Branding.....		7-8
3. Linkage to the airport when air service begins.....		7-9
4. Serving future growth in Mammoth Lakes.....		7-9
<b>US Forest Service Reds Meadow Shuttle.....</b>		<b>7-10</b>
Overview of Existing Reds Meadow Shuttle.....		7-10
	<i>Exhibit 7-5 Number of shuttle passengers and shuttle trips, 2002- 2007 .....</i>	<i>7-11</i>
Potential Partnership Opportunities.....		7-11
Key Issues.....		7-11
1. Provide Rolling Stock.....		7-11
2. Fee Structure.....		7-12
3. Maintenance.....		7-12
<b>ESTA and MMSA Transit Service.....</b>		<b>7-12</b>
Operations.....		7-12



Fleet Maintenance.....	7-13
Management and administration.....	7-13
Marketing and Public Information.....	7-13

**8. Financial Plan..... 8-1**

**Key Expenditure and Revenue Source Assumptions ..... 8-1**

Expenditure Assumptions.....	8-1
Fare and Fee Revenues.....	8-1
State and Local Revenue Descriptions and Assumptions.....	8-2
Federal Funding Descriptions and Assumptions.....	8-3
Planning Grants.....	8-4

**Operating Costs ..... 8-5**

Service Supplied.....	8-5
Driver Costs.....	8-5
<i>Exhibit 8-1 Projected Changes in Service Supply.....</i>	<i>8-6</i>
Administrative and Management Staff Costs.....	8-7
Fuel Costs.....	8-7
Cost Model for ESTA.....	8-7
Summary of Expenses by Plan Year.....	8-7

*Exhibit 8-2 Operating and Administrative Expenditures ..... 8-8*

**Operating Revenues..... 8-9**

Fares and Fees.....	8-9
<i>Exhibit 8-3 Expected Passengers and Fare Revenue by Service.....</i>	<i>8-10</i>
State/Local Funds.....	8-11
Federal Funds.....	8-11
Summary of Operating Revenues.....	8-11

*Exhibit 8-4 Operating Revenue Forecasts..... 8-12*

**Capital Expenditures..... 8-13**

Fleet Procurement.....	8-13
<i>Exhibit 8-5 Peak Day Vehicle Needs: Fridays.....</i>	<i>8-13</i>
<i>Exhibit 8-6 Summary FY 08/09 Fleet.....</i>	<i>8-14</i>
<i>Figure 8-7 Fleet Plan.....</i>	<i>8-15</i>
Facility Design and Construction.....	8-16

Bus Stop Improvements/Signage.....	8-16
Safety and Security Enhancements.....	8-16
Summary of Capital Expenditures and Revenues .....	8-16

*Exhibit 8-8 Capital Expenditures and Revenues ..... 8-17n*

**Capital Revenues.....8-16**

**Summary of Expenditures and Revenue ..... 8-19**

*Figure 8-9 Summary of Expenses and Revenues..... 8-20*

Appendix A Roaring Forks Transit Agency Peer Review.....A-1



### **Exhibits / Figures Listing**

Exhibit ES-1.....	ES-12
Exhibit ES-2.....	ES-14
Exhibit 2-1 Census Profile.....	2-1
Exhibit 4-1 Existing 395 Corridor Routes .....	4-3
Exhibit 4-2 ESTA Statistics for Significant Intercity Service .....	4-5
Exhibit 4-3 Idealized Winter Schedule: 5-Year Vision .....	4-10
Exhibit 4-4 395 Corridor Transit Services Winter Peak Period Long Range Vision .....	4-11
Exhibit 5-1 FY 2007-08 Rural Service Performance .....	5-2
Exhibit 6-1 Bishop Area Red & Blue Fixed Rte Bus Service .....	6-2
Exhibit 6-2 Bishop Fixed Route Performance.....	6-4
Exhibit 6-3 Bishop Dial-A-Ride Performance .....	6-6
Exhibit 6-4 Bishop Public Transportation System Performance Fixed Route and Dial-A-Ride Services Combined .....	6-7
Exhibit 6-5 Peer Comparison of Bishop and Rural Towns under 25,000 Population .....	6-8
Exhibit 6-6 Bishop Area Two Way Loop Option.....	6-10
Exhibit 6-7 Bishop Area Two Way Loop Route With Extension .....	6-14
Exhibit 6-8 Bishop Service Options: Service Levels .....	6-16
Exhibit 7-1 Mammoth Lakes Summer Routes .....	7-3
Exhibit 7-2 Mammoth Lakes Winter Routes.....	7-5
Exhibit 7-3 Town of Mammoth Lakes 2007/08 Performance Statistics .....	7-6
Exhibit 7-4 Tahoe and Vail Benchmarks Performance Statistics.....	7-7

Exhibit 7-5 Number of shuttle passengers and shuttle trips, 2002-2007 .....	7-11
Exhibit 8-1 Projected Changes in Service Supply .....	8-6
Exhibit 8-2 Operating and Administrative Expenditures .....	8-8
Exhibit 8-3 Expected Passengers and Fare Revenue by Service .....	8-10
Exhibit 8-4 Operating Revenue Forecasts .....	8-12
Exhibit 8-5 Peak Day Vehicle Needs: Fridays .....	8-13
Exhibit 8-6 Summary FY 08/09 Fleet .....	8-14
Figure 8-7 Fleet Plan .....	8-15
Exhibit 8-8 Capital Expenditures and Revenues .....	8-17
Figure 8-9 Summary of Expenses and Revenues .....	8-20

This page purposefully left blank

## EXECUTIVE SUMMARY

Public transportation services in Inyo and Mono counties were transitioned from Inyo Mono Transit to the Eastern Sierra Transit Authority (ESTA) on July 1, 2008. This is the first Short Range Transit Plan (SRTP) for ESTA.

### Short Range Transit Plan Objectives

The SRTP is intended to guide the development of public transportation services in Inyo and Mono counties over the next five-year period. The SRTP:

- Provides opportunities for public input into the future of public transit services in all areas of Inyo and Mono counties.
- Establishes goals and performance standards.
- Documents transit needs.
- Provides service plan recommendations.
- Establishes a detailed operating and capital financial plan.
- Provides a comprehensive marketing plan. The Marketing Plan is Volume II of the Short Range Transit Plan.

### Overview of Existing Services

The Eastern Sierra Transit Authority provides an array of local, town-to-town, and intercity transit services. When the arrival of seven new buses is complete this fiscal year, ESTA will own 47 buses.

Eastern Sierra Transit operates inter-city service via the CREST routes to Ridgecrest and Reno. The Authority operates both local fixed route and dial-a-ride services in the greater Bishop area and in the Town of Mammoth Lakes. A contract with the Town of Mammoth Lakes provides additional fixed route transit services. Convenient connections are provided via the town-to-town routes from Lone Pine to Bishop, Bishop to Mammoth Lakes, Benton to Bishop, Walker to Bridgeport and Tecopa to Pahrump. Rural dial-a-ride services are also provided in Lone Pine and Walker.

### Transit Needs

#### Transit Dependent Population

Both counties have a significantly higher elderly population than the state average of 10.8%, with 16.9% and 20.8% of Inyo and Mono county residents being age 65 or older, respectively. Another indicator of transit dependency is the percent of the population below poverty level. Both Inyo and Mono counties have a smaller poverty level rate than the state average of 13.2%, with Inyo and Mono counties having 10.5% and 8.2% respectively. The disability rate in Inyo

County is 17.9% of the population, compared to the state average of 15.6%. In Mono County, the disability rate is 12.8%, below the state average.

While the average population density in Inyo County at 1.8 persons per square mile is a small fraction of the statewide average, the mean travel time to work is about one half of the state average of 27.7 minutes. Many residents live and work in their community.

Stakeholders and passengers interviewed identified five key challenges and needs for future public transportation development in rural areas.

1. *Inyo and Mono counties are very expansive low-density areas with dispersed populations of elderly, disabled, and low-income populations.*
2. *There is a need for services from outlying areas to both Bishop and Mammoth.*
3. *There is a need for additional non-emergency medical transportation outside of Mono and Inyo counties.*
4. *A regular five-day-a-week intercity service along the 395 corridor would facilitate greater transportation opportunities for Mono and Inyo County residents.*
5. *There is a lack of transportation for those who don't own or cannot afford an automobile for jobs in Mammoth Lakes and Bishop.*

### Tourist and Visitor Market

The Inyo National Forest is the most visited National Forest in California, and the third most visited in the United States. Market projections for the growth in visitation for the National Forest alone show an additional 98,000 visits per year can be expected each year for the next 20 years.<sup>1</sup> This would increase the number of recreation visits along the corridor from nearly 4 million visits to over 6 million recreation visits each year. The Mammoth Mountain Ski Area averages about 1.3 million visitors a year with 24,000 daily skiers in the winter.

The overwhelming majority of visitors to the Eastern Sierra (upwards of 95%) arrive by private motor vehicles, making alternative transportation more a matter of choice than necessity. Most are from Southern California (especially during the winter as highway routes between S.R. 88 and S.R. 178 across the Sierra Nevada are closed). Increasingly, visitors are coming from Reno and Las Vegas, NV, in part as a result of "Angelenos" relocating to these areas but still recreating in the Eastern Sierra.

---

<sup>1</sup> US Forest Service Recreation Facility Analysis, 2007.

While the Town of Mammoth Lakes and Bishop have excellent transit alternatives for guests once they arrive, the alternative transportation options along the 395 corridor are limited. Currently CREST has low service levels and operates only 3 or 4 days a week depending on the route segment. The dominance of continued auto traffic, with the significant growth in expected tourism and recreation visits to 6 million for just the National Forest alone, will add to the existing significant traffic and parking impacts.

### Seamless Transit System

A major theme of stakeholder interviews and a May 2008 ESTA Board workshop was the desire for the development of a seamless transit system in the Eastern Sierras. Partnerships with the Forest Service, Mammoth Mountain Ski Area, Caltrans, and human service agencies were often mentioned to provide an expanded network of transit services along the 395-corridor spine with connecting routes and shuttles from local town and public lands. Raising the service level bar with convenient and seamless connections will benefit both the visitor and transit dependent population. A new bus branding, signage system and public information system will enable all users to have a reasonable transit or alternative transportation choice for both getting to the Eastern Sierra and travelling by non-auto modes to desired destinations within the Eastern Sierras. The Short Range Transit Plan provides a service plan, financial plan, and marketing plan to achieve the desired seamless transit system within a five-year time frame.

## **ESTA Mission, Goals and Performance Standards**

The purpose of the Eastern Sierra Transit Authority is to provide excellent public transportation services in an entrepreneurial style within the Eastern Sierra Region. The Authority, through its leadership, provides responsive and reliable services and is a regional platform for service planning and funding decisions. To achieve this mission, the SRTP is recommending four key goals:

*Goal #1: Continue to provide safe and convenient transportation services to the residents and visitors of Mono and Inyo counties for employment, shopping, education, medical, recreation and social service trips, while improving cost-effectiveness.*

*Goal #2: Ensure that all transit programs can be provided at a high quality and are seamless to the user.*

*Goal #3: Generate increased ridership among both residents and visitors, while retaining the existing ridership base.*

*Goal #4: Provide public transportation services that are financially sustainable within existing and future potential private, local, state and federal funding programs and regulations in a cost-efficient manner.*

A series of performance standards for each of these goals have been developed. Both minimum and target standards are recommended.

### **395 Corridor Services**

The U.S. 395 corridor functions as the transportation backbone of the Eastern Sierra and provides access to Reno, NV, to the north, Los Angeles, CA to the south, and linkages to I-15 and other routes to Las Vegas, NV. Caltrans reports that 40% of U.S. 395 travel is “through traffic”; 55% is for recreational purposes.

The withdrawal of Greyhound intercity bus service from the corridor in 2001 resulted in Inyo and Mono counties instituting the CREST (Carson Ridgecrest Eastern Sierra Transit) intercity bus service which now provides service between the Reno airport and Ridgecrest. In addition, ESTA provides three other town-to-town services along the 395 corridor. Collectively, the four services provided approximately 8,349 annual service hours and 23,439 annual passenger trips in FY 2007-08. The four services have a combined farebox recovery ratio of 35.8%, with CREST north service between Bishop and the Reno airport having an exemplary farebox recovery ratio of 81%. Recently adopted plans to extend CREST to Lancaster and connect with Metrolink and Greyhound service from Southern California should significantly boost CREST south ridership and efficiency.

In order to provide non-driving alternatives to the recreation market and improve service levels for the transit dependent market, four different studies over the past four years have recommended increased transit service along the 395 corridor. While there is wide recognition of excellent partnerships among the federal land agencies, ESTA and its member entities, Mammoth Mountain Ski Area, Caltrans, and human service agencies, the lack of a cohesive financial plan to move recommendations from paper to reality has been a major constraint identified in each of the previous studies.

The ESTA Short Range Transit Plan provides an opportunity to establish a vision for the development of transit options along the 395 corridor, and a financial framework to provide incremental improvement of services. The 5-year vision is to have ESTA buses meet the four daily Metrolink trains arriving between 8:30 am and 5:35 pm in Lancaster, with a similar service level to the Reno airport. Amenities such as tour-style buses, real time transit information, branding and full implementation of the ESTA marketing plan, timed transfers with US Forest service shuttles in the summer, and coordinated local transit service connections would provide a reasonable transit choice to many potential recreational users as well as residents of Mono and Inyo County.



The incremental five-year plan starts with the link to Lancaster and the Reno Greyhound station in January 2009. More efficient utilization of the existing hours on the 395 corridor would be implemented.

A two-year pilot 395 corridor transit service would be established in FY 2009/10 with two trips in each direction to Lancaster and Reno during peak seasons, 7 days a week. Buses would be leased for the pilot demonstration program. Trip destinations between Lone Pine and the June Lakes Junction, would have up to six trips daily in each direction during peak demand months. One trip in each direction to Lancaster and Reno five days a week would be provided during shoulder seasons, with up to three trips daily between Lone Pine and June Lakes Junction in each direction. A Federal grant would be written to fund the costs of leased buses and program evaluation. Direct operating costs would be recovered through farebox revenues. The partnership agencies would fund start-up costs, marketing, and administrative costs, including a need to guarantee any shortfall in farebox revenues during the two-year pilot program. After the first year of full operation, an evaluation on first year operations would be conducted. The evaluation would also include a financial feasibility analysis for achieving the 5-year vision. Depending on the outcome of the feasibility analysis based on the pilot program, a formal long-term funding agreement would be signed by participating partners.

If the evaluation is successful, two additional round trips between Reno and Lancaster would be added by 2013/14. Ten tour bus coaches would be purchased by ESTA to operate the service in the long term.

## **Rural Transit Services**

Rural transit provides an important lifeline service to residents living in rural communities in both Inyo and Mono counties. ESTA currently provides an array of town-to-town and local dial-a-ride services to meet the rural needs of Inyo and Mono County residents.

ESTA provides two rural dial-a-ride and two town-to-town services outside the Highway 395 corridor. The Lone Pine Dial-A-Ride and Benton-Bishop town-to-town are both performing reasonably well and serve transit dependent markets. While the Walker Dial-A-Ride provides important lifeline service to residents of the Antelope Valley, low productivity and farebox recovery is likely to persist for this rural transit service. The Tecopa-Pahrump service is operated just one day a week in a very isolated area and serves important lifeline transit needs. While productivity is low, it should achieve farebox recovery requirements with the September fare increases.

In interviews with human service agencies, there were a significant number of suggestions for improved transportation connections in rural areas. A review of

the Census data on the distribution of seniors, low-income and disabled individuals point to the fact that trip patterns are very dispersed and trip volumes are too low to be supported by traditional public transportation. Poor performance led to the termination of three town-to-town services in July 2008.

In the recent Public Transit-Human Service Coordinated Transportation Plan,<sup>2</sup> there were nine different human service agencies identified that directly provide or assist clients in obtaining transportation services. Two examples include the Inyo Mono Senior Transportation program that provides out-of-area medical transportation for individuals who have no public or private alternative. Rides require 7 - 10 days advance notice to schedule a trip. A second example is the Big Pine Education Center which provides after-school transportation to tribal and non-tribal children in the Big Pine area. The program operates two 14-passenger and one 7-passenger van.

The key to meeting rural transportation needs is increased coordination and collaboration with human service agencies. Three priority strategies recommended in the Coordination Plan for developing and staffing a viable Consolidated Transportation Service Agency are recommended for inclusion in the Short Range Transit Plan. The ability to connect with a consistent 5-7 day-a-week 395 Corridor service as recommended above will leverage the number and type of trips the ESTA-human service agency partnership can provide. A Rural Mobility Manager is recommended to coordinate this effort. A grant application has been submitted to achieve this objective.

## **Bishop Local Services**

Very high levels of both fixed route and dial-a-ride services are provided in Bishop. Two fixed routes with two buses on 30-minute frequencies provide excellent coverage throughout Bishop five days a week. The fixed routes also provide route deviation with an advanced reservation and an extra fee for pick up and drop offs within one mile of the route. A general public dial-ride service is operated with 6 buses in service, seven days a week. Late service is provided Friday and Saturday nights.

Passengers and local stakeholders are extremely pleased with the high level of service provided in Bishop. There is a very diverse ridership of both the dial-a-ride (DAR) and fixed route bus services. For example, Great Steps Ahead in Bishop is a heavy user of dial-a-ride services. The program buys monthly DAR passes for their counselors. Counselors take DAR to the home of a child (the client) while the DAR vehicle waits; they then return to Great Steps Ahead for the program activities. At the end of the program they use DAR to return the child to

---

<sup>2</sup> Innovative Paradigms and Nelson Nygaard, "Public Transit-Human Service Transportation Coordination Plan for Inyo and Mono Counties", Draft Final Report, May 2008.

home. Another example is taking seniors to the Senior Center for the lunch program and returning them home after lunch. Regular trips are also scheduled to and from the Friendship Center. On the fixed route, there is heavy utilization of the Blue route for student trips to Jill Kinmont Boothe School. The consulting team also observed trips on fixed route services to work, shopping at Kmart, and to Northern Inyo Hospital for medical appointments.

There is significant investment in local Bishop DAR and fixed route services. Approximately 43% of total ESTA service hours are devoted to local Bishop fixed route and dial-a-ride services. Bishop local services currently cost an estimated \$916,255 annually.

The six dial-a-ride buses provided a total of 41,320 passenger trips in FY 2007/08 at a subsidy per passenger of \$13.58. Aside from the grouping of trips to the Senior Center, Friendship Center, and Little Promises, the Bishop Dial-a-Ride is more like a taxi service than a general public dial-a-ride service. While about one-third of the available slots are regularly scheduled in advance (commonly referred to as subscription trips), many of the other trips are arranged the same day, and a single passenger is picked up and dropped off, very similarly to a taxi trip. Public transportation agencies cannot afford the luxury of being a single trip taxi service for the convenience of passengers. General public dial-a-ride need group trips to achieve cost efficiencies.

While the existing Blue and Red routes do provide a high level of service to the community, there is an opportunity to improve overall effectiveness and cost-efficiencies of the community transit services. Ridership productivity, as measured by passengers per service hour, is particularly low for fixed-route service, at 4.4 passengers per hour of service provided. Most local fixed route services average more than 8 passengers per hour. Low productivity has resulted in an average subsidy of \$11.23 per fixed route passenger trip.

In order to improve overall cost-effectiveness, nine service options were evaluated, ranging from increasing fixed route frequencies to 15 minutes to eliminating fixed route service altogether. For dial-a-ride, the options range from the status quo of having 6 dial-a-ride buses, to drastically reducing dial-a-ride to two buses and restricting eligibility to individuals who qualify under the Americans with Disabilities Act. Requiring advanced reservations in order to provide opportunities for dispatchers to group trips was also considered.

Two options are recommended for consideration by the ESTA that would most effectively work towards improving productivity and reducing the subsidy per passenger for the local Bishop transit system. Both options streamline the fixed route to serve origins and destinations where riders in Bishop desire to travel to, expand coverage to serve the Meadow Farms and Highlands mobile park area, eliminate the route deviations on fixed route, require next day advanced reservations and reduce the number of DAR vehicles from 6 to 3 or 4 (depending

on the option) and will increase both the efficiency and effectiveness of public transportation in Bishop. It is important to note that the next day advanced reservation will allow dispatchers to group trips for improved efficiency and eliminate the existing taxi-style operation.

## **Mammoth Local Services**

ESTA is one component of the transit system provided in Mammoth Lakes. ESTA operates three types of services that vary in their routes and service levels in the summer and winter:

- Town Trolley: summer and winter routes and schedules
- Lift Service: Midtown and Old Mammoth Lift with summer and winter routes and schedules
- Mammoth Dial-A-Ride: year round service, open to general public

The Town of Mammoth Lakes contracts for extra service beyond what would be normally provided by ESTA. The Town approved a 1% increase in the Transient Occupancy Tax and the Town Council has designated the funds to support local transit services in the town.

Mammoth Mountain Ski Area (MMSA) operates extensive transit service during the winter to provide access from the town to the mountain. In the summer, MMSA operates the Mammoth Bike Shuttle from the Village to the Main Lodge.

From June to early September, the US Forest Service has historically operated under a vendor contract, providing service from the Main Lodge to Reds Meadow every 30 minutes, or more frequently as demand dictates.

The free Mammoth Trolleys and Lift services have excellent ridership and productivity. The \$2.28 cost per passenger trip for the Mammoth Trolley is exemplary. The Trolley attracts a very diverse ridership of local Mammoth residents and tourists. It's very popular with children. The Mammoth Lift is very heavily utilized for employment transportation.

The Town of Mammoth Lakes staff and more recently ESTA staff have done an exemplary job in developing local public transportation services in concert with the MMSA ski area transit services. The system is working well, it exceeds the performance standards recommended for the SRTP, and no changes in service design are recommended.

There are four key issues and opportunities that did surface during the Short Range Transit Plan process:

1. Bus stop signage: There was consensus that bus stop signage is a significant issue in the Town of Mammoth Lakes. In the past, there was no coordination of

signage among Inyo Mono Transit, Town of Mammoth Lakes, and ESTA services with signs scattered haphazardly, often on the same pole. With no consistency and very little information on the signs, confusion, particularly for new visitors or residents was commonplace.

Volume II of the SRTP and subsequent work by subcontractor Transit Marketing for the Town of Mammoth Lakes is addressing this issue with an integrated bus stop signage scheme.

2. Vehicle Branding: ESTA does not currently have a single brand. Rather it has a number of de facto brands which it has inherited from previous organizations. As just one example, Minivans and cutaway style vehicles are branded as Inyo-Mono Transit, Inyo-Mono Dial-a-Ride, or ESTA. Many are white with red and blue stripes, some are red, some are blue (to coincide with the red and blue routes in Bishop), and the newest are white with gold and blue stripes.

The Marketing Plan in Volume II of the Short Range Transit Plan recommends a vehicle branding scheme that addresses these issues in a comprehensive manner.

3. Linkage to the airport when air service begins. Air service to the Town of Mammoth Lakes will begin on December 18, 2008. While some stakeholders expressed a need for public transportation to meet the daily trip, the combination of hotel shuttles and rental cars will adequately serve the transportation needs of air travelers.

4. Serving future growth in Mammoth Lakes. The Town of Mammoth Lakes has a General Plan policy to “limit total peak population of permanent and seasonal residents and visitors to 52,000 people.”

In order to achieve the goals of the General Plan, the Town has established a series of districts for detailed planning and public input. District planning is now underway in various stages for the Clearwater, Mammoth Crossings, the Sherwin, Hidden Creek Crossing and Sierra Star and Snowcreek VIII.

In reviewing the draft site plans for several of these developments as part of the district planning process, bus stop improvements are being included, but there has not been adequate consideration on how and if the existing Town of Mammoth Lakes transit services can effectively serve the planned bus stop in new developments with available TOT dollars. It is recommended that the Town of Mammoth Lakes undertake such an assessment as an integral part of the District Plans. The potential transit demand for each District Plan should be compiled and considered in a comprehensive manner.

The Short Range Transit Plan includes a new year round LIFT route to serve these new developments in 2012/13 if development progresses to the point

which justifies implementation. 3,700 new annual vehicle revenue hours are utilized as a placeholder until the District Plan process considers transit operations in a more comprehensive manner.

## Financial Plan

The financial plan provides the details on costs and revenues from FY 2008/09 to FY 2013/14 based on the recommendations in previous chapters. The financial plan is based on a series of assumptions that are clearly documented in detail in Chapter 8.

### Operating Costs

The number of vehicle revenue hours and miles supplied are the primary variables that determine operating costs. In FY 2007/08, the actual number of vehicle revenue hours was 51,546. In FY 2008/09, the number of budgeted vehicle revenue hours is 51,589. The SRTP improvements to all service types are expected to increase the number of vehicle revenue hours to 77,638. This does not include the MMSA services and it also does not include a prospective Whitney Portal shuttle service.

In FY 2007/08, driver wages and benefits were approximately \$1.3 million per year or approximately 47% of total expenditures. Overall driver costs, including wages and benefits, are forecast to increase from \$1.3 million to \$2.4 million between FY 2007/08 and 2013/14, an 80% increase.

To account for increased administrative and management staffing needs to provide a Rural Mobility Manager, plan and implement the Reds Meadow service, and implement and manage the two-year pilot 395 service, the SRTP assumes that administrative costs will increase by 25% in 2008 dollars.

Fuel costs are a significant wild card in the Short Range Transit Plan. There have been unprecedented swings in fuel costs over the past year. The SRTP is assuming that the recent plunge in gas prices will be temporary and that, over a five year period, fuel costs will rise faster than the rate of inflation, at 5% per year on average. Fuel costs are also correlated to the number of miles being provided. The annual number of total miles travelled by ESTA services is forecast to increase from 817,000 annual miles in FY 2008/09 to 1,526,000 in FY 2013/2014.

The actual operating and administrative expenses in 2007/08 were \$2,868,636. In FY 2013/14, after the five-year service plan is fully implemented, operating and costs are expected to increase to \$4.9 million, a 73% increase.

## Operating Revenues

In FY 2007/08, fare revenues were \$350,820. Systemwide, ESTA had a 12.2% farebox recovery ratio (fare revenues divided by operating and administrative expenses). ESTA has recently raised fares in January 2008 and then again in September 2008. The FY 2008/09 ESTA budget anticipates a 43% increase in fare revenues to \$471,357.

With the full implementation of the service plan in 2013/14, fare revenues and fees are expected to account for \$2.1 million with an expected farebox recovery ratio of 42.7%. Recent fare increases, Reds Meadow shuttle fees, and the high farebox recovery rate for 395 services are three primary factors for the significant increase in farebox recovery.

State funding sources are expected to be flat or actually decline over the next five years. The biggest source of funds currently utilized by ESTA is the Local Transportation Fund (LTF), collected from ¼ cents of the sales tax. LTF monies are expected to only increase marginally over the next five years, from \$1,375,000 to \$1,445,000. The other major state funding source, State Transit Assistance (STA) funds are projected to remain constant at \$149,000 for all five SRTP plan years.

The Town of Mammoth Lakes provided \$427,000 in transient occupancy tax (TOT) to support contract services operated by ESTA in Mammoth Lakes. In order to fund a new LIFT route to serve new development, the amount of TOT is expected to increase to \$647,000 in FY 2013/14. This increase would need to be negotiated between the Town of Mammoth Lakes and ESTA.

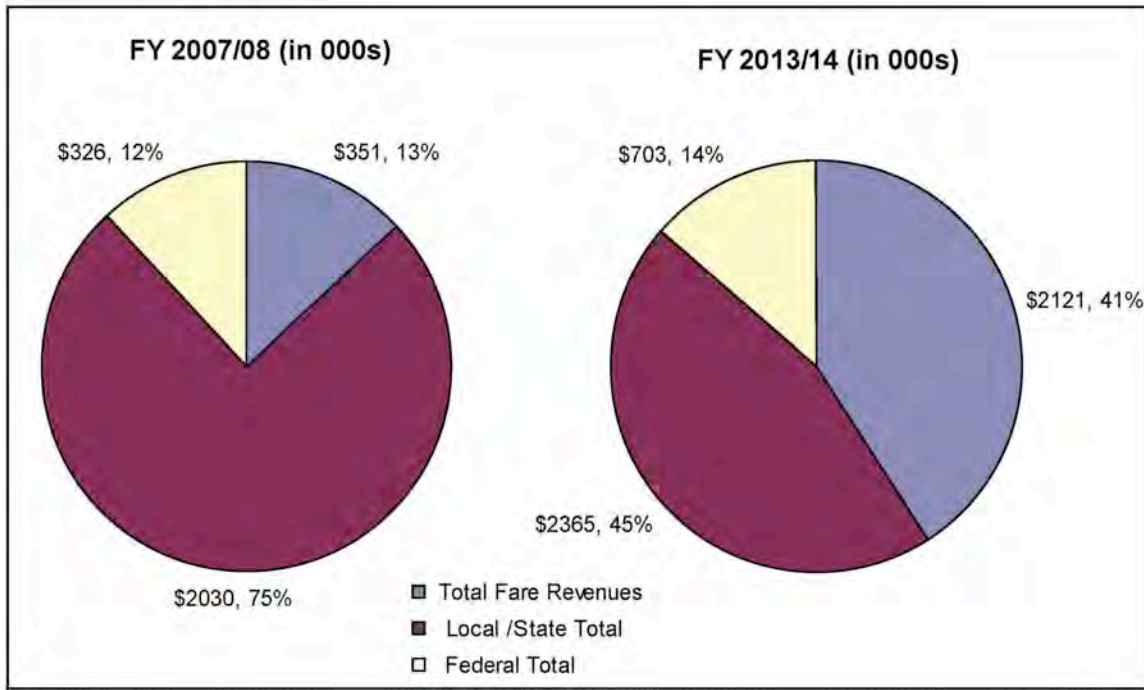
In FY 2007/08, ESTA received \$326,000 in Federal Transit Administration (FTA) funds or 12% of the budget. Federal funding is expected to increase to \$703,000 in FY 2013/14.

The SRTP projects a significant shift in the proportion of different revenue sources between FY 2007/08 and 2013/14 as shown in Exhibit ES-1 on the next page. A much higher proportion of the budget is expected from fare revenues and fees, and a much lower proportion from local and state funding.

## Capital Expenditures

ESTA utilizes a range of 9 to 24 vehicles, depending on the day of week, with Friday being the peak day of vehicle utilization. When the arrival of seven new buses is complete this fiscal year, ESTA will own 47 buses. Nine buses are currently slated for salvage after the delivery is complete. There is currently a peak pullout of 17 ESTA owned vehicles, with a need for 11 spare buses. The Town of Mammoth Lakes owns 12 buses, with seven currently operating in ESTA peak pullout service.

**Exhibit ES - 1**



Over the five-year period, the fleet plan calls for:

- 20 bus replacement purchases: \$3.2 million
- 18 buses leased: \$656,000 (for the Reds Meadow and 395 pilot demonstration)
- 21 expansion bus purchases: \$9.8 million (for Reds Meadow and for 395 service if pilot program is successful)

The existing ESTA facility at the airport is inadequate for the system expansion required for the seamless transit system. In order to accommodate a seamless transit system, a facility feasibility study is recommended. ESTA can either apply for a Caltrans planning grant or collaborate with the Forest Service’s ATPPL grant to define facility needs as part of the proposed partnership with the Forest Service and MMSA area. The feasibility study would determine the institutional arrangements required for potentially utilizing existing facilities owned by the Town of Mammoth Lakes and MMSA.

The branding recommendations in Volume II, Marketing Plan, will require a significant investment in bus stop signage and maps at key bus stop locations. The SRTP also includes monies for future bus stop improvements including new bus stop shelters, benches, and Americans with Disabilities Act (ADA) access improvements. A total of \$304,000 is included over the five-year plan period.



## Capital Revenues

Revenue sources for capital expenditures are expected to come from four primary sources. Over the five-year planning horizon, the following revenue sources would be utilized:

- Public Transportation Account (via STIP): \$2.5 million
- Proposition 1B (PTMISEA): \$1.2 million
- FTA 5320 (ATPPL): \$8.9 million
- FTA 5311f (Rural intercity): \$1.1 million

A total of \$14 million in capital revenues are required to fund the seamless transportation vision.

## **Seamless Transit System Performance**

Exhibit ES-2 provides an overview of the ESTA system performance over the next five years. With full implementation of the service, marketing and financial plans, the number of annual passengers is expected to increase from 363,200 to approximately 635,000 by FY 2013/14. With increased fares and fees, average fare per passenger is expected to increase from 97 cents to \$3.75 in 2013/14. The subsidy per passenger is expected to drop from \$6.93 to \$41.9.

**Exhibit ES-2**  
**Overall System Performance Summary**

	<b>FY 2007/08 Actual</b>	<b>FY 2008/09 Budget</b>	<b>FY 2009/10 Projected</b>	<b>FY 2010/11 Projected</b>	<b>FY 2011/12 Projected</b>	<b>FY 2012/13 Projected</b>	<b>FY 2013/14 Projected</b>
<b>Base Statistics</b>							
Passengers	363,200	398,971	517,374	571,321	594,519	662,738	677,310
Vehicle Revenue hours	51,546	50,750	51,862	60,049	60,049	68,142	72,530
Operating cost	\$ 2,868,636	\$ 2,909,978	\$ 3,345,391	\$ 3,853,325	\$ 4,068,111	\$ 4,544,695	\$ 4,966,344
Fare Revenues/User fees	\$ 350,820	\$ 483,367	\$ 763,417	\$ 1,204,673	\$ 1,472,509	\$ 1,718,363	\$ 2,121,234
<b>System Performance Indicators</b>							
Operating cost/vehicle revenue hour	\$ 55.65	\$ 57.34	\$ 64.51	\$ 64.17	\$ 67.75	\$ 66.69	\$ 68.47
Operating cost/passenger	\$ 7.90	\$ 7.29	\$ 6.47	\$ 6.74	\$ 6.84	\$ 6.86	\$ 7.33
Passengers/ vehicle revenue hour	7.0	7.9	10.0	9.5	9.9	9.7	9.3
Average Fare/passenger	\$ 0.97	\$ 1.21	\$ 1.48	\$ 2.11	\$ 2.48	\$ 2.59	\$ 3.13
Subsidy Per Passenger	\$ 6.93	\$ 6.08	\$ 4.99	\$ 4.64	\$ 4.37	\$ 4.26	\$ 4.20
Farebox recovery ratio	12.2%	16.6%	22.8%	31.3%	36.2%	37.8%	42.7%

# 1. Introduction

This is the first Short Range Transit Plan (SRTP) for the Eastern Sierra Transit Authority (ESTA). This chapter starts out describing the objectives of the SRTP. It then provides a historical perspective of the development of the Eastern Sierra Transit Authority services. Finally, it describes the focus areas of the SRTP effort.

## Short Range Transit Plan Objectives

The SRTP is intended to guide the development of public transportation services in Inyo and Mono counties over the next five-year period. The SRTP:

- Provides opportunities for public input into the future of public transit services in all areas of Inyo and Mono counties.
- Establishes goals and performance standards.
- Documents transit needs.
- Provides service plan recommendations.
- Established a detailed operating and capital financial plan.

## Historical Perspective

The Eastern Sierra Transit Authority was established in November of 2006 as a Joint Powers Authority between the Counties of Inyo and Mono, the City of Bishop and the Town of Mammoth Lakes. ESTA is a new public transit agency created to meet the growing need for public transportation in the four member jurisdictions and throughout the entire Eastern Sierra region. The ESTA Board of Directors is made up of eight members, two from each of the member jurisdictions, appointed from their respective governing bodies. ESTA began transit operations on July 1, 2007.

Public transportation in the Eastern Sierras has its roots in social service agency transportation. In the late 1970s, the Area Agency on Aging obtained three vans to provide dial-a-ride service in Bridgeport, Bishop, and Lone Pine. The County of Inyo created Inyo Mono Transit (IMT) to provide transit services within its jurisdiction in 1983. At that time, it also began operating transit services in Mono County. In 2000, a Memorandum of Understanding (MOU) was developed between the two counties to formalize this relationship. A separate MOU was created in 2000 to institute IMT's service contract with the Town of Mammoth.

During the era of Inyo Mono Transit, services were incrementally implemented based on unmet needs findings and recommendations of both the Inyo and Mono Local Transportation Commissions. According to stakeholder interviews, the Benton Bishop town-to-town service was an early example of a service started in response to an unmet need, reasonable to meet finding. As described in more

detail in the chapter, IMT also implemented CREST service in response to Greyhound abandoning intercity service along the 395 corridor.

## **Overview of Services Provided**

The Eastern Sierra Transit Authority provides an array of local, town-to-town, and intercity transit services. When the arrival of seven new buses is complete this fiscal year, ESTA will own 47 buses.

Eastern Sierra Transit operates inter-city service via the CREST routes to Ridgecrest and Reno. The Authority also operates local fixed route and dial-a-ride services in the greater Bishop area and in Town of Mammoth Lakes. A contract with the Town of Mammoth Lake provides additional fixed route transit services. Convenient connections are provided via the town-to-town routes from Lone Pine to Bishop, Bishop to Mammoth Lakes, Bishop and Benton and Walker to Bridgeport.

## **Focus Areas of Short Range Transit Plan**

With ESTA being just over one year old, the Joint Power Authority has significant opportunity to develop a comprehensive seamless transportation system that is attractive to its core transit dependent ridership, but also to visitors to the Eastern Sierra. The US Forest Service and Mammoth Mountain Ski Area currently operate their own bus services and have expressed strong interest in collaborating with ESTA in providing a seamless public transportation system. The focus of this Short Range Transit Plan process was:

1. Development of a comprehensive marketing plan with a new branding scheme for buses and bus stop signs. Volume 2 of the Short Range Transit Plan includes the Marketing Plan.
2. Measurement of the effectiveness and efficiency of existing services, and provision of recommendations on how to improve efficiency and effectiveness.
3. Development of a comprehensive set of goals and performance standards that can be utilized to monitor ongoing performance.
4. Initial dialog and discussion with potential partners who will have important roles in the future development of a seamless transportation system in Eastern Sierras.
5. Provision of a longer-range vision and implementation plan for upgrading service in the 395 corridor and connections to this important spine service.
6. Development of a comprehensive operations and capital financial plan to guide future investments in public transportations services in the Eastern Sierra.

## **Report Organization**

Chapter 2 provides an overview of transit needs between FY 2008/09 and FY 2013/14. Information is provided on the demographics of the existing population and visitors to the area. Results of stakeholder interviews are provided in summary form.

Chapter 3 provides the ESTA mission statement, recommended goals, and performance standards for ongoing performance tracking.

Chapter 4 provides a vision and recommended implementation plan for services along the 395 corridor.

Chapter 5 provides a plan for further development of rural public transportation services in the Eastern Sierra.

Chapter 6 provides background on existing dial-a-ride and fixed-route services in the City of Bishop, provides seven services, and provides recommendations for improving the efficiency and effectiveness of services in Bishop.

Chapter 7 provides a description of local services in the Town of Mammoth Lakes and provides recommendations for minor adjustments in service delivery over the next five years.

Chapter 8 provides a detailed financial plan. Descriptions, assumptions and forecasts are provided for existing and future revenue sources. Detailed operating costs are provided between FY 2008/09 and FY 2013/14 based on service supply recommended in previous chapters. A capital plan for future investment in bus replacements, bus stop improvement and facilities is provided.

Appendix A contains a description of the Roaring Forks Transportation Authority and its relevance to ESTA's future growth and partnerships.

This page purposefully left blank

## 2. Transit Needs

This chapter describes how public transportation services in Inyo and Mono counties fulfill the existing and future needs of the transit dependent population, the general public, and visitors to the Eastern Sierra. This section begins with an overview of the demographics of the transit dependent populations in Mono and Inyo counties, with a focus on the elderly, disabled, and low-income populations. A profile is also provided of the tourists and visitors to the area. Annually, both Inyo and Mono counties hold unmet needs hearings that have led to many of ESTA's services. Recent findings of the unmet needs hearing process are provided. During the planning process, input was received from a variety of stakeholders and these interviews are summarized.

### Demographics of the Transit Dependent Population

Exhibit 2-1 provides a profile of the Census information for Inyo and Mono counties. Both counties have a significantly higher elderly population than the state average of 10.8%, with 16.9% and 20.8% of Inyo and Mono county residents being age 65 or older, respectively. Another indicator of transit dependency is the percent of the population below poverty level. Both Inyo and Mono counties have a smaller poverty level rate than the state average of 13.2%, with Inyo and Mono counties having 10.5% and 8.2% respectively.

**Exhibit 2-1  
Census Profile**

	Inyo	Mono	California
Population 2006 estimate	17,980	12,754	36,457,549
Percent Age 65+	16.9%	20.8%	10.8%
Percent American Indian	11.0%	2.9%	1.2%
Persons with disability	17.9%	12.8%	15.6%
Median Household Income, 2004	\$ 38,853	\$ 48,083	\$ 49,894
Percent Below Poverty Level	10.5%	8.2%	13.2%
Mean Travel Time to Work (minutes)	15.2	16.4	27.7
Persons Per Square Mile	1.8	4.2	217.2

The disability rate in Inyo County is 17.9% of the population, compared to the state average of 15.6%. In Mono County, the disability rate is 12.8%, below the state average.

While the average population density in Inyo County at 1.8 persons per square mile is a small fraction of statewide average, the mean travel time to work is about one half of the state average of 27.7 minutes. Many residents live and work in their community.

A series of maps was prepared to show the distribution of the elderly, disabled, and households below the poverty level in Inyo and Mono counties. Appendix A provides the distribution by Census block groupings.

## **Needs for Rural Transportation Services in Inyo/Mono Counties**

The following analysis is based on:

- A review of 2000 and 2006 Census data, including mapping of data by Census blocks.
- Interviews of representatives from the Area Agency on Aging, Mono County Social Services, and Inyo County Department of Health and Human Services.
- Unmet needs finding of the Coordinated Public Transit-Human Service Transportation Coordination for Inyo and Mono Counties by Nelson Nygaard and Innovative Paradigms, et al. Draft Report, May 2008.

The interviews and review of available information points to the challenges of operating rural transit services in Inyo and Mono counties. The following are five key findings of the stakeholder interviews and review of relevant background materials.

1. *Inyo and Mono counties are very expansive low-density areas with dispersed populations of elderly, disabled, and low-income populations.*

The 2000 Census shows expansive low-density areas with dispersed populations of elderly, low income and disabled populations in Inyo and Mono County. Appendix A is a series of maps that illustrates the wide dispersion of these transit dependent populations. Social service agency representatives said that many seniors age in place in very isolated areas. Isolation is a major issue, particularly when a spouse passes away. According to the Area Agency on Aging, Inyo County has the largest percentage of seniors in California who live alone – 43%. Most of these seniors are at or below the poverty level.

2. *There is a need for services from outlying areas to both Bishop and Mammoth.*

There is an ongoing need for transportation from outlying communities to social service agency appointments, medical appointments, and shopping. The most critical transportation connections cited by social service agency representatives were the following:

- Benton – Chalfant – Bishop – Mammoth
- Walker – Coleville – Carson – Bridgeport
- Coleville/Walker – Marine Base – Bridgeport
- Middy service from Lone Pine to Bishop



While Mono County residents in Benton can get to Bishop on the Benton to Bishop town-to-town service, the connection to Mammoth for social service agency services doesn't exist during the midday. According to social service agencies, there is also a need for service to the Marine Base.

While these are important transportation connections, the trip dispersion and volumes would likely be very low, making traditional public transportation difficult from both an efficiency and effectiveness perspective in these corridors.

3. *There is a need for additional non-emergency medical transportation outside of Mono and Inyo counties.*

Many residents in northern Mono County have medical appointments and tend to shop in Carson, Minden, and Gardnerville.

In southern Inyo County, there is a need for non-emergency medical transportation to Loma Linda in Ridgecrest and other major medical facilities in San Bernardino County.

The Inyo Mono Senior Program (IMSP) does provide out-of-area medical transportation for seniors who have no public or private alternative. Rides require 7 - 10 days advance notice to schedule a trip. There is a need to make a similar service available to non-seniors.

4. *A regular five-day-a-week intercity service along the 395 corridor would facilitate greater transportation opportunities for Mono and Inyo County residents.*

While social service agency representatives are appreciative of the Lone Pine to Bishop service, the lack of midday service was problematic for a number of clients.

There are significant problems in finding MediCal service providers. Because CREST service is not available from Lone Pine to Reno on the same day, medical appointments can be problematic and very time consuming. The consulting team interviewed a disabled passenger on the Bishop to Lone Pine bus returning to Lone Pine from a medical appointment in Reno. The trip required an overnight stay at a hotel, and was very time consuming.

According to human service agency representatives, the only dentist available for Medical clients in Ridgecrest is only available on days that the CREST bus doesn't operate to Ridgecrest.

5. *There is a lack of transportation for those who don't own or cannot afford an automobile for jobs in Mammoth Lakes and Bishop.*

Services like the Benton to Bishop service operate on a limited schedule three days a week and are not conducive to employment trips. Overall, there are many

job opportunities in Mammoth, but the transportation options on ESTA for employment are quite limited, especially those working non-traditional hours.

## **Tourism and Recreation Market<sup>1</sup>**

Of the 60% of traffic originating in or destined to locations within Inyo and Mono counties, the Town of Mammoth Lakes is the top destination. Caltrans has also indicated that increased truck traffic to Reno, NV, from Los Angeles, CA, is projected due to industrial development in the Reno area.

Tourism and recreation represent the largest portion of the local economy. Major sites from north to south along the U.S. 395 Scenic Byway corridor include:

- Bodie State Historic Park
- Mono Lake / Mono Lake Tufa State Reserve (South Tufa) / USFS Visitor Center
- Yosemite National Park
- June Lake
- Town of Mammoth Lakes area
  - Inyo Craters / Earthquake Fault
  - Mammoth Mountain Ski Area
  - Mammoth Lakes Basin
  - Reds Meadow / Minaret Vista
  - Devils Postpile / Rainbow Falls
  - Hot Creek
  - Convict Lake
- Rock Creek
- Bishop Creek
  - North Lake
  - South Lake
- Manzanar National Monument
- Ancient Bristlecone Pine Forest / Schulman Grove Visitor Center
- Mount Whitney / Alabama Hills (Film Museum)
- Interagency Visitor Center (Lone Pine)
- Death Valley National Park

The Inyo National Forest is the most visited National Forest in California, and the third most visited in the United States. Market projections for the growth in

---

<sup>1</sup> Much of this section is cited directly from: "Transportation Observations, Considerations, and Recommendations relative to the Eastern Sierra Expanded Transit System and the Reds Meadow Shuttle," provided by the Interagency Transportation Assistance Group (TAG) / Alternative Transportation in Parks and Public Lands (ATPPL) Program, August 2007, hereinafter referred to as the Final Eastern Sierra TAG Report.

visitation for the National Forest alone show an additional 98,000 visits per year can be expected each year for the next 20 years.<sup>2</sup> This would increase the number of recreation visits along the corridor from nearly 4 million visits to over 6 million recreation visits each year.

The overwhelming majority of visitors to the Eastern Sierra (upwards of 95%) arrive by private motor vehicles, making alternative transportation more a matter of choice than necessity, as was noted by multiple stakeholders in the recent TAG report. Most are from Southern California (especially during the winter as highway routes between S.R. 88 and S.R. 178 across the Sierra Nevada are closed). Increasingly, visitors are coming from Reno and Las Vegas, NV, in part as a result of “Angelenos” relocating to these areas but still recreating in the Eastern Sierra. The Town of Mammoth Lakes reports solid international visitation from “fly-drive” and “fly-ride” tours of the American West. Tour itineraries vary, but typically include a leg from Las Vegas to Mammoth en-route to Yosemite (where overnight accommodations are more difficult to secure than in Mammoth Lakes).<sup>3</sup>

While the Town of Mammoth Lakes and Bishop have excellent transit alternatives for guests once they arrive, the alternative transportation options along the 395 corridor are limited. Currently CREST has low service levels and operates only 3 or 4 days a week depending on the route segment. The dominance of continued auto traffic, with the significant growth in expected tourism and recreation visits to 6 million for just the National Forest alone, will add to the existing significant traffic and parking impacts.

The Rock Creek Recreation Area is a prime example. Located off US 395, approximately half way between the towns of Bishop and Mammoth Lakes, this recreation area includes several public campgrounds and day use sites, three resorts, and the most popular wilderness trailhead accessing the John Muir Wilderness. For the trailhead, on any given day during the peak season, the “Mosquito Flat” parking lot is completely full by 10 am, resulting in vehicles parked off the roadway as far as two miles away. With only 400 parking spaces and an estimated 4,200 daily visitors during a busy summer day, traffic and parking congestion are an unavoidable consequence. Many other sites on the Inyo National Forest witness similar traffic and capacity impacts during the peak seasons. These include places such as Hot Creek, Convict Lake, June Lake, and Mount Whitney.<sup>4</sup>

The US Forest service has successfully applied for an Alternative Transportation in Parks and Public Lands Program (ATPPL) planning grant to address these needs in a comprehensive manner. The \$350,000 study will result in a multi-

---

<sup>2</sup> US Forest Service Recreation Facility Analysis, 2007.

<sup>3</sup> Final Eastern Sierra TAG Report, op cit.

<sup>4</sup> U.S. Forest Service Inyo National Forest, FY 2008 Proposal for Alternative Transportation in the Parks and Public Lands Program,.

agency Master Transportation Plan that can build on the results of the Short Range Transit Plan. According to the grant application, the “scope of work will focus on the service area from State Route 120 at Yosemite National Park to Whitney Portal Road (terminates at Mount Whitney) and will analyze existing alternative transportation systems, gather data to sufficiently inform future transit decisions, identify potential funding strategies, and make recommendations about needs associated with connecting these systems with existing and planned interregional transit systems. In addition to the regional service areas, there are a number of very specific linkages located on the Inyo National Forest that will be analyzed as part of this effort:

- State Route 120 (Tioga Pass) from Yosemite National Park to Lee Vining
- Service extensions from Mammoth Lakes to Hot Creek/Convict Lake/Rock Creek
- Service extensions from Yosemite NP and Lee Vining to Mammoth Lakes
- Service extensions or expansions to the June Lake Loop/Lakes Basin/Reds Meadow
- Service extensions to Big Pine, Lone Pine, and Mount Whitney Portal”<sup>5</sup>

It is hoped that the US Forest service will collect detailed market research data to inform this effort. Since most of the visitors and tourists to the area are driving, detailed market research of potential transit users is needed to inform the decision-making process. Statistically valid survey data was not available for the Short Range Transit Plan.

The Forest Service has also been successful in obtaining an ATPPL planning grant to study the feasibility of a shuttle service from Whitney Portal, 12 miles from Town of Lone Pine. Every year, an estimated 200,000 people visit Portal, the bulk of which visit during the peak summer months. According to the grant application, the 300 parking spaces cannot meet the demand of 2500 daily visitors. A Transportation Assistance Group (TAG) report completed in 2007 identified the Whitney Portal as a strong candidate for alternative transit and advises coordination between the national Forest and interested partners to establish a sustainable, integrated system. The Inyo National Forest is planning to carry out a transit feasibility study that would “quantify visitation patterns and traffic trends while analyzing potential alternatives, funding strategies, transit schedules, phased implementation, contracting methods and other logistics necessary in the development of a successful integrated and sustainable ATS.”

---

<sup>5</sup> Ibid, p. 3

## **3. Goal and Performance Standards**

### **Introduction**

This chapter provides a framework for establishing overall goals and performance standards for the Eastern Sierra Transit Authority (ESTA). The ESTA Board adopted the ESTA Mission Statement in 2007. The ESTA Board reviewed the recommended goals and performance standards in an August 2008 working paper. Comments from the ESTA Board and staff have been incorporated.

### **ESTA Mission Statement**

The purpose of the Eastern Sierra Transit Authority is to provide excellent public transportation services in an entrepreneurial style within the Eastern Sierra Region. The Authority, through its leadership, provides responsive and reliable services and is a regional platform for service planning and funding decisions.

### **ESTA Goals and Performance Standards**

The goals establish general direction for policies and operation, are value-driven, and provide a long-range perspective. The minimum performance standard is the recommended minimum performance standard for achieving the goal. The recommended target performance standard is what ESTA should strive to achieve during the next five years.

There is a need to distinguish between performance standards for different types of services. Several minimum and target standards are suggested for the following types of services:

- Bishop Fixed Route
- Mammoth Fixed Route
- Bishop Dial-A-Ride
- Mammoth Dial-A-Ride
- Rural Dial-A-Ride
- Town-to-Town

**Goal #1: Continue to provide safe and convenient transportation services to the residents and visitors of Mono and Inyo counties for employment, shopping, education, medical, recreation and social service trips, while improving cost-effectiveness. (Safe and accessible goal)**

1.1 Accessibility:

1.1.1 Mammoth Lakes:

*Summer:* The minimum standard is to provide free access to public transportation in the greater Mammoth Lakes area from 7:00 am to 10:00 pm on weekdays and 9:00 am to 10:00 pm on weekends. The target standard is to provide service from 6:30 am to 1:00 am seven days a week as demand warrants. Individual fixed route services will vary, but Dial-A-Ride access for Americans with Disability Act (ADA) eligible passengers needs to match fixed route service hours.

*Winter:* ESTA supplements service provided by Mammoth Mountain Ski Area during the winter months. The existing and target standard is providing service from 6:00 pm to 1:00 a.m., for a total of 18 hours of free of public transit service seven days a week. Individual fixed route services will vary. Dial-A-Ride access for ADA eligible passengers needs to match fixed route service hours if route deviation service is not provided.

*Shoulder seasons:* The minimum standard is 7:00 am to 6:00 pm six days a week.

1.1.2 Bishop Services

The minimum service standard for fixed route service is Monday through Friday from 7:00 am to 6:00 pm. The target service standard should be fixed route service Monday through Friday from 6:30 am to 7:00 pm. The target standard is to provide supplemental Friday and Saturday night service until 1:00 am on Fridays and Saturdays.

The minimum standard for Dial-A-Ride service should be offered to residents and visitors who are physically not able to access fixed route service and are eligible for ADA paratransit service. ADA defines the minimum service standards for service within  $\frac{3}{4}$  of a mile of fixed route service, next day advanced reservations, comparable hours as fixed route, and no capacity constraints. The weekend minimum standard is for Dial-A-Ride service to be available on Saturdays and Sundays from 9:00 am to 3:00 pm.

The target standard is to only provide Dial-a-Ride service to residents who cannot utilize fixed route transit for the trip they are making.

1.1.3 Town-to-Town

Demand and performance should dictate availability. The minimum lifeline standard should be one round-trip, two days a week with a minimum layover in the destination town of three hours. If lifeline services do not meet minimum cost-effectiveness standards, then alternative service delivery strategies such as mileage reimbursement and volunteer based programs should be explored.

As demand warrants and cost-effectiveness and productivity minimum standards are surpassed, accessibility should be increased. The target standard is service six days a week with a choice of two trips a day in each direction.

1.1.4 Rural Dial-A-Ride:

Demand and performance should dictate availability. The minimum lifeline standard should be dial-a-ride service two days a week from 9:00 am to 3:00 pm. If lifeline services do not meet minimum cost-effectiveness standards, then alternative service delivery strategies such as mileage reimbursement and volunteer based programs should be explored.

As demand warrants and cost-effectiveness and productivity minimum standards are surpassed, accessibility should be increased. The target standard is service seven days a week from 8:00 am to 5:00 pm, with reduced hours on weekends to match services with demand.

1.2 Total Accidents: The minimum standard should be 100,000 miles between accidents with a target objective of 500,000 between all accidents.

1.3 Training and Safety Plan: The minimum standard and target objective are 100% compliance with the regulations and laws governing employee selection, drug testing, and training requirements. The target standard should provide supplemental training for safety and customer service orientation as needed.

***Goal #2: Ensure than all transit programs can be provided at a high quality and are seamless to the user. (Service quality goal)***

The recommended performance standards to monitor the service effectiveness goal are:

2.1 On-time performance: The minimum standard for fixed route is 0.5% percent of trips that are not early and 95% of trips that are no more than 5 minutes late. The target objective is zero percent of trips that are not early and 99% of trips that are no more than 5 minutes late. For fixed route services, on-time performance should be measured independently at least twice per year. The minimum standard for advanced reservation dial-a-ride is 95% of pick-ups within a window of 5 minutes before reservation time, and 15 minutes after. The target objective is 99% of pick-up within a window of 5 minutes before reservation time and 15 minutes after. The minimum standard for immediate response DAR is

95% within 30 minutes of call, and the target objective is 99% within 30 minutes of call.

## 2.2 Frequency

2.2.1 Mammoth Lakes Fixed Route: The minimum standard is 30 minutes. The target standard is 15 minutes, with demand based scheduling during peak demand periods.

2.2.2 Bishop Fixed Route: The minimum standard is 30 minutes. The target standard is 15 minutes during peak demand periods.

2.2.3 Town-to-Town: For town to town service, the minimum standard for origins and destinations along the 395 corridor is one round trip a minimum of four days a week.

The target objective is very dependent on funding availability and partnerships with the Forest Service and Mammoth Mountain Ski Area. The target standard for service between Lancaster and Reno is service seven days a week with a choice of four trips a day, seven days a week during peak winter and summer months. The target standard would provide visitors with a reasonable non-auto choice for recreation trips.

2.3 Customer Satisfaction: The minimum standard is that every two years, a customer satisfaction survey should be conducted for all ESTA services. The target standard is an intercept survey by ESTA staff at key transfer locations in Mammoth and Bishop every six months.

2.4 Road Calls: A minimum standard is 8,000 miles between road calls for all buses in the fleet that are within their normal useful life. A target objective is 12,500 miles between road calls for all buses in the fleet that are within their normal useful life.

***Goal #3: Generate increased ridership among both residents and visitors, while retaining the existing ridership base. (Service effectiveness and ridership goal)***

3.1 Marketing Objectives: The Marketing Plan has suggested several important objectives to build ridership for residents and visitors. These are essentially target objectives<sup>1</sup>:

3.1.1 Establish a regional transit brand: A consistent brand clearly communicates to both residents and visitors that they can travel throughout the region via public transportation.

---

<sup>1</sup> The marketing objectives and rationale are verbatim from the Eastern Sierra Transit Authority SRTP: Marketing Plan, p.9 prepared by Transit Marketing, August 2008.



3.1.2 Provide transit passenger information in a variety of user-friendly formats: Passenger information –maps, schedules, and how-to-ride information-are the directions for using transit. ESTA must provide clear directions for using the area’s various transit services that are understandable to visitors as well as residents.

3.1.3 Create visibility for the Eastern Sierra Transit network, as well as for the individual services that comprise it: By making the public transportation system more visible, ESTA can build awareness and utilization among various target groups.

3.1.4 Educate potential users and gatekeepers about the services offered and the benefits they deliver: Beyond simply creating awareness, ESTA needs to educate the population about the benefits that its services provide to them, their families, their clients, their customers, their guests, their students or other constituencies.

3.1.5 Deliver consistent, high-quality customer service: Friendly staff, reliable service, quality amenities and services designed around the needs of all users will encourage residents to use transit regularly and will enhance the experience of visitors to the region.

3.2 Service productivity: The following are target objectives and minimum standards for measuring productivity as measured by passengers per vehicle revenue hour: (vehicle revenue hours are the hours when the bus is available for passenger boarding)

Passengers Per Hour	2007/08(1)	Minimum	Target
Bishop DAR	3.5	3.0	4.5
Bishop Fixed Route	4.4	8.0	12.0
Mammoth DAR	4.5	3.0	5.0
Mammoth Fixed Route	18.3	18.0	20.0
Town-to-Town	2.3	2.5	4.0
Rural Dial-A-Ride	2.2	2.5	3.5
CREST (395 services)	1.7	2.5	3.5
All	7.0	8.0	10.0

(1)Passengers per vehicle revenue hour, utilizing conversion factors provided by ESTA staff based on 1<sup>st</sup> quarter 2008/09 statistics.

**Goal #4: Provide public transportation services that are financially sustainable within existing and future potential private, local, state and federal funding programs and regulations in a cost-efficient manner. (service cost-efficiency goal)**

**4.1 Farebox Recovery<sup>2</sup>:** The minimum standard systemwide is 10%. The target standard systemwide is 15%.

<b>Farebox Recovery*</b>	<b>FY 2007-08</b>	<b>Minimum</b>	<b>Target</b>
Bishop DAR	9.3%	10%	15%
Bishop Fixed Route	5.6%	10%	15%
Mammoth DAR	14.9%	10%	15%
Mammoth Fixed Route	Free, Town contributions		
Town-to-Town	10.7%	10%	15%
Rural DAR	6%	10%	12%
CREST	56.5%	10%	40%
All	11.5%	10%	15%

**4.2 Subsidy Per Passenger Trip:** The subsidy per trip is the difference between the cost per trip and average fare per trip divided by the number of passengers. Systemwide, including the free Mammoth services, the subsidy per passenger trip is \$6.87. The minimum standard systemwide is \$6.50. The target standard systemwide is \$5.00.

<b>Subsidy Per Passenger</b>	<b>FY 2007/08</b>	<b>Minimum</b>	<b>Target</b>
Bishop DAR	\$13.68	\$15.00	\$10.00
Bishop Fixed Route	\$11.23	\$6.75	\$4.50
Mammoth DAR	\$9.85	\$15.00	\$10.00
Mammoth Fixed Route	Free, Town contributions		
Town-to-Town	\$21.14	\$10.00	\$7.00
Rural DAR	\$35.20	\$15.00	\$10.00
CREST (395 services)	\$17.40	\$15.00	\$10.00
All	\$6.87	\$6.50	\$5.00

**4.3 Cost Per Vehicle Revenue Hour:** The minimum standard should be no more than 110% of five northern California peer systems. The target objective should be 90% of five northern California peer systems. This data would need to be collected and reported on annual basis by ESTA staff.

---

<sup>2</sup> Fare recovery is fares divided operating costs. Allocation of costs to individual services is based on cost allocation model developed for the Short Range Transit Plan.

## 4. Transit Services in the 395 Corridor

This chapter focuses on the development of transit service in the 395 corridor. It starts with a discussion of the historical context of transit service delivery along Highway 395. A profile of existing ESTA services and their performance in the corridor is then provided. A series of previous studies have recommended improvements to transit service in the corridor and these are summarized. A financially unconstrained vision is provided for making public transportation from Southern California and Reno to destinations in Inyo and Mono counties a reasonable transportation choice. Finally, a financially constrained six-step action plan is recommended for service improvements in the corridor in partnership with the Forest Service and Mammoth Mountain Ski Area.

### Historical Development of Intercity Bus Service in the 395 Corridor

For many years, Greyhound provided regular daily service along Highway 395, operating between Reno and Los Angeles through the cities and small communities in Inyo, Mono and Eastern Kern County. When heavy flooding closed Highway 395 in January 1997, Greyhound temporarily discontinued its service. Following the flood, Greyhound requested a funding subsidy from Kern, Inyo and Mono Counties. Greyhound received Section 5311 funds to reinstate the service for a three-year period. Section 5311 funds can be used for planning, capital, operating and administrative assistance to local governing bodies in non-urbanized areas, so the funds were used by the counties to support the Greyhound service. Greyhound also wanted assurances that funding would be continued beyond the three-year start-up period.

When Greyhound service was reinstated in July 1997, ridership was lower than it had been, due to the route schedule's omission from the reservation database. Greyhound customer service agents did not offer this routing to persons traveling between Los Angeles and Reno unless passengers specifically requested it. Ridership remained under 2,000 annual passengers for the following years. Greyhound planned to terminate the service in 2000, at the end of the three-year funding period, unless the counties could guarantee funding support. Service continued to operate until June 2001, but the counties determined at that time that they would not provide additional funding to Greyhound, opting instead to develop their own regional link.<sup>1</sup>

The withdrawal of Greyhound intercity bus service from the corridor in 2001 resulted in Inyo and Mono counties instituting the CREST (Carson Ridgecrest Eastern Sierra Transit) intercity bus service between the Reno, NV airport and Ridgecrest, CA. Operating a reduced service in comparison to daily Greyhound

---

<sup>1</sup> The first two paragraphs are paraphrased from Nelson Nygaard Consulting Associates, Eastern SierraPublic Transportation Study Final Report, Kern Council of Governments 2005.

service previously, CREST serves to connect communities along the corridor and link to other intercity transportation services.

## **Description of Existing CREST Performance**

### CREST North

CREST North runs every weekday except Wednesday. The service starts in Bishop at 7:00 a.m. It serves cities and towns along Highway 395 such as Mammoth Lakes, Lee Vining, Bridgeport and Coleville, before entering Nevada near Topaz Lake and continuing to the larger cities of Gardnerville, Carson City and Reno. The northern terminal is the Reno-Tahoe International Airport. The bus arrives at about noon.

CREST North follows the same routing back to Bishop. There is a one-hour layover in Carson City. The arrival time in Bishop is 5:30 p.m.

### CREST South

The CREST South route runs on Monday, Wednesday and Friday. The service starts in Mammoth Lakes at 8:05 a.m. It serves cities and towns along Highway 395 such as Mammoth Lakes, Big Pine, Lone Pine, and Ridgecrest. The latter location is the southern terminal, where there is a 1:45 layover just after 11:45 a.m.

CREST South follows the same routing back to Mammoth Lakes. The arrival time in Mammoth Lakes is 4:50 p.m.

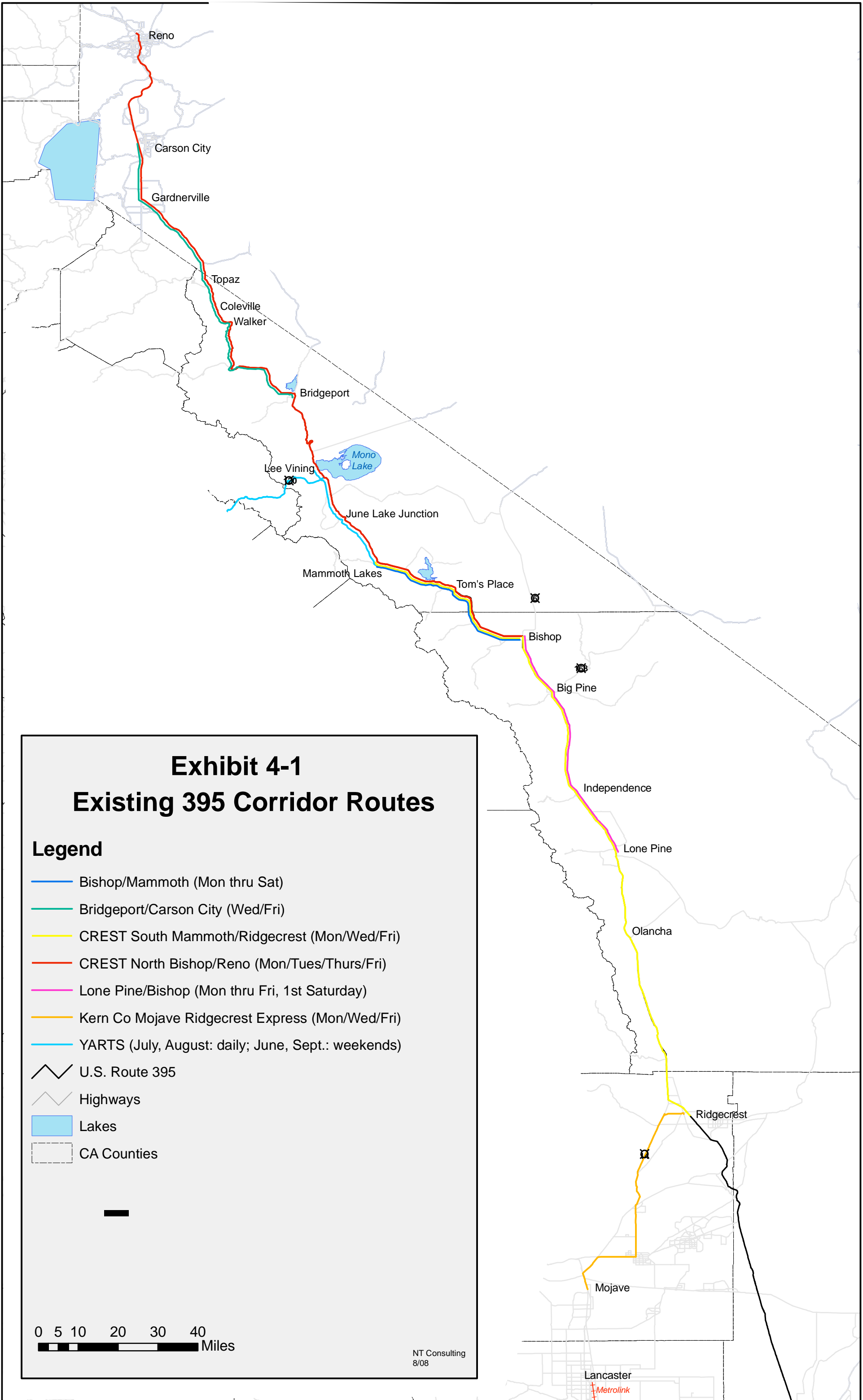
Exhibit 4-1 shows the CREST route and other town-to-town services along the 395 corridor.

### CREST Ridership and Performance

The CREST ridership includes a mix of Inyo and Mono County residents and tourists who use the service for both inter-regional and intra-regional trips along the 395 corridor. A survey of CREST passengers by LSC Transportation Consultants reported “of the 4,400 annual passengers (comparable to 8,000 for the daily Greyhound service on a per day basis), 55% use CREST to connect with other airline, rail, or bus service. Notably, 72% use CREST for “recreation / vacation” travel, which is consistent with reports that only 45% of the riders reside in California, about 35% reside in other states, and more than 20% are from other countries. Most (70%) of CREST riders are non-disabled adults, 20% are seniors, 5% are persons with disabilities, and 5% are children.”<sup>2</sup>

---

<sup>2</sup> Final Eastern Sierra TAG report, op cit.



## Exhibit 4-1 Existing 395 Corridor Routes

### Legend

- Bishop/Mammoth (Mon thru Sat)
- Bridgeport/Carson City (Wed/Fri)
- CREST South Mammoth/Ridgecrest (Mon/Wed/Fri)
- CREST North Bishop/Reno (Mon/Tues/Thurs/Fri)
- Lone Pine/Bishop (Mon thru Fri, 1st Saturday)
- Kern Co Mojave Ridgecrest Express (Mon/Wed/Fri)
- YARTS (July, August: daily; June, Sept.: weekends)
- U.S. Route 395
- Highways
- Lakes
- CA Counties

0 5 10 20 30 40  
 Miles

NT Consulting  
8/08

This page purposefully left blank

It is important to stress that CREST provides very important lifeline service for residents of Mono and Inyo County who do not own a car. Interviews with social service agencies in the ESTA service stressed the importance of having viable transit in the corridor.

There is a significant difference in CREST North and South services. In FY 2007/08, CREST North had 4,102 annual passengers and a productivity of 1.9 passengers per revenue vehicle hour, compared to CREST South which had 1,421 annual passengers and a productivity of 1.3 passenger per revenue vehicle hour.

Based on a cost model developed for the SRTP<sup>3</sup>, the farebox recovery for CREST North was 72% in FY 2008/08, while the farebox recovery for CREST South was 26%. CREST North in particular helps ESTA to exceed the state requirement of a minimum systemwide 10% farebox recovery requirement.

There are a number of factors that likely contribute to low ridership and productivity in the CREST South service:

- There is excellent Lone Pine to Bishop service that serves a significant portion of the market.
- Seniors and others interviewed reported not having sufficient time in Ridgecrest to conduct shopping or to attend medical appointments.

While serving the transit dependent population of residents in the 395 Corridor will always to continue to be a priority, stakeholders interviewed for this SRTP also expressed a strong desire to provide significantly improved service in the tourism and recreation markets.

## **Town-Town Services Along the 395 Corridor**

ESTA currently operates three other intercity services along the 395 corridor:

Bridgeport-Carson City: An intercity service is provided on Wednesday and Friday with one trip in each direction. Stops are provided in Bridgeport, Walker, Coleville, Gardnerville and Carson City. In Carson City, the intercity service provides DAR service for the 4 hours that the vehicle is in Carson City.

Mammoth Express: Two trips a day in each direction are provided Monday through Saturday between Bishop and Mammoth. Interim stops are made at Crowley Lake, Tom's Place, and Round Valley/Pine Creek Road.

---

<sup>3</sup> Allocates costs to specific service based on revenue vehicle hours and revenue vehicle miles.

Lone Pine-Bishop: Three trips a day in each direction are provided Monday through Friday. Service is also provided the first Saturday of every month. Interim stops are provided in Wilkerson, Big Pine, Aberdeen, and Independence.

Exhibit 4-2 summarizes these three intercity services for origins and destinations within Inyo and Mono counties. CREST service is also included. Collectively, there were a total of 8,219 annual ESTA vehicle revenue hours provided and 22,908 FY 2007/08 passenger trips made along the 395 Corridor.

**Exhibit 4-2  
ESTA Statistics for Significant Intercity Service  
FY 2007-08**

Route	FY 07-08 Passenger Trips	FY 07-08 Veh. Rev. Hours	FY 07-08 Operating Cost	FY 07-08 Farebox Revenues	Passenger Trips per Hour	Operating Cost per Passenger	Farebox Recovery Ratio (1)
<b>Bridgeport- Carson City</b>	859	825	\$48,063	\$5,184	1.04	\$55.95	10.8%
<b>Mammoth Express</b>	5,474	1,617	\$108,228	\$27,846	3.38	\$19.77	25.7%
<b>Lone Pine - Bishop</b>	11,052	2,581	\$176,952	\$34,033	4.28	\$16.01	19.2%
<b>CREST</b>	5,523	3,195	\$221,039	\$124,928	1.73	\$40.02	56.5%
<b>Total</b>	22,908	8,219	\$554,283	\$191,991	2.79	\$23.64	35%

1) Fare revenues divided by costs determined by a cost allocation model for all ESTA services. See Chapter 8 for discussion of cost model.

Taken together, these routes, which serve the Highway 395 corridor, can be combined with CREST to form one intercity route. This would make it easier for new or occasional riders to understand the service, thus encouraging ridership. The combined trips could be lengthened as feasible to extend service between locations, or ordered in a way to make transfers to subsequent trips easier to accomplish

**Improving 395 Corridor Transit Service Levels**

Improving transit options along the 395 corridor has been recommended for several years in a variety of studies:

ESETS Field Report 2004

“Increase the CREST southbound and northbound route levels of service to provide a sustainable, dependable, and year round interregional transit service. CREST would be expanded from three to seven days per week over the same ESETS service area (Reno, Nevada to Ridgecrest, California). Increased



frequencies are proposed in this expansion plan. Capital expenditures would include the purchase of four additional ADA compatible buses with luggage compartments and bike racks.”<sup>4</sup>

#### 2004 Federal Lands Alternative Transportation Systems Study Summary of Forest Service ATS Needs<sup>5</sup>

“The proposed Alternative Transportation System (ATS) for the ESETS service area would include an expansion of existing transit services, the implementation of new transit services, and the integration of each. ATS options would include expansion of the CREST Route and YARTS to provide increased interregional transit services to better serve visitor and residential long-distance travel. Converting the Town of Mammoth Lakes Skier Shuttle (and summer services from Mammoth Mountain Ski Area) to town operation would be part of this expansion process. Associated bus fleet upgrades, land acquisition, and construction of a maintenance facility would be required for this conversion to meet FTA regulations. The implementation of new services would include services to meet the recreational needs of local attractions adjacent to the Town of Mammoth Lakes not currently served. The establishment of regional partnerships and relationships will be critical to ensure the success of this expanded ATS system. Partnerships between the Forest Service, NPS, Town of Mammoth Lakes, Inyo Mono Transit, Mammoth Mountain Ski Area, Caltrans, and other partners will be required to sustain the ESETS service.”

#### 2005 Kern COG Eastern Sierra Public Transportation Study<sup>6</sup>

“Interregional transit, with four vehicles in service, is recommended to link Reno with Lancaster. Using a total of four vehicles to provide service affords all communities in the corridor access to two northbound and two southbound trips each day. This service would provide public access for residents and visitors to the Eastern Sierra region. An interregional route with four vehicles would provide enhanced service for Inyo or Mono County residents who want to make a same-day return trip to Carson City or Ridgecrest. It would also offer same-day through service (not necessitating an overnight stay in Bishop) in northbound and southbound directions.

“In the longer-term, passenger rail service can be operated between Lancaster and Mammoth Lakes. To attract choice customers, a competitive passenger rail service would have to approximate or *beat* the perceived six-hour driving time between points in metropolitan Los Angeles and Mammoth Lakes. Historically,

---

<sup>4</sup> Federal Highway Administration and Federal Transit Administration, *Eastern Sierra Expanded Transit System Field Report 2004*, hereinafter referred to as ESETS Field Report 2004.

<sup>5</sup> Cambridge Systematics, 2004 Federal Lands Alternative Transportation Systems Study Summary of Forest Service ATS Needs,

<sup>6</sup> Nelson Nygaard Consulting Associates, Eastern Sierra Public Transportation Study Final Report, Kern Council of Government 2005.

when passenger service was offered in this "corridor", speeds never approached that level. Today, this can be achieved, but this level of performance implies new alignments in many locations, including along Highway 14 via Red Rock Canyon rather than the old railroad alignment through Searles, and an all-new alignment between Bishop and Mammoth. Regardless of alignment specifics, this would essentially be a completely new 240 mile-long railroad, much of it built in mountainous terrain."

### 2007 Final Eastern Sierra TAG report

"'Feasible' Alternative: Expand CREST service to daily operation at a cost of \$690,000 initially and \$500,000 per year thereafter. TAG Perspective: Impractical until a viable operations and maintenance funding strategy can be identified."

In summary, there have been numerous proposals to expand transit service options along the 395 corridor over the past 4 years. While there is wide recognition of excellent partnerships among the federal land agencies, ESTA and its member entities, Mammoth Mountain Ski Area, Caltrans, and human service agencies, the lack of a cohesive financial plan to move recommendations from paper to reality has been a major constraint.

The ESTA Short Range Transit Plan provides an opportunity to establish a vision for the development of transit options along the 395 corridor, and provides a financial framework to work from to provide incremental improvement of services. This will require a funding partnership that establishes a win-win situation for all parties involved.

Collaboration on establishing and sustaining sufficient levels of operating subsidies to provide the desired levels of service will be the primary challenge and will require unique partnerships among ESTA and its member jurisdictions, the federal land management agencies, Caltrans, Mammoth Mountain Ski Area and other private entities.

## **Establishing a 5-Year Financially Unconstrained Vision**

The purpose of establishing a 395 Corridor transit vision is to establish a benchmark for what is ultimately desirable at the end of the five-year planning horizon. The vision is financially unconstrained. The last section of this chapter is financially constrained and provides a stepwise approach for potentially achieving the longer-term vision.

The financially unconstrained vision is demand-based, and responds to different market needs at different times of the year. During the peak winter and summer season, service levels are significantly increased to provide a good reasonable choice to driving to get to the user's final destination. Raising the bar for tourism

and recreation travel during the peak winter and summer season will increase the service levels for transit dependent markets.

The five-year, financially unconstrained vision includes the following demand based services:

- During peak summer (July and August) and winter (mid-December through March) months, the vision would be to have an ESTA bus waiting in Lancaster for each of four trains arriving from Los Angeles between 8:30 am and 5:30 pm. Similarly, four trips a day would be provided from the Reno Greyhound station and Reno airport during peak summer and winter months. During peak months, service would be provided seven days a week.
- During summer months, efforts would be made to coordinate timed transfers with potential trailhead shuttles provided by the Forest Service, local community dial-a-ride services provided by ESTA, and YARTS for service to Yosemite. The Forest Service has received an ATPPL grant to study the feasibility of providing a shuttle to Whitney Portal, similar to the Reds Meadow shuttle. 395 Express and shuttle drivers would provide interpretive information to passengers to provide a value added experience to the summer visit.
- Higher transit service levels along the 395 corridor would enable both visitors and residents of the area a reasonable transit choice for trips within the ESTA service area. A skier could stay in Bishop and have reasonable service to Mammoth Mountain and June Lakes. A hiker could stay in Bishop or Mammoth Lakes, and have a reasonable transit choice to get to and from trailheads on a bus.
- During peak months, the objective would be to fully recover operating costs through the farebox. Capital costs, including the cost of leasing or purchasing the bus would be achieved through Federal and/or State grants.
- During shoulder months, one trip in each direction from Lone Pine to Reno, and Lancaster to Mammoth Lakes would be provided. Service would be provided five days a week.
- The branding of 395 Corridor buses would be accomplished.
- A pervasive marketing program to attract new riders would be developed.
- Efforts would be made to provide a daily, weekly, and family pass to provide reasonably priced fares for multiple trips in the region.

- Real time schedule information would be provided at key stops, with readily available Internet and cell phone access.

Exhibit 4-3 on the next page shows an idealized winter schedule for the five year financially unconstrained vision. In the northbound direction, the ESTA buses would meet each of the Metrolink trains arriving from Los Angeles, as well as providing service to the Greyhound station in Lancaster. Four trips would also be available northbound from Bishop to Reno Airport and the Greyhound station. In Mammoth Lakes, the 395 Corridor buses would connect with other Mammoth Lake Routes at the Village. For the June Lake junction, a June Lake dial-a-ride bus would connect with the 395 Corridor bus. Approximately every two hours, service would also be available between Bishop, Mammoth Lakes, and the June Lake Junction.

Exhibit 4-4 is an idealized map that shows what the Winter peak season vision might look like in five years if the funding collaboration is successful. Please note that the circles indicate the relative number of trips being provided

An idealized summer schedule would be similar to the winter schedule with the additional vision of providing timed transfers along the 395 corridor spine to Forest Service shuttles to trailheads in addition to local community circulators.

**Exhibit 4-3  
Idealized Winter Schedule: 5-Year Vision**

**Morning Commute**

**Midday**

**Evening Commute**

**Early evening**

**Northbound**

Lancaster		G, M		G and M		G, M		G, M	
Mojave		G		G		G		G	
Inyokern		K				K			
Olancha									
Lone Pine	EL	EL	EL			EL		EL	
Independence									
Big Pine									
Bishop	EL	EL	EL	EL		EL		EL	
Tom's Place									
Crowley Storefront									
Mammoth Lake	EL, MA	EL, MA	EL, MA	EL, MA		EL, MA		EL, MA	
June Lake Junction	EL		EL	EL		EL		EL	
Lee Vining									
Bridgeport	EL			EL				EL	
Walker	EL			EL				EL	
Topaz									
Gardnerville									
Carson City									
Reno Airport	A			A		A		A	
Reno Greyhound	G			G		G		G	

**LEGEND**

Connect Service

*Bus Stops Only at locations highlighted in yellow or green*

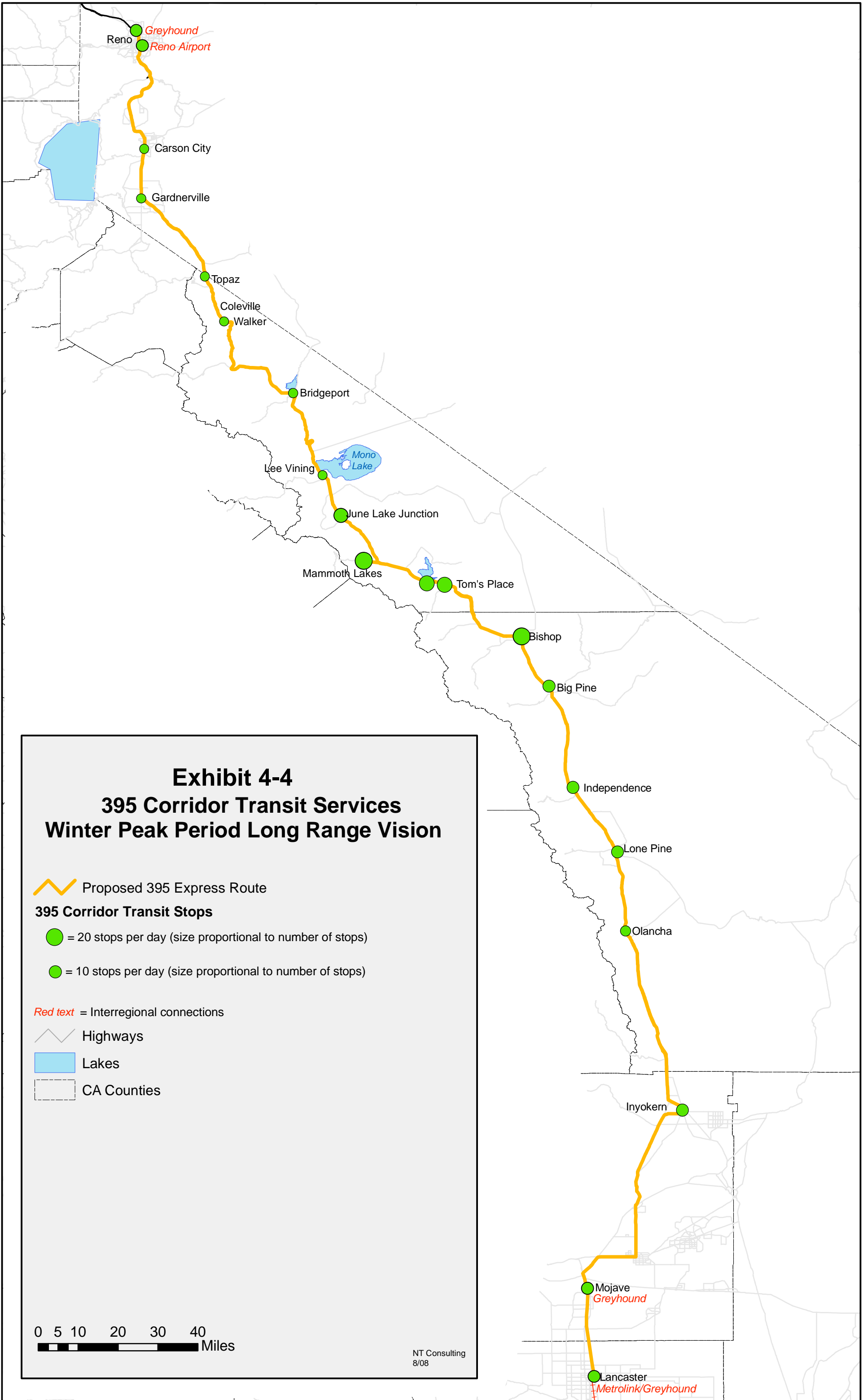
**Connecting Services**

- M=Metrolink
- EL=ESTA local services
- G= Greyhound
- K=Kern Regional Transit
- MA= Mammoth Mt. Ski Area
- A=Airlines at Reno Airport

**Southbound**

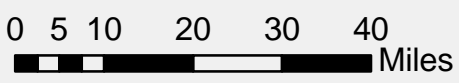
Reno Greyhound		G		G		G		G	
Reno Airport		A		A		A		A	
Carson City									
Gardnerville									
Topaz									
Walker									
Bridgeport				EL				EL	
Lee Vining				EL				EL	
June Lake Junction		EL	EL	EL		EL		EL	
Mammoth Lakes	EI, MA	EL, MA	EL, MA	EL, MA		EL, MA		EL, MA	
Crowley Storefront									
Tom's Place									
Bishop	EL		EL	EL		EL		EL	
Big Pine									
Independence									
Lone Pine	EL		EL			EL		EL	
Olancha									
Inyokern	K		K			K		K	
Mojave	G		G			G		G	
Lancaster	G,M		G,M			G, M		G, M	

This page purposefully left blank



## Exhibit 4-4 395 Corridor Transit Services Winter Peak Period Long Range Vision

- Proposed 395 Express Route
- 395 Corridor Transit Stops**
- = 20 stops per day (size proportional to number of stops)
- = 10 stops per day (size proportional to number of stops)
- Red text* = Interregional connections
- Highways
- Lakes
- CA Counties



NT Consulting  
8/08

This page purposefully left blank



## Financially Constrained 395 Corridor Development

A six- step action plan is recommended to implement the 395 corridor transit improvements in incremental steps.

Step 1: Create extension to Lancaster and Reno Greyhound with existing ESTA Service levels. Negotiations were recently successfully completed with Kern Regional Transit to provide funding for the link between Ridgecrest and Lancaster. These connections have just been approved for the 5311 (f) application to Caltrans for funding. New service to Lancaster would start in January 2009. Drivers would lay over at the end of the run near the Reno Greyhound station instead of the current practice in Carson City.

Step 2: Consider how to optimize the existing 8,219 annual ESTA service hours on the 395 corridor to achieve overall ESTA goals and objectives. There are a number of scheduling efficiency opportunities that are being considered by ESTA staff. These include:

- The layover of the CREST bus in Carson City after it departs with passengers in Reno. ESTA has plans to relocate CREST bus layover near the Reno Greyhound station, when the route is extended in January 2009.
- Mammoth Express and the CREST bus both leave Bishop at 7:00 am and arrive in Mammoth Lakes at 7:50 am. This scheduling overlap needs to be adjusted.
- The Lone Pine to Bishop run arrives in Bishop at 7:40 am, 40 minutes after the CREST north bus departs.

Step 3 Invite potential partners to participate in pursuing funding for a pilot demonstration program. Candidate partners include ESTA, Kern Regional Transit, Caltrans, US Forest Service, Bureau of Land Management, National Park Service, and Mammoth Mountain Ski Area. A memorandum of understanding would be executed.

Step 4: Apply for an ATPPL grant for implementation of a two-year long pilot demonstration of upgraded transit service along the 395 corridor. For peak summer months (July and August) and peak winter months (mid-December to March), the pilot demonstration program would include two daily round trips from Lancaster to Mammoth Lakes and two daily round trips from Bishop to Reno, seven days a week. One round trip in each direction would be provided during the shoulder seasons, five days a week. ATPPL funds cannot be used to subsidize operating expenses, but can be used to lease equipment for the two-year pilot program, and overall program evaluation. A target of 100% farebox recovery would be set for direct operating expenses during peak months and 75% during shoulder months. Start-up, administrative and marketing costs would be shared by partners in the program. A reserve fund would be established by

ESTA and its partners to fund shortfalls in farebox revenues during the pilot program.

Step 5: A detailed performance and economic analysis and evaluation would be completed after the first year of the program. This would set the framework for ESTA negotiating funding agreements for continuing and/or expanding the pilot demonstration program with an eye toward the 5-year vision. The pilot program and subsequent evaluation would determine the need for a subsidy based on farebox recovery, and the potential shares for the required subsidy. The feasibility of achieving service levels described in the financially unconstrained vision would be fully evaluated.

Step 6: Based on the outcome of the first year of the pilot program, a detailed financial plan to fund the 395 Corridor service permanently would be developed. Potential participants would have sufficient time to consider their longer-term willingness to financially participate and guarantee the summer peak service, winter peak service or year-round service with appropriate service levels. A formal agreement would be executed among the partners.

## 5. Rural Transit

### Introduction

The focus of the last chapter was intercity transit services between Inyo and Mono County communities. The focus of this chapter is local dial-a-ride services in rural communities and town-to-town services outside the 395 corridor. The chapter begins with a description of the four rural services, followed by an analysis of recent performance. Rural transit needs were highlighted in stakeholder interviews and five key findings are summarized. Service options and recommendations are offered to address those needs with both traditional and nontraditional service delivery methods.

### Description of Existing ESTA Rural Services

ESTA provides two rural dial-a-ride and two town-to-town services outside the Highway 395 corridor. These services are briefly described below.

#### Rural Dial-A-Ride Services

Lone Pine Dial-A-Ride: Service is available Monday to Friday from 7:00 am to 4:00 pm. Consultant observations of the Lone Pine Dial-A-Ride revealed that the single bus serves the Lone Pine community quite well. Observed trips included transporting seniors from their homes to the Senior Center, as well as providing rides for residents living in a mobile park home outside town to services within the town.

Walker Dial-A-Ride: Service is provided throughout the Antelope Valley serving the Walker and Coleville areas. Service is available from 8:00 am to 4:30 pm on weekdays. A single bus and driver is utilized.

#### Town-to-Town Services

Benton to Bishop: Service is provided on Tuesday, Thursday and Friday, with interim stops in Hammil and Chalfant. One round trip per day is provided. Service originates at the Benton Station at 8:25 am and arrives in Bishop at 9:30 am. The bus departs back to Benton at 2:30 pm, allowing residents plenty of time to shop, visit, or go to medical appointments. Passengers interviewed on a sample run were quite pleased with the three days of service, and the bus was their only means of traveling to and from Bishop for shopping and other services.

Tecopa to Pahrump: Service is provided on Thursday only with an interim stop in Shoshone. One round trip is provided. Service originates in Tecopa on

Thursday at 7:45 am, arriving in Pahrump at 9:00 am. The return trip leaves Pahrump at 11:00 am.

Three town-to-town rural services were discontinued, effective July 1, 2008 due to poor performance and ESTA budget constraints:

Mountain Express: This service connected Mammoth Lakes, June Lake and Lee Vining. Prior to the discontinuation of service, the Mammoth Express had 56 monthly passengers with a subsidy per passenger trip of \$128.04

Lone Pine-Olancha-Keeler: This service operated one round trip on Tuesday and Thursday. Before the service was discontinued by the ESTA Board, the Olancha-Keeler service was attracting just 5 passengers a month, and had a subsidized cost of \$310 per passenger trip.

Walker-Bishop: This service operated one round trip on Monday. Before the service was discontinued in July, 2008, the Walker Bishop service had an average of 17 monthly passengers, and the subsidized cost per passenger trip was \$39.89.

### Performance of Existing ESTA Rural Services

Exhibit 5-1 provides a profile of existing rural service performance. The fare increase in January 2008 and the subsequent fare increase in September 2008 will likely increase the farebox recovery ratio above the 10% minimum for the Lone Pine DAR and the Tecopa-Pahrump services.

While the Walker Dial-A-Ride provides important lifeline service to residents of the Antelope Valley, low productivity and farebox recovery is likely to persist for this rural transit service.

**Exhibit 5-1  
FY 2007-08 Rural Service Performance\***

	FY 2007-08 Actuals					
	Vehicle Rev. Hrs.	Annual Pass.	Annual Op. Cost	Pass./ Hour	Op. Cost/ Passenger	Farebox Ratio
<b>Dial-A-Ride Service</b>						
Lone Pine	2,202	6,480	\$111,612	2.94	\$17.22	7.5%
Walker	1,810	2,265	\$92,158	1.25	\$40.69	4.3%
<b>Town-to-Town Service</b>						
Benton-Bishop	497	1,531	\$29,979	3.08	\$19.58	14.0%
Tecopa-Pahrump	133	188	\$8,309	1.41	\$44.20	7.6%

## Needs for Rural Transportation Services in Inyo/Mono Counties

In Chapter 2, the findings on rural transit needs in Inyo and Mono Counties were presented. They are again summarized here for reader convenience as the context for the rural service recommendations.

1. *Inyo and Mono counties are very expansive low-density areas with dispersed populations of elderly, disabled, and low-income populations.*
2. *There is a need for services from outlying areas to both Bishop and Mammoth.*
3. *There is a need for additional non-emergency medical transportation outside of Mono and Inyo counties.*
4. *A regular five-day-a-week intercity service along the 395 corridor would facilitate greater transportation opportunities for Mono and Inyo County residents.*
5. *There is a lack of transportation for those who don't own or cannot afford an automobile for jobs in Mammoth Lakes and Bishop.*

## Service Options

Inyo-Mono Transit and now ESTA have experimented with traditional dial-a-ride and town-to-town services in rural communities with mixed success. Some services such as the Benton to Bishop and Lone Pine Dial-a-Ride services have favorable operating conditions and performance. However, as mentioned previously, three very ineffective town-to-town services were recently eliminated by the ESTA Board. A key question is how to best serve the very important transportation needs of Inyo and Mono County rural residents.

Concurrently, with the Short Range Transit planning, there has been a study of how to better coordinate public transit and human service agency transportation. The following is the list of human service agency transportation provided in Inyo and Mono counties:<sup>1</sup>

- The Inyo-Mono Area Agency on Aging (IMAAA) is a joint powers agency created by the Inyo and Mono Boards of Supervisors. It has been designated by the California Department of Aging to plan, deliver and administer services for older persons and certain disabled adults in the two-county region. IMAAA contracts with the Inyo-Mono Senior Program to provide transportation for seniors who need transportation to essential

---

<sup>1</sup> Innovative Paradigms and Nelson Nygaard, "Public Transit-Human Service Transportation Coordination Plan for Inyo and Mono Counties", Draft Final Report, May 2008.

services but cannot ride an ESTA bus. Rides are scheduled by appointment.

- IMSP also provides out-of-area medical transportation for individuals who have no public or private alternative. Rides require 7 - 10 days advance notice to schedule trips.
- The Inyo-Mono Association for the Handicapped operates two vans in the Bishop area to transport developmentally and mentally disabled adults to and from the day activity program in Bishop. Service is available Monday through Friday.
- DHHS purchases ESTA bus passes for distribution to its clients. The Short Range Transit Plan team was also told that the Social Services provides a mileage reimbursement program, and has a program to help clients purchase vehicles.
- The Toiyabe Indian Health Project provides transportation to tribal members and their families in Inyo and Mono Counties. Service is available for medical appointments, shopping and other necessary purposes.
- The Big Pine Education Center provides after school transportation to tribal and non-tribal children in the Big Pine area. The program operates two 14-passenger and one 7-passenger van.
- The Owens Valley Career Development Center offers emergency assistance to tribal members, including ESTA vouchers for transportation.
- The Bishop Paiute Elders Program serves tribal members and their families through the use of one 10-passenger van and one Jeep Cherokee. Neither vehicle is wheelchair accessible.

Coordination among ESTA and human service agencies would appear to be the best option for serving dispersed rural transit needs and trip patterns in Inyo and Mono counties. The Public Transit-Human Service Transportation Coordination Plan (hereinafter referred to as the Coordination Plan) has developed several high priority strategies that are recommended for implementation in the Short Range Transit Plan. The following are the relevant high priority recommended strategies for implementation in Inyo and Mono Counties:<sup>2</sup>

---

<sup>2</sup> The strategies are verbatim from the Draft Final Report of the Public Transit-Human Service Coordination Plan, op. cit. , hereinafter referred to as the Coordination Plan.  
*Transit Resource Center*  
*Transit Marketing*

***High Priority Strategy #1:******Designate ESTA as the CTSA for both Inyo and Mono Counties***

Currently ESTA is the Consolidated Transportation Service Agency (CTSA) for Mono County, while the Inyo County Board of Supervisors serves as CTSA for Inyo County. Coordination efforts would be more effective if CTSA responsibilities were combined under the direction and leadership of one agency. ESTA, with its existing connections to and agreements with local human service organizations in both counties is the natural choice for this role. Further, ESTA has experience serving as the CTSA for Mono County. This existing circumstance and the regional nature of the agency make it ideally sited to serve as the CTSA for the two-county region.

The concept of CTSAs was created by State Law, AB 120, in 1979 with the approval of the Social Services Transportation Improvement Act. The Act was codified in the California Code of Regulations, Title 21, Division 3, Article 7. CTSAs come in many flavors in California, but are an institutional mechanism for coordinating human service agency transportation with public transportation services.

***High Priority Strategy #2:******Enhance CTSA management to allow for negotiation of interagency agreements, providing for coordinated use of assets and operating funds.***

The importance of the CTSA became very clear during discussions with local participants in the Coordination Plan development. In the two-county region, the role of the CTSA is not clearly defined, with ESTA serving as the CTSA for Mono County and Inyo County serving as the CTSA in Inyo. While not necessarily responsible for all coordination activities, the CTSA is positioned to take on a larger regional role in coordination implementation. As an agency specializing in transportation service delivery, ESTA has the technical skills and decision-making structure to be the most effective organization in the region to pursue coordination.

Research revealed that while most rural counties have a designated CTSA, many CTSAs are not very active in pursuing coordination opportunities. This situation often is the result of two local conditions:

**1. Lack of Staff Resources to Pursue Coordination**

Small transit agencies, such as ESTA, are frequently the designated CTSA for their county. While such designation is intended to carry with it the responsibility to work actively to coordinate the services of local organizations including the transit operator, small agencies often do not have the staff to carry out this task. The existing staff is focused on day-

to-day operations management, service planning, and overall compliance with regulations. While supporting the concept of coordination and the key role of the CTSA in the coordination process, small agencies do not have sufficient personnel to dedicate to the outreach, planning and organization that is required for effective coordination.

Completing grant applications can be confusing and overwhelming. While larger agencies often have staff dedicated to the preparation of grant applications, smaller agencies usually assign this responsibility to the transit manager or other administrative personnel. These individuals may not have the time or the expertise to seek out grant opportunities and submit applications.

## **2. Lack of Sufficient Funds to Accomplish Meaningful Results**

Grant amounts available to rural counties are usually significantly less than those awarded to larger urban counties. The small size of the award can make it difficult to achieve “critical mass” or sufficient funds to realize meaningful outcomes. Agencies in rural counties weigh the value of the grant amount against the staff time required to prepare the grant application and manage the grant once an award is made. Often, agencies find the reward is not worth the effort.

The realization that ESTA does not have sufficient staff resources to create coordination results led to the recommendation that the CTSA function of the agency be enhanced through dedicated funding for that purpose. Workshop participants in the Coordination plan process rated as a high priority the ability to

- add staff devoted to CTSA activities, or
- contract for CTSA management services from an outside expert source.

The dedication of resources for achieving coordination results was universally recognized by stakeholders as the starting point for action. In Inyo and Mono Counties, TDA funds are fully dedicated to transit purposes. Thus, there are not additional funds that might be allocated to Article 4.5 purposes. Given this situation, funds to support coordination must come either from new sources or from reallocating current transit resources to CTSA purposes. In the absence of TDA funds, sources such as New Freedom<sup>3</sup> grants for mobility management purposes could be utilized to achieve this objective.

### ***High Priority Strategy #3:***

*Through the CTSA, expand support services such as grant application assistance, driver training, alcohol/drug testing and other support services for non-profit agencies.*

---

<sup>3</sup>: New Freedom grants<sup>1</sup> refers to a new federal funding source under Federal Transit Administration 5317. The purpose is to expand transportation services beyond those currently available under the Americans with Disabilities Act.



An agency devoted to coordination, typically the CTSA, often can provide a variety of support services to community organizations that lack the resources or the expertise to provide them internally. Many social service agencies are too small to have dedicated technical resources, such as certified driver trainers, on staff. This sets the stage for the provision of support services by a centralized agency.

In Inyo and Mono Counties, ESTA as the CTSA may be in a position to provide centralized services to a variety of agencies in the counties.

## **Recommendations for the Short Range Transit Plan**

The high priority strategies of the Public Transit-Human Service Agency Coordination Plan for Inyo and Mono County are excellent in providing necessary infrastructure and staffing to address rural transit service needs. These high priority strategies are recommended for inclusion in the Short Range Transit Plan. The recommended staff person should be a rural mobility manager responsible for coordinating and building services that meet the diverse needs of Inyo and Mono County. A mobility manager matches services to market needs without a bias to mode. In many cases, a volunteer-based mileage reimbursement program might better service the dispersed trip patterns in rural Inyo and Mono counties.

1. Building services: The CTSA would collaboratively work with the human service agencies to build a modest network of rural transportation service to fill in critical gaps that cannot be met with public transportation services.

The Rural Mobility Manager would build the following type of services for member organizations:

- Non-emergency medical transportation
- Volunteer rides
- Mileage reimbursement program: after the Mobility Manager approves a trip request from a volunteer to provide a ride to a rural resident, the volunteer is reimbursed for his/her costs on a per mile basis.
- Special purpose shuttles to and from rural areas to 395 Corridor services
- Maintenance of human service agency vehicles
- Driver training
- Travel training
- Transit pass programs/distribution

2. Enhancing information portals: The CTSA could be the central clearinghouse for information on human service agency transportation. Importantly, it could also help to provide a one-stop source of both public and human service transportation agency information.

The Tecopa/Pahrump and Walker Dial-A-Ride service are strong candidates for converting from traditional transit services to nontraditional means, including the development of a volunteer driver network and a Mobility Manager approved mileage reimbursement program. The Short Range Transit Plan recommends that the Tecopa/Pahrump service be replaced with a volunteer network and mileage reimbursement program in 2009/10. The Walker Dial-A-Ride should be retained until the 2-year 395 demonstration program is complete and evaluated. The Walker Dial-A-Ride could provide an important feeder bus function to twice daily 395 service in addition to providing local trips. If performance standards are still not met, then it should also transition to a volunteer network and mileage reimbursement program. The Lone Pine Dial-A-Ride service needs to be monitored carefully as its performance is currently below the performance standards recommended in Chapter 3.

The Mobility Manager would be responsible for developing a network of volunteers willing and able to provide rides to community members. Guidelines would need to be established for the mileage reimbursement program. To provide an incentive to potential volunteers, the mileage reimbursement rate should be at least 50% higher than the IRS mileage rate.

The Mobility Manager would be responsible for approving trip requests and fulfilling mileage reimbursements.

## 6. Bishop Local Transit Service

The City of Bishop has an excellent array of local and town-to-town services. Chapter 4 provided an analysis and recommendations for future 395 services. Chapter 5 provided an analysis and future recommendations for rural services serving Bishop, including the Benton to Bishop town-to-town service. This chapter focuses on an analysis of local transit circulation within the Bishop area. This includes both the Red and Blue fixed routes and dial-a-ride services.

### Analysis of Fixed Route Services

#### Description of Existing Services

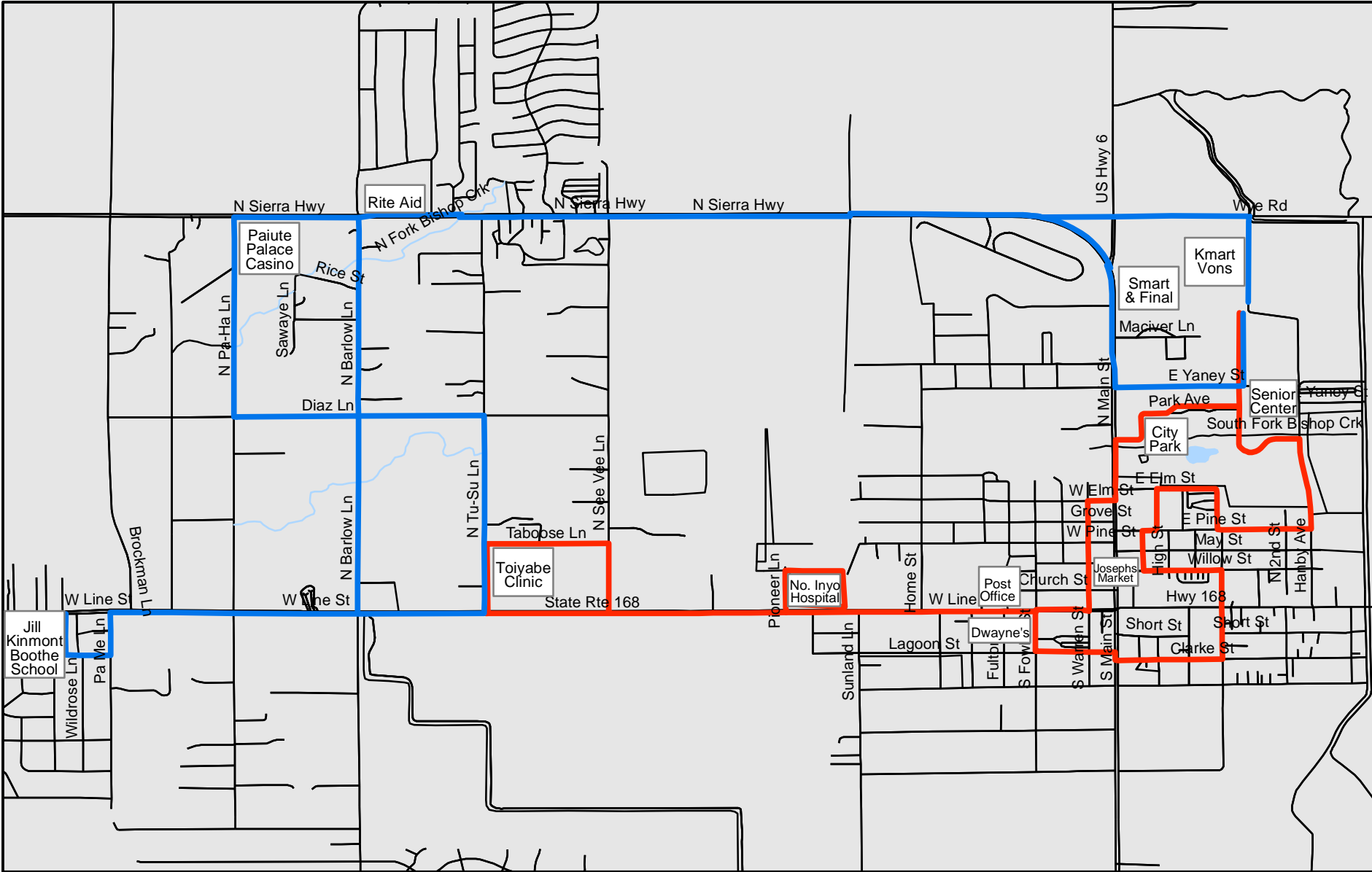
The City of Bishop operates service every 30 minutes on two routes, the Red and Blue routes. Exhibit 6-1 on the next page shows the map and the key activity center served by the Red and Blue routes. The local fixed routes use two buses. Service is operated Monday through Friday from 7:00 a.m. to 6:00 p.m. Fares are \$1.25 and \$1.00 for seniors and disabled passengers.

A route deviation is also available on both the Red and Blue routes to pick up passengers one mile off the regular fixed route. Passengers need to request the route deviation one hour before the desired travel time. Disabled passengers have priority. Fares for the route deviation service are currently \$1.25 and \$1.00 for senior, youth, and disabled.

#### Observations

There has not been a survey conducted of fixed route passengers to determine who is using the existing service. The consulting team rode the bus and interviewed passengers and drivers on a random day as input to the evaluation process. During the onboard observations, there were a few work trips to the Paiute Palace Casino, trips to the Toiyabe Clinic for medical appointments, and shopping trips to Rite Aid, and Kmart /Vons. There were typically 1-3 passengers onboard the bus at any one time. Observations and discussions with the drivers indicate that many students use the fixed route to Jill Kinmont Boothe School and at that time the buses can be full. All passengers were very satisfied with the level of service provided and the reliability of the service. Stakeholders interviewed for the SRTP process were similarly pleased with what was perceived as a very high level of service.

# Exhibit 6-1 Bishop Area Red & Blue Fixed Route Bus Service



**Legend**

- Blue Line
- Red Line
- Roads

0 0.125 0.25 0.5 0.75 1 Miles

N

NT Consulting 5/08

From interviews with passengers and ESTA staff, there appears to be duplication of effort between dial-a-ride service and route deviation service. Having the ability for route deviation is advantageous if dial-a-ride service is not provided, but provides lots of inefficiencies when dial-a-ride is also provided. The reason is that the fixed routes have to be shorter in length in order to allow for a route deviation. If a route deviation is not provided on a particular trip, observations by the consulting team found that the bus lays over at Kmart and Vons for 5-10 minutes every half hour. This adds up to a significant amount of unproductive service time.

### Fixed Route Performance

Exhibit 6-2 provides a profile of fixed route performance in FY 2007-08. Some cautionary notes are provided for the data presented. Two fare increases in 2008 have raised the adult fixed route fare from \$0.50 to \$1.25 per trip, and the adult dial-a-ride fares from \$1.25 to \$2.50, effective September 2008. If such large fare increases were to follow normal patterns, it would increase the farebox recovery ratio, but would have a detrimental impact on ridership and productivity in the short term. In general, national experience has shown that for every 10% increase in fares, there is normally a 3% reduction in ridership. However, the recent significant rise in fuel prices, followed by a fare increase, and then a precipitous drop in fuel prices may have an impact on ridership and revenue starting September 2008.

Despite the uncertainty on the impacts of fuel prices and fare increases, the FY 2007/08 statistics do point to several important issues. Productivity of the fixed route service is substantially below industry standards. Farebox recovery is the percentage of costs recovered by fares. The California requirement is 10% for rural areas such as Bishop and fixed route services in FY 2007/08 were about one-half of the farebox recovery requirement. The two fare increases in 2008 should help to bolster the farebox recovery ratio and to decrease the subsidy per passenger. However, the existing productivity as measured in passengers per revenue vehicle hour are very low, and will likely drop with the September fare increase.

**Exhibit 6-2  
Bishop Fixed Route Performance**

	Fixed Route		
Base Statistics FY 2007/08	Red/Blue		
Annual Passengers	25,011		
Vehicle Revenue Hours	5,614		
Vehicle Revenue Miles	67,806		
Annual Farebox Revenue	\$16,674		
Annual Operating Costs	\$297,473		
Performance Indicators	FY 07/08	Min. Standard	Target Standard
Passengers Per Hour	4.4	8	12
Farebox Recovery Ratio	5.6%	10%	15%
Subsidy Per Passenger	\$11.23	\$6.75	\$4.50

The bottom line is that there should be significant opportunities for improving the productivity of the fixed route in order to provide overall improved efficiency to local Bishop Transit services. Steps need to be taken to both improve the attractiveness of fixed route service, while making it more efficient. Improving the productivity from 4.4 to 8 passengers per hour, however, will require not only a more efficient fixed route system, but also changes to the supply of dial-a-ride service and policies for accessing dial-a-ride service.

**Analysis of Dial-A-Ride Services**

Description of Existing Services

Dial-a-Ride service is offered on a door-to-door basis within the City limits of Bishop and the surrounding unincorporated areas.

Service is provided seven days a week during the following hours:

- Monday through Thursday - 7:00 A.M. to 6:00 P.M.
- Friday - 7:00 A.M. to Midnight
- Saturday - 8:30 A.M. to Midnight
- Sunday - 8:00 A.M. to 3:00 P.M.

The following is the fare structure:

- Adult One Zone: \$2.50
- Discounted: Seniors, Disabled, Youth, \$2.00
- Adult Between Zones \$3.50
- Discounted Between Zones \$3.00

## Dial-a-Ride Service Levels

The City of Bishop has a very high level of dial-a-ride service for its residents. There are currently six dial-a-ride vehicles that operate a total of approximately 44 weekday total hours between 7:00 am and 6:00 pm. As discussed further below under a review of peer systems, most communities the size of Bishop only have dial-a-ride service. In smaller rural communities with fixed route bus service, the dial-a-ride service is often limited to individuals eligible for Americans with Disabilities Act service.

The Americans with Disabilities Act (ADA) of 1990 requires all public transportation agencies that provide fixed route service to provide specialized transportation that is comparable to the public transit bus service for individuals who do not have the functional ability to ride public transit. ESTA's dial-a-ride service far exceeds the requirements of the Americans with Disabilities Act for complementary paratransit service. The ADA requires the following service levels:

- Complementary service to origins and destinations within  $\frac{3}{4}$  mile of the fixed route
- Reservations for next day service, up to 7 days in advance
- The span of service must match those of fixed route service
- No pattern of trip denials
- Fares for ADA dial-a-ride cannot exceed twice that of general public base fare

Many communities with fixed route services with a route deviation service do not operate dial-a-ride service. ADA regulations allow service providers to deviate from their routes to pick up and drop off ADA eligible passengers without having to provide complementary ADA paratransit service.

However, service providers such as ESTA can make a policy choice to exceed the ADA requirement to broadly meet mobility needs. This is currently the policy of ESTA, adopted from Inyo/Mono Transit.

## Observations

In riding the fixed-route buses, many of the passengers also use the dial-a-ride buses for at least some of their trip, e.g. trips to the grocery store. Passengers reported that the dial-a-ride buses were quite reliable and on-time. During a site visit, the consulting team observed five dial-a-ride buses in the Kmart/Vons parking lot at about 10 am. The drivers were idle and waiting for their next assignment. A week's sample of dispatch sheets was obtained from ESTA staff to determine how effectively the dial-a-ride vehicles were being utilized.

As mentioned above, there is a high level of service provided by dial-a-ride service to meet a mix of social service agency, shopping, medical, and Senior Center trips, among others. However, aside from the grouping of trips to the Senior Center, Friendship Center, and Little Promises, the Bishop Dial-a-Ride is more like a taxi service than a general public dial-a-ride service. While about one-third of the available slots are regularly scheduled in advanced (commonly referred to as subscription trips), many of the other trips are arranged the same day, and a single passenger is picked up and dropped off, very similar to a taxi trip. Public transportation agencies cannot afford the luxury of being a single trip taxi service for the convenience of passengers. General public dial-a-ride needs to group trips to achieve cost efficiencies. It currently costs taxpayers \$13.58 every time a dial-a-ride passenger boards the bus.

A week’s worth of dial-a-ride trip origins and destinations were charted by the ESTA drivers for analysis by the consulting team. Approximately 70% of the trip origins and destinations are within ¼ mile of the existing Red or Blue Route. There is a large concentration of dial-a-ride trips in the Highlands mobile park area. This doesn’t necessarily mean that all 70% of the passengers could utilize the Red or Blue Route, as many dial-a-ride passengers have special needs. However, interviews with ESTA passengers indicate that a substantial, albeit unquantified percentage, do use both dial-a-ride and fixed route services.

Dial-A-Ride Performance

Exhibit 6-3 shows the performance of the dial-a-ride services in Bishop. By itself, the dial-a-ride is currently close to meeting all of the minimum standards for a dial-a-ride service. The fare increases should raise the farebox recovery ratio well above the proposed minimum standard.

**Exhibit 6-3  
Bishop Dial-A-Ride Performance**

<b>Base Statistics FY 2007/08</b>	<b>Dial-A-Ride</b>		
Annual Passengers	41,320		
Vehicle Revenue Hours	11,757		
Vehicle Revenue Miles	135,106		
Annual Farebox Revenue	\$57,848		
Annual Operating Costs	\$618,782		
<b>Performance Indicators</b>	<b>FY 07/08</b>	<b>Min. Standard</b>	<b>Target Standard</b>
Passengers Per Hour	3.5	3	4.5
Farebox Recovery Ratio	9.3%	10%	15%
Subsidy Per Passenger	\$13.58	\$15.00	\$10.00

The current subsidy per passenger of dial-a-ride is \$13.58 compared to \$11.23 for fixed route service. It is important to note that the subsidy per passenger of



dial-a-ride services in other communities is often 2-5 times higher than fixed route services. The Bishop numbers are unusual, primarily due to the low productivity of the fixed route services.

### Analysis of Bishop Public Transportation System

The Bishop fixed route and dial-a-ride bus services is a system of local public transportation in Bishop. Most of the trips are local within the greater Bishop area. However, passengers that arrive on town-to-town services such as Lone Pine to Bishop can travel to their final destination on either the fixed route or dial-a-ride service. Exhibit 6-4 shows the combined performance of Bishop dial-a-ride and fixed route services. As a system, the overall productivity, as measured by passengers per hour, is low at 3.6 passengers per hour, resulting in a FY 07-08 subsidy per passenger trip of \$12.69.

**Exhibit 6-4  
Bishop Public Transportation System Performance  
Fixed Route and Dial-A-Ride Services Combined**

<b>Base Statistics FY 2007/08</b>	<b>Bishop System</b>		
Annual Passengers	66,331		
Vehicle Revenue Hours	17,371		
Vehicle Revenue Miles	202,912		
Annual Farebox Revenue	\$74,523		
Annual Operating Costs	\$916,255		
* FY 07/08 7-month average			
<b>Performance Indicators</b>	<b>FY 07/08</b>	<b>Min. Standard</b>	<b>Target Standard</b>
Passengers Per Hour	3.8	6	10
Farebox Recovery Ratio	8.1%	10%	15%
Subsidy Per Passenger	\$12.69	\$10.00	\$7.00

Based on the FY 07-08 data, the overall Bishop system is operating at below proposed minimum standards. The fare increases will likely raise the farebox recovery ratio above 10%. However, steps are needed to increase the productivity of overall services as measured by passengers per hour.

### Peer Analysis of Similar Size Cities

Exhibit 6-5 on the next page includes detailed tables of a peer analysis with 7 small rural cities under 25,000 population. Only stand-alone towns were selected such that Grass Valley has a similar population as Bishop, but is adjacent to Nevada City. The smallest city other than Bishop with both a demand response and fixed route system was Barstow, CA, with a population of almost 25,000. In

general, most towns the size of Barstow only have a dial-a-ride service. Ridgecrest that the CREST route serves has a population of 25,470 and only provides dial-a-ride service.

On a per capita basis, only Barstow has a higher number of transit trips per capital for small towns. Bishop’s 6.34 annual trips per capita are two to three times higher than the other six towns selected for comparison. However, Bishop’s average productivity of 3.8 passengers per vehicle revenue hour is substantially lower than the average of its peers or 5.5 passengers per vehicle revenue hour. Finally, the subsidy per passenger of \$12.69 is the second highest, next to Ridgecrest’s \$13.93 subsidy per passenger.

**Exhibit 6-5  
Peer Comparison of Bishop and Rural Towns under 25,000 Population**

City	2007 Population Estimate	Annual Passenger Trips	Farebox Recovery	Passenger Trips per Revenue Vehicle Hour	Annual Passenger Trips per Capita	Subsidized Operating Cost per Passenger Trip
Gridley, CA	6,250	10,265	9.3%	4.6	1.64	\$8.17
McFarland, CA	11,718	21,230	10.6%	9.1	1.81	\$5.14
Wasco, CA	24,199	26,112	8.8%	12.6	1.08	\$7.89
Shafter, CA	15,514	35,657	15.5%	10.4	2.30	\$4.65
Corcoran, CA	13,474	37,320	7.0%	6.5	2.77	\$7.34
Ridgecrest, CA	25,470	39,279	3.9%	5.5	1.54	\$13.93
Barstow, CA	24,677	239,362	10.8%	4.6	9.70	\$8.72
<b>Bishop, CA</b>	<b>10,543</b>	<b>66,311</b>	<b>8.1%</b>	<b>3.8</b>	<b>6.29</b>	<b>\$12.69</b>

A review of 20 dial-a-ride systems with same day service was undertaken to ascertain key themes on reservation policies. The following are the key themes of the literature review:

- A large majority of rural dial-a-ride services that also have fixed-route service do not have same day service. Most agencies allow reservations up to 14 days in advance, but require “next day” reservations. Therefore, reservations are typically required by 5 pm the day before service is actually provided.
- Local agencies that have viable taxi providers in their towns typically contract with the taxi provider to provide 24 hour a day seven day a week service with immediate response. Typically, the user pays 50% of the fare and the transit agency pays the other 50%. This is the most common arrangement for same day reservations.
- All transit agencies that do allow same day reservations only provide service on a space available basis. In areas that do certify ADA Paratransit eligibility, these passengers have priority. Out of town visitors with ADA Paratransit eligibility in their hometown also have priority.
- Some agencies, such as the City of Tracy, require a fare surcharge for same day service.
- Some agencies such as Paso Robles and Modesto require a two-hour reservation for same day service.
- The response time for same day service for general public dial-a-ride varies from 45 minutes in places such as Lodi to 4 hours in Visalia.

In general, what distinguishes a general public dial-a-ride and a taxi service is shared rides, and advanced reservations on the same day. A two-hour advance reservation would enable dispatchers to potentially group shared ride trips to increase system productivity.

## **Options for Improving Service Efficiency and Effectiveness**

The ESTA Board has the following policy options for improving efficiency and effectiveness of local community transit service in Bishop.

1. Service supply (changes in the number of vehicle hours provided)
  - Changes in hours and days operation
  - Frequency of fixed route service
  - Availability of dial-a-ride (DAR) service. The number of hours of DAR service provided on a daily basis is an important policy option for the ESTA Board to consider.
2. Fare policy
  - Relationship of adult and discounted fares on DAR and fixed route services
  - Charges more for same day service. To encourage scheduling efficiency, some transit agencies charge for same day service.
  - Charges for route deviation service

### 3. Service policies

- Human service agency trip provision. Many public transportation agencies distinguish between trips arranged by human service agency representatives and those arranged by the individual.
- Subscription trip policy
- Window for DAR pick-up and drop-off
- Advance reservation policy: same day versus next day reservations

Nine service options were evaluated. The options range from increasing service levels to strategies to make the overall service more cost effective. They also include fare policy and service policy change options. At present, the local Bishop system has a fixed route service, a route deviation element and an extensive dial-a-ride service. While it is very convenient to the passenger, each time a passenger boards a fixed route bus or dial-a-ride bus, it is costing \$12.69 in public subsidy. The target objective is \$7.00 in public subsidy per passenger trip. In order to achieve this objective, there is a need to emphasize either fixed route or dial-a-ride service. The options below provide both for consideration.

#### 1. Increase fixed route to 15 minutes on two-way loop

- Increases fixed bus service from two to four vehicles on a new two-way loop as shown in Exhibit 6-6. This bi-directional loop eliminates the need for transfers and connects all of the major destinations in Bishop.
- Eliminates route deviations on fixed route to maintain schedule adherence.
- Reduces DAR buses from six to four.
- Utilizes DAR hours for commuter route to Jill Kinmont Booth School with one trip in morning and afternoon during school sessions.

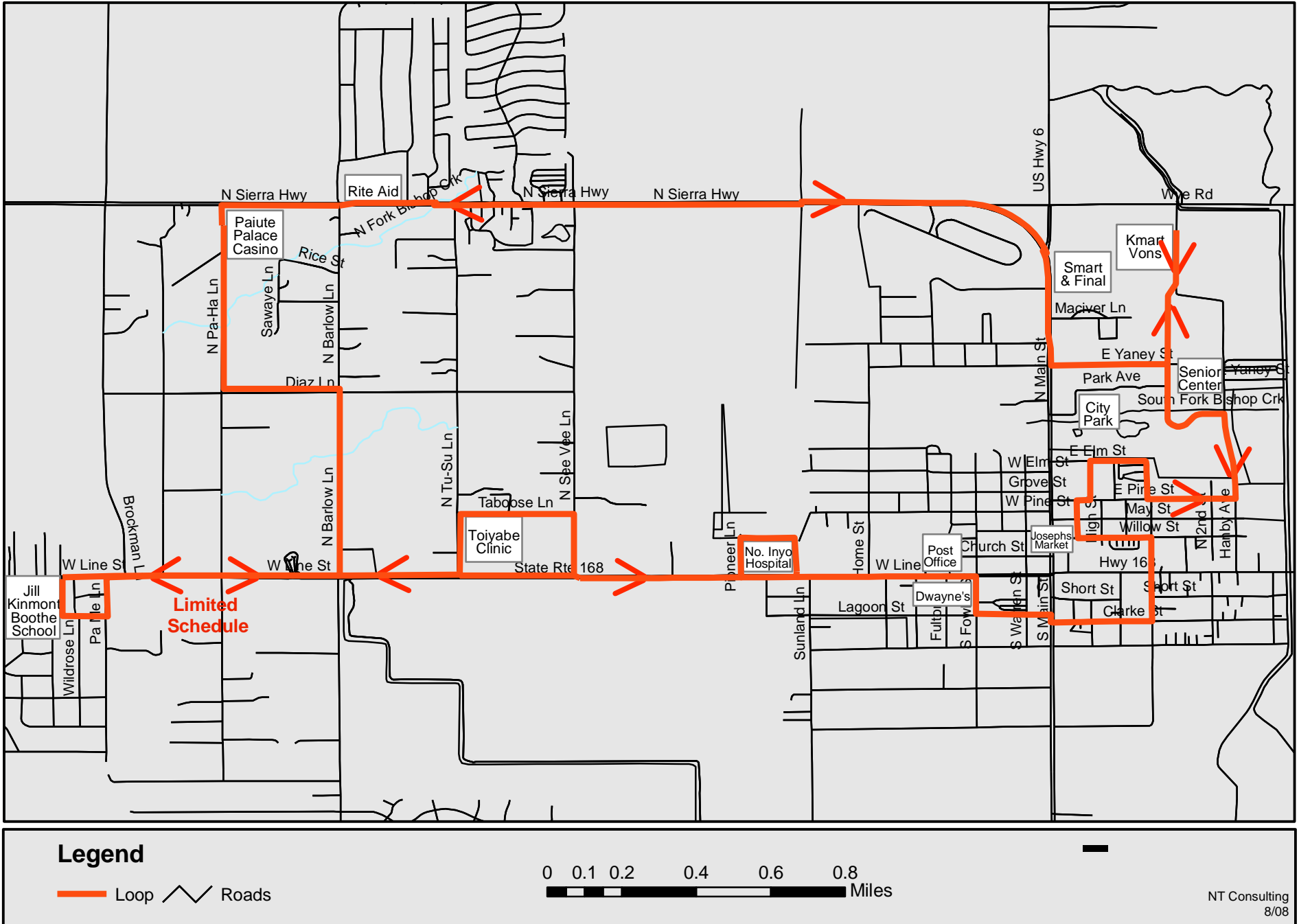
#### Pros:

- Increases frequency on fixed route to provide strong incentive to use fixed route service.
- Encourages able-bodied dial-a-ride passengers to use fixed route service.

#### Cons:

- Increases in frequency of fixed route service to 15 minutes would likely result in a decline in fixed route productivity. Existing demand levels for fixed route service may not justify 15-minute frequencies in Bishop.
- Maintains the same number of service hours provided for the Bishop public transportation system, without an overall system productivity increase.

# Exhibit 6-6 Bishop Area Two Way Loop Option



2. Increase fixed route service to every 15 minutes, restrict DAR eligibility to ADA eligible persons.

- Improves fixed route service levels to every 15 minutes on the Red and Blue Routes.
- Route deviation used to serve many former DAR passengers.
- Restricts eligibility to DAR to ADA eligible individuals who cannot utilize fixed route services.
- Requires next day reservations for DAR.
- Requires reservations by DAR individuals.
- Limits subscription trips to 50% of available capacity.
- Reduces dial-a-ride from seven to two buses.

Pros:

- Provides very convenient and frequent fixed route service.
- Increases overall fixed route ridership and productivity to 8 or more passengers per hour.

Cons:

- Decreases access to DAR by able-bodied dial-a-ride customer base.
- Decreases convenience of dial-a-ride service.

3. Reduce Weekday and Saturday Hours

- Reduces weekday hours to 5 pm for both fixed route and dial-a-ride.
- Eliminates Nite Rider on Friday and Saturday evenings.

Pros:

- Eliminates the last hour of dial-a-ride and fixed route service, normally the least productive service hour.

Cons:

- Reduces ability of both dial-a-ride and fixed route to serve employment trips.
- Eliminates availability of late night public transportation.

4A. Streamline Fixed Route and Reduce DAR by Two Buses

- Streamlines fixed route into single route, but retains existing 30-minute frequencies.
- Eliminates route deviations on fixed route to maintain schedule adherence.
- Reduces discounted fare for seniors and disabled on fixed route to half fares.
- Reduces DAR from 6 to 4 vehicles.
- Commuter bus route to Jill Kinmont Boothe School during school days.

- Requires priority utilization of DAR services for persons not able to use fixed route services.
- Requires next day reservations for DAR. Same day reservations would be eliminated.

## Pros:

- Provides incentive for one-seat trip on fixed route.
- Institutes fare incentive for seniors and disabled to use fixed route.
- Increases fixed route productivity.
- Provides more opportunities to group dial-a-ride trips with next day reservation policy.

## Cons:

- Lessens the ability for same day trips for some dial-a-ride passengers.
- Reduces choice on fixed route versus dial-a-ride trips.
- Reduces DAR vehicles and eliminates fixed route deviations resulting in the reduction of the convenience for Bishop residents who can currently use both fixed route and DAR services.

4B. Option 4A, but add Community Service Route to Highlands/Meadow Farms

- Same Option 3A features
- Adds a community service route four hours a day (10:00 am to 2:00 pm) from Highlands mobile home park and Meadow Farms neighborhood on 60-minute frequencies.
- After circulating Meadow Farms and Highlands mobile home park, would go to Kmart/Vons and then follow the existing Red Route before returning to Highlands and Meadow Farms. The same bus could be utilized for commuter bus to Jill Kinmont Boothe School.
- Route deviations provided in Highlands and Meadow Farms area.
- Timed transfers to two-way loop route.

## Pros:

- Retains all of the advantages of Option 3A.
- Highlands mobile home park currently generates significant numbers of dial-a-ride trips. Option 3A provides a lower cost fixed route, fixed schedule option 4 hours a day. Would eliminate a significant number of single ride dial-a-ride trips, resulting in greater productivity.
- No advance reservation required for Highland mobile home park or Meadow Farms community during mid-day.
- Provides 15-minute service along high volume Red Route route segments during higher demand mid-day.

## Cons:

- Speed bumps in Highlands mobile park home slows down route and lowers productivity.

- Limited service hours for a portion of the service area.

5. Keep existing routes; reduce 2 DAR buses.

- Reduces discounted fare for seniors and disabled on fixed route to half fares.
- Reduces DAR from 6 to 4 vehicles.
- Requires some prioritization of DAR for persons not able to use fixed route services.

Pros:

- Provides fare incentive for seniors and disabled to use fixed route.
- Increases fixed route productivity, but likely less than option #3.
- Encourages more next day trips resulting in improved number of group trips.
- Keeps familiarity of existing Red Route and Blue Route fixed routes.

Cons:

- Reduces ability for same day trips for some dial-a-ride passengers.
- Reduces choice of fixed route versus dial-a-ride for desired trip.

6. Extended Two-Way Route to Meadow Farms; integrated fixed route and dial-a-ride

- New two-way loop route shown on Exhibit 6-7 serves Meadow Farms and backside of Highlands Mobile Home park.
- Retains 30-minute frequency.
- Buses alternate between fixed route and dial-a-ride service to maintain 30 minute on 45-minute length route.
- Next day advanced reservation for dial-a-ride.

Pros:

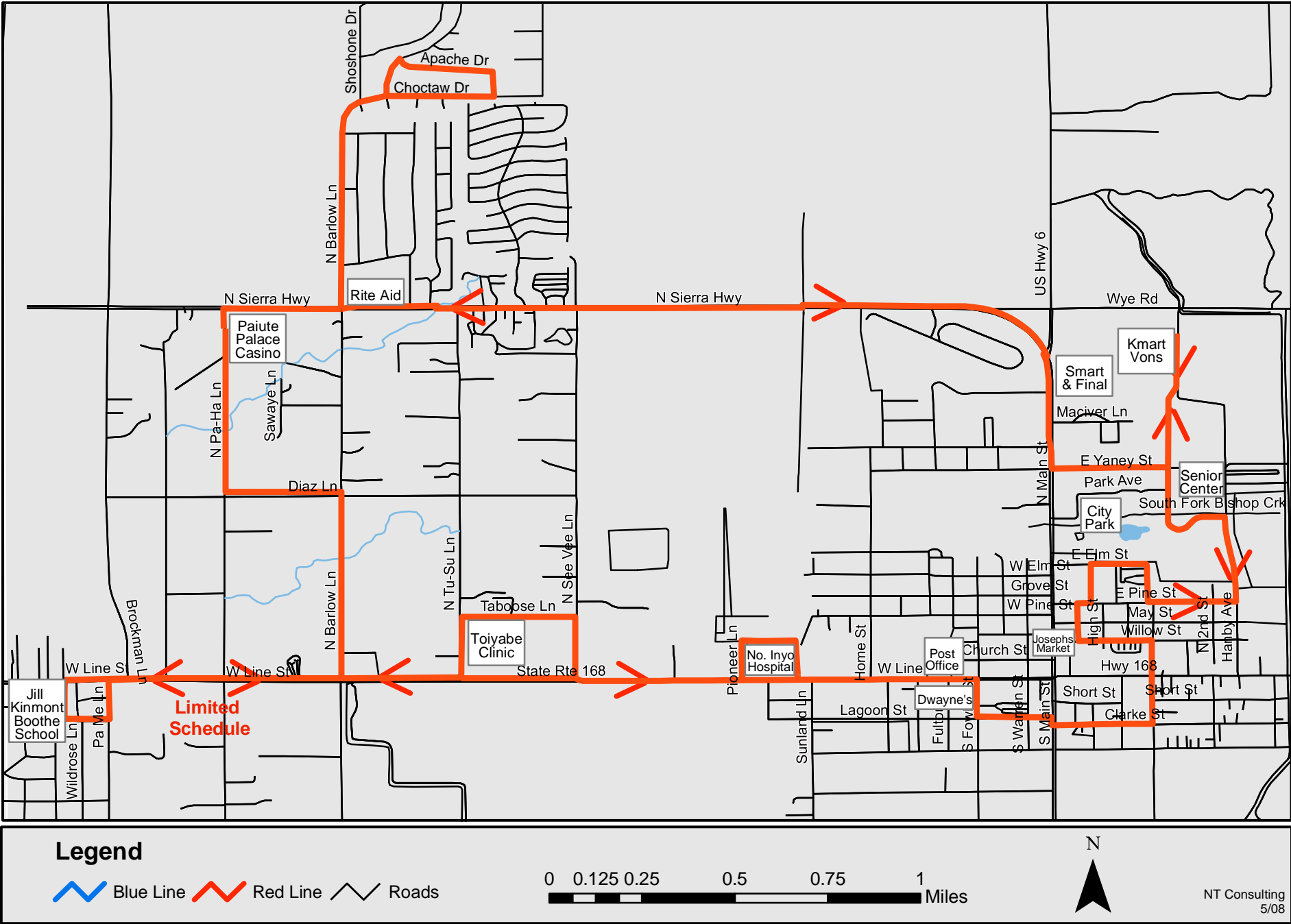
- Extends coverage to Meadow Farms neighborhood and provides backside stop for Highland mobile park residents.
- Provides greater opportunity for fixed route trips.
- Provides more opportunities to group dial-a-ride trips with next day reservation policy.

Cons:

- Mixing of dial-a-ride and fixed route with same buses has little or no industry experience.
- Scheduling constrained during DAR mode for starting fixed route function on time.
- Requires longer trip times and out of direction travel compared to options 4A, 4B, and 5. Normally equates to lower productivity



# Exhibit 6-7 Bishop Area Two Way Loop Route With Extension



7. Eliminate Fixed Route Service

- Eliminates fixed route buses in Bishop.
- Retains 6 DAR buses.

Pros:

- Eliminates duplication of fixed route and dial-a-ride coverage.
- Encourages improved productivity of DAR service.
- Dial-A-Ride only service is typical for towns the size of Bishop.

Cons:

- Eliminates convenience of fixed route, fixed schedule services.
- Results in probable DAR capacity issues requiring trip prioritization for seniors and disabled passengers.
- Results in less effective and cost efficient public transportation system.

8. Keep existing fixed route, restrict DAR to ADA eligible passengers

- Restricts eligibility to DAR to ADA eligible individuals who cannot use fixed route services.
- Requires next day reservations for DAR.
- Requires reservations by DAR individuals.
- Limits subscription trips to 50% of available capacity.
- Reduces dial-a-ride from seven to two buses.

Pros:

- Encourages utilization of more efficient fixed route service.

Cons:

- Reduces overall public transportation service levels.
- Impacts able-bodied dial-a-ride customer base.
- Reduces convenience of dial-a-ride service.
- Decreases the ability of human service agencies likely to book regular trips for able-bodied clients.

Exhibit 6-8 compares the fixed route and dial-a-ride service levels among the nine service options. The cells highlighted in bold are changes compared to the existing service levels.

Exhibit 6-9 compares the service supply and estimated operating costs of the nine options in 2009/10 dollars. At the high end, estimated operating cost ranges from \$1,167,000 for operating 15-minute service on a streamlined route and reducing DAR from 6 to 4 vehicles. At the low end of operating costs is restricting dial-a-ride services to ADA eligible passenger.

In order to reduce the subsidy per trip for Bishop local transit service system from \$12.69 to \$7.00 per passenger, there needs to be a strong emphasis on promoting fixed route service. Options 4B or 6 are the options that would most effectively work towards that objective. Both options streamline the fixed route to serve origins and destinations where riders in Bishop desire to travel to, expand coverage to serve the Meadow Farms and Highlands mobile park area, eliminate the route deviations on fixed route, require next day advanced reservations and reduce the number of DAR vehicles from 6 to 3 or 4 (depending on the option) will increase both the efficiency and effectiveness of public transportation in Bishop. It is important to note that the next day advanced reservation will allow dispatchers to group trips for improved efficiency and eliminate the existing taxi-style operation. Implementation of either package of recommendations in Options 4B or 6 should result in improved productivity in passengers per hour for both fixed route and DAR services, reducing the overall systemwide subsidy per trip.

The advantage of Option 6 over Option 4B is that it expands coverage on regular streets in the Meadow Farms neighborhood, with stops in the front and back of the Highlands mobile home park. The integrated dial-a-ride and fixed route system provides an innovative means of maintaining 30-minute frequencies while expanding the route coverage. It is an option that does not have significant real world experience. Normally, fixed route and dial-a-ride services are operated as separate services.

The advantage of Option 4B over Options 6 is a dedicated four-hour per day route which serves the difficult to serve Meadows Farm and Highlands mobile home park. The hourly service provides more direct service with the Highland mobile home park and enables route deviation on at least one trip. Dial-a-ride are already regularly schedule to Highland mobile home park, and the limited schedule service allows former dial-a-ride riders direct scheduled service without having to walk long distances to a bus stop or make an advanced reservation.

**Exhibit 6-8  
Bishop Service Options: Service Levels**

Option	Description	Fixed Route Service Levels					Dial-A-Ride Service Levels				
		Hours	Buses	Routes	Deviations	Frequency	Hours	Eligibility	Reserve	Days	Buses
Existing	Existing DAR and Red, Blue FR	7 am - 6 pm	2	Red, Blue	Yes	30	7am-6pm	Gen. Public	Same day	7	6
Option 1	Increase FR to 15 min on 2- way loop	7 am - 6 pm	4	<b>Exh. 6-5</b>	<b>No</b>	<b>15</b>	7am-6pm	Gen. Public	Same day	7	4
Option 2	FR 15 minutes, restrict DAR eligibility	7 am - 6 pm	4	Red, Blue	Yes	15	7am-6pm	<b>ADA Elig.</b>	Same Day	7	2
Option 3	Reduce weekday and Sunday hours	<b>7 am- 5 pm</b>	2	Red, Blue	Yes	30	<b>7am-5 pm</b>	Gen. Public	Same day	6	6
Option 4A	Streamline FR, reduce 2 DAR buses	7 am - 6 pm	2	<b>Exh. 6-5</b>	<b>No</b>	30	7am-6pm	Gen. Public	<b>Next Day</b>	7	4
Option 4B	Option 4A +Highland Community Route	<b>10 am-2 pm</b>	1	<b>3A + Highland</b>	<b>Yes</b>	<b>60</b>	7am-6 pm	Gen. Public	<b>Next Day</b>	7	3
Option 5	Existing FR, reduce 2 DAR buses	7 am - 6 pm	2	Red, Blue	Yes	30	7am-6pm	Gen. Public	<b>Next Day</b>	7	4
Option 6	Expanded FR, integrated DAR/FR	7am- 6 pm	3	<b>Exh. 6-6</b>	<b>No</b>	30	7am-6 pm	Gen. Public	<b>Next Day</b>	7	3
Option 7	Eliminate fixed route						7am-6pm	Gen. Public	Same Day	7	6
Option 8	Restrict DAR to ADA eligible passengers	7 am - 6 pm	2	Red, Blue	Yes	30	7am-6pm	<b>ADA Elig.</b>	<b>Next Day</b>	7	2

DAR= Dial-A-Ride, FR= Fixed Route

**Exhibit 6-9  
Bishop Service Options: Hours and Operating Costs**

Option	Description	Fixed Route Hours, Miles, Costs			Dial-A-Ride Hours, Miles, Costs			Total Hours, Miles, Costs (2009/10)		
		Annual	Annual	Estimated	Annual	Annual	Estimated	Annual	Annual	Estimated
		Hours	Miles	Op. Cost	Hours	Miles	Op. Cost	Hours	Miles	Op. Cost
Existing	Existing DAR and Red, Blue FR	5,614	67,806	\$ 315,175	11,852	134,581	\$ 660,177	17,466	202,387	\$ 975,351
Option 1	Increase FR to 15 min on 2- way loop	11,229	135,611	\$ 630,349	9,600	112,616	\$ 536,914	20,829	248,228	\$ 1,167,263
Option 2	FR 15 minutes, restrict DAR eligibility	11,229	135,611	\$ 630,349	5,496	64,473	\$ 307,383	16,725	200,084	\$ 937,732
Option 3	Reduce weekday and Sunday hours	5,314	64,183	\$ 298,334	11,436	134,154	\$ 639,598	16,750	198,337	\$ 937,932
Option 4A	Streamline FR, reduce 2 DAR buses	5,614	67,806	\$ 315,175	9,600	112,616	\$ 536,914	15,214	180,422	\$ 852,088
Option 4B	Option 4A +Highland Community Route	6,622	80,910	\$ 372,318	8,592	100,791	\$ 480,538	15,214	181,701	\$ 852,856
Option 5	Existing FR, reduce 2 DAR buses	5,614	67,806	\$ 315,175	9,600	112,616	\$ 536,914	15,214	180,422	\$ 852,088
Option 6	Expanded FR, integrated DAR/FR	8,422	101,709	\$ 472,762	6,793	79,685	\$ 379,909	15,214	181,393	\$ 852,671
Option 7	Eliminate fixed route			\$ -	11,852	134,581	\$ 660,177	11,852	134,581	\$ 660,177
Option 8	Restrict DAR to ADA eligible passengers	5,614	67,806	\$ 315,175	5,496	64,473	\$ 307,383	11,110	132,278	\$ 622,558

## 7. Local Mammoth Lakes Transit Service

### Introduction

This section starts with a description of local transit services in the Town of Mammoth Lakes. FY 2007/08 performance is then reviewed. Key issues revealed in stakeholder interviews are then summarized. The two top issues identified for the Short Range Transit Plan were the consolidation of bus stop signage and vehicle branding. Those issues are addressed in Volume II of the SRTP: Marketing Plan. A section briefly describes the Forest Service Reds Meadow Shuttle service and the keys issue that need to be resolved for ESTA to partner with the Inyo National Forest to operate and maintain services starting in the summer of 2008. Finally, the last section describes a process for ESTA to consider in partnering with the MMSA to operate and maintain their transit service.

### Description of Existing ESTA Services

ESTA is one component of the transit system provided in Mammoth Lakes. ESTA operates three types of services that vary in their routes and service levels in the summer and winter:

- Town Trolley: summer and winter routes and schedule
- Lift Service: Midtown and Old Mammoth Lift with summer and winter routes and schedules
- Mammoth Dial-A-Ride: year round service, open to general public

The Town of Mammoth Lakes contracts for extra service beyond what would be normally provided by ESTA. The Town approved a 1% increase in the Transient Occupancy Tax and the Town Council has designated the funds to support local transit services in the town.

Mammoth Mountain Ski Area (MMSA) operates extensive transit service during the winter to provide access from the town to the mountain. In the summer, MMSA operates the Mammoth Bike Shuttle from the Village to the Main Lodge.

From June to early September, the US Forest Service has historically operated under a vendor contract, providing service from the Main Lodge to Reds Meadow every 30 minutes, or more frequently as demand dictates.

## **ESTA Summer Service Description<sup>1</sup>**

A map of the Mammoth Lake Summer Routes is provided as Exhibit 7-1. All fixed routes services in the Town of Mammoth Lakes are free.

### Town Trolley

The Town Trolley (Red Line) operates from The Village at Mammoth to Mammoth Creek Park, from 9:00 am to 10:00 pm daily with stops every 15 minutes.

### Lakes Basin Trolley

The Lakes Basin Trolley (Orange Line) operates from The Village at Mammoth to Horseshoe Lake from 8:00 a.m. to 6:00 p.m. daily with service from July 1 to September 1. The Trolley departs The Village every hour with stops at Twin Lakes (Tamarack Lodge), Lake Mary, Lake Mamie and Horseshoe Lake.

### Midtown LIFT

The Midtown LIFT (Purple Line) operates on a route from Vons, to Sierra Valley sites, The Village, and Canyon Lodge 7days a week from May 27 to November 1. The LIFT departs the Vons parking lot on the hour and 30 minutes past the hour, and operates Monday – Friday from 6:30 a.m. to 8:30 p.m. and from 9:00 a.m. to 9:00 p.m. Saturday and Sunday.

### Old Mammoth LIFT

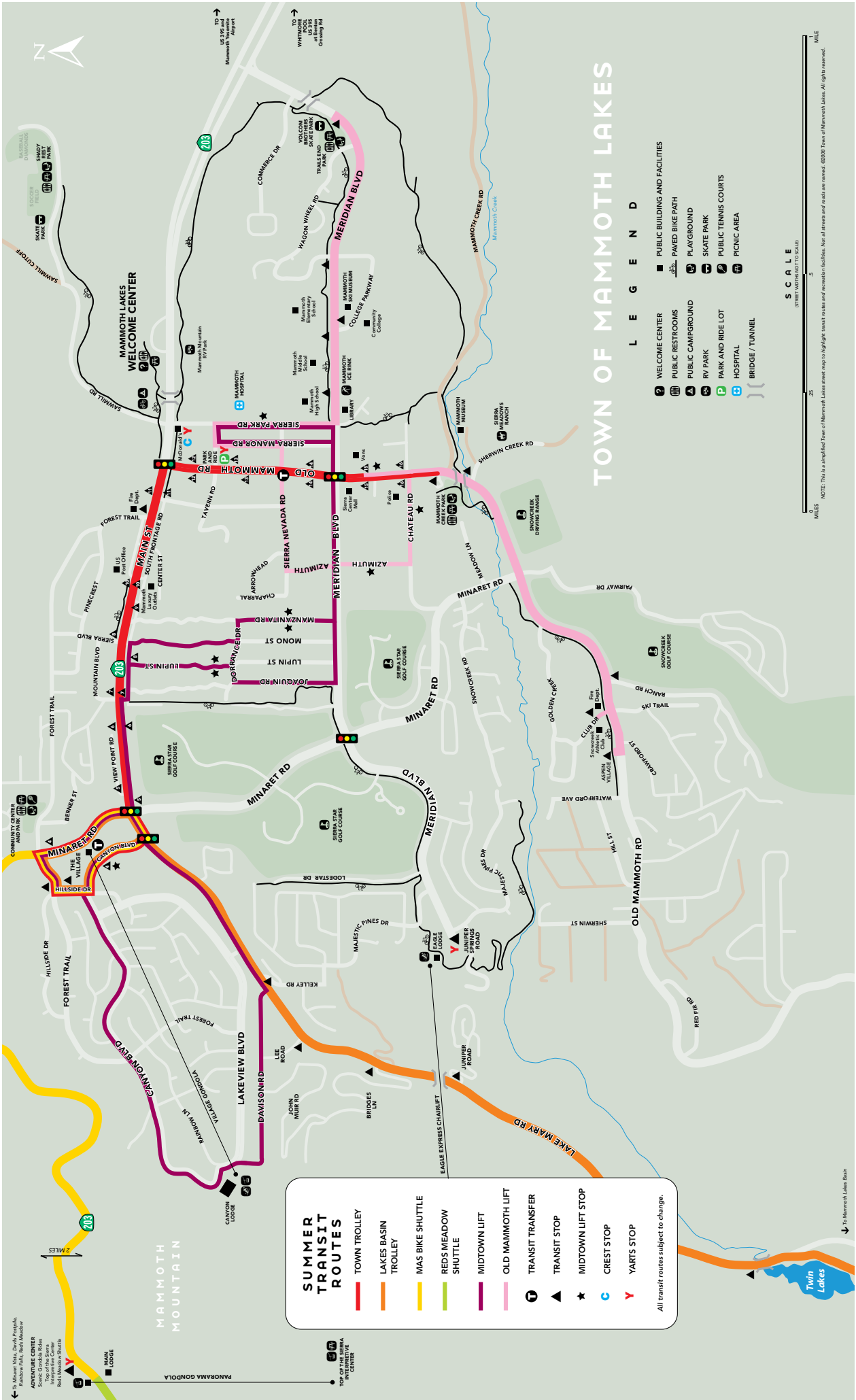
The Old Mammoth LIFT (Pink Line) will operate on the same 2007 summer route from Vons to the Skatepark, Mammoth Hospital and Aspen Village Apartments 7days a week from May 27 to November 1. The LIFT departs the Vons parking lot on the hour and 30 minutes past the hour, and operates Monday - Friday from 6:30 a.m. to 8:30 p.m. and from 9:00 a.m. to 9:00 p.m. Saturday and Sunday.

### Dial-A-Ride

From June 14 to Nov. 1, door-to-door dial-a-ride service is available from 8:00 am to 9:00 pm on weekdays and from 9:00 am to 5:00 pm on weekends. The cost is \$1.50 to \$3.00 depending on the zone.

---

<sup>1</sup> Based on Summer 2008. Please note that there are shoulder seasons with lower service levels between the summer and winter seasons and the winter and summer seasons.



**SUMMER TRANSIT ROUTES**

- TOWN TROLLEY
- LAKES BASIN TROLLEY
- MAS BIKE SHUTTLE
- REDS MEADOW SHUTTLE
- MIDTOWN LIFT
- OLD MAMMOTH LIFT
- TRANSIT TRANSFER
- ▲ TRANSIT STOP
- ★ MIDTOWN LIFT STOP
- CREST STOP
- Y YARTS STOP

All transit routes subject to change.

# TOWN OF MAMMOTH LAKES

- LEGEND**
- WELCOME CENTER
  - ☒ PUBLIC RESTROOMS
  - ⚽ PUBLIC CAMPGROUND
  - 🛶 RY PARK AND RIDE LOT
  - 🏠 HOSPITAL
  - ⌋ BRIDGE / TUNNEL
  - PUBLIC BUILDING AND FACILITIES
  - 🚶 PAVED BIKE PATH
  - 🎮 PLAYGROUND
  - ⚽ SKATE PARK
  - 🎾 PUBLIC TENNIS COURTS
  - 🌳 PICNIC AREA

**SCALE**  
 (STATE AGENCY NOT TO SCALE)

0 1 2 3 4 5  
 MILES

NOTE: This is a simplified map of Mammoth Lakes street map to highlight transit routes and recreation facilities. Not all streets and roads are shown. ©2008 Town of Mammoth Lakes. All rights reserved.

© Mammoth Lakes, Calif. / Paradise  
 Adventure Center  
 Ski Area  
 Mammoth Mountain  
 Ski Area  
 Mammoth Lakes  
 Ski Area  
 Mammoth Lakes  
 Ski Area

↓ To Mammoth Lakes Basin

## **ESTA Winter Services<sup>2</sup>**

Exhibit 7-2 provides a summary map of ESTA winter service in the Town of Mammoth Lakes.

### Town Trolley

The Town Trolley (Red Line) operates from The Village at Mammoth to Mammoth Creek Park, from 9:00 am to 10:00 pm daily with stops every 15 minutes.

### Lakes Basin Trolley

The Lakes Basin Trolley (Orange Line) operates from The Village at Mammoth to Horseshoe Lake from 8:00 a.m. to 6:00 p.m. daily with service from July 1 to September 1. The Trolley departs The Village every hour with stops at Twin Lakes (Tamarack Lodge), Lake Mary, Lake Mamie and Horseshoe Lake.

### Midtown LIFT

The Midtown LIFT (Purple Line) operates on a route from Vons, to Sierra Valley sites, The Village, and Canyon Lodge 7 days a week from May 27 to November 1. The LIFT departs the Vons parking lot on the hour and 30 minutes past the hour, and operates Monday – Friday from 6:30 a.m. to 8:30 p.m. and from 9:00 a.m. to 9:00 p.m. Saturday and Sunday.

### Old Mammoth LIFT

The Old Mammoth LIFT (Pink Line) will operate on the same 2007 summer route from Vons to the Skatepark, Mammoth Hospital and Aspen Village Apartments 7 days a week from May 27 to November 1. The LIFT departs the Vons parking lot on the hour and 30 minutes past the hour, and operates Monday – Friday from 6:30 a.m. to 8:30 p.m. and from 9:00 a.m. to 9:00 p.m. Saturday and Sunday.

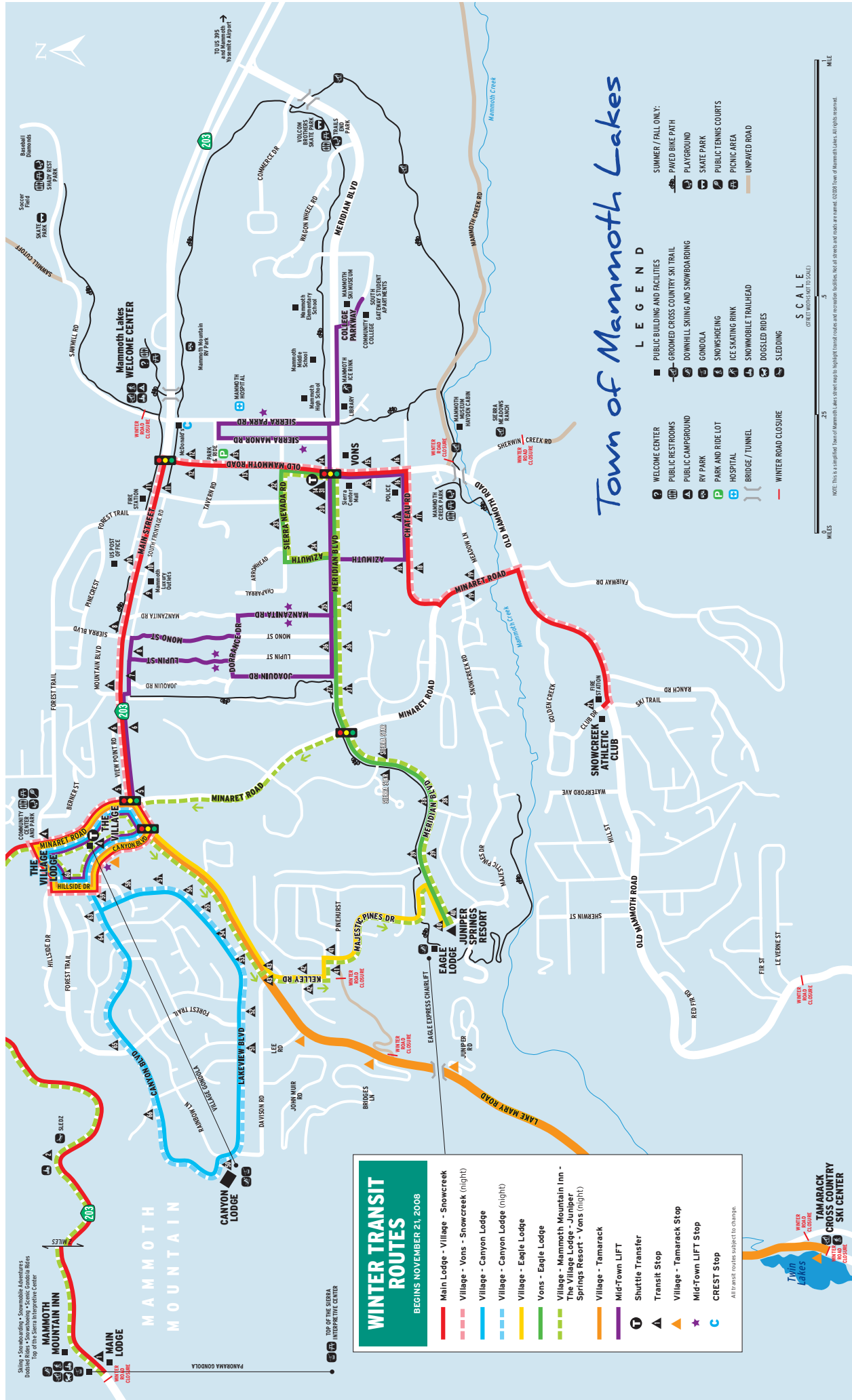
### Dial-A-Ride

From June 14 to Nov. 1, door-to-door dial-a-ride service is available from 8:00 am to 9:00 pm on weekday and from 9:00 am to 5:00 pm on weekends. The cost is \$1.50 to \$3.00 depending on the zone.

---

<sup>2</sup> Based on Winter 2008 schedule. Please note that the Winter dates of operation are dependent upon snow conditions, but generally operate from mid-December through May.





Village - Snowcreek - Snowcreek (night)  
 Doublet - Doublet - Snowcreek (night)  
 Top of the Sierra Interpretive Center

MAMMOTH MOUNTAIN INN  
 MAIN LODGE

MAMMOTH MOUNTAIN  
 MOUNTAIN

CANYON LODGE

THE VILLAGE LODGE

EAGLE LODGE

JUNIPER SPRINGS RESORT

SNOWCREEK ALPINE CLUB

VONS

MAMMOTH WELCOME CENTER

SIERRA MOUNTAIN INN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

MAMMOTH HAYDEN CABIN

### WINTER TRANSIT ROUTES

BEGINS NOVEMBER 21, 2008

	Main Lodge - Village - Snowcreek
	Village - Vons - Snowcreek (night)
	Village - Canyon Lodge
	Village - Eagle Lodge
	Vons - Eagle Lodge
	Village - Mammoth Mountain Inn - The Village Lodge - Juniper Springs Resort - Vons (night)
	Village - Tamarack
	Mid-Town LIFT
	Shuttle Transfer
	Transit Stop
	Village - Tamarack Stop
	Mid-Town LIFT Stop
	CREST Stop

All transit routes subject to change.

# Town of Mammoth Lakes

- ### LEGEND
- |  |                                |
|--|--------------------------------|
|  | PUBLIC BUILDING AND FACILITIES |
|  | PUBLIC RESTROOMS               |
|  | PUBLIC CAMPGROUND              |
|  | RV PARK                        |
|  | PARK AND RIDE LOT              |
|  | HOSPITAL                       |
|  | BRIDGE / TUNNEL                |
|  | WINTER ROAD CLOSURE            |
|  | WELCOME CENTER                 |
|  | PUBLIC RESTROOMS               |
|  | PUBLIC CAMPGROUND              |
|  | RV PARK                        |
|  | PARK AND RIDE LOT              |
|  | HOSPITAL                       |
|  | BRIDGE / TUNNEL                |
|  | WINTER ROAD CLOSURE            |
|  | SUMMER / FALL ONLY:            |
|  | PAVED BIKE PATH                |
|  | PLAYGROUND                     |
|  | SKATE PARK                     |
|  | PUBLIC TENNIS COURTS           |
|  | PICNIC AREA                    |
|  | UNPAVED ROAD                   |

SCALE  
(STREET NAMES NOT TO SCALE)



MILE  
 .25  
 .5  
 MILES  
 NOTE: This is a simplified Town of Mammoth Lakes street map to highlight transit routes and recreation facilities. Not all streets and roads are named. ©2008 Town of Mammoth Lakes. All rights reserved.



Winter Lift

The ESTA Winter Lift is the Purple Route on the Winter map and the schedule operates from the Village to Main Street, Sierra Park Road and mid-Mammoth, 7 days a week at 30 minute intervals.

Winter Night Trolley

The ESTA-operated night trolley operates from the Village to Old Mammoth Road to Snowcreek Athletic Club from 6:00 pm to 1:00 am seven days a week.

**ESTA Town of Mammoth Lake Performance**

The free Mammoth Trolleys and Lift services have excellent ridership and productivity. As shown in Exhibit 7-3, the \$2.28 cost per passenger trip for the Mammoth Trolley is exemplary. The Trolley attracts a very diverse ridership of local Mammoth residents and tourists. It's very popular with children. The Mammoth Lift is very heavily utilized for employment transportation.

**Exhibit 7-3  
Town of Mammoth Lakes  
2007/08 Performance Statistics**

	Vehicle Rev. Hours	Annual Pass.	Annual Op. Cost*	Passengers/ Hour	Op. Cost/ Passenger
<b>Mammoth Trolleys</b>	6,935	158,810	\$361,360	22.90	\$2.28
<b>Mammoth Lift</b>	5,436	66,904	\$284,216	12.31	\$4.25
<b>Mammoth Dial-A-Ride</b>	5,918	26,664	\$301,996	4.51	\$11.33

\*based on ESTA cost model of FY 2007/08 expenditures by categories assigned to hours and miles

Town of Mammoth Lakes staff and more recently ESTA staff have done an exemplary job in developing local public transportation services in concert with the MMSA ski area. The system is working well, it exceeds the performance standards recommended in Chapter 3, and no changes are recommended.

**Peer Comparison**

In order to provide a benchmark for Mammoth Lake performance, data was collected from the Tahoe BlueGo Winter shuttle and the ECO-Vail ski shuttle and the comparative statistics are shown in Exhibit 7-3. Both of these services charge a fare and have different service configurations. Nevertheless, the productivity of the Tahoe BlueGo service is comparable to the Mammoth Trolleys. The ECO Vail Ski Shuttle has an operating cost per passenger trip that is much higher than both the Mammoth Trolley and Lift services.

**Exhibit 7-4  
Tahoe and Vail Benchmarks  
Performance Statistics**

<b>Route</b>	<b>Fiscal Year</b>	<b>Annual Passenger Trips</b>	<b>Annual Revenue Vehicle Hours</b>	<b>Annual Operating Cost</b>	<b>Passenger Trips per Revenue Vehicle Hour</b>	<b>Operating Cost per Passenger Trip</b>
<b>Tahoe BlueGo Winter Service shuttle</b>	FY 2008	418,183	19,003	\$572,691	22.01	\$1.37
<b>ECO-Vail Ski shuttle</b>	CY 2007	54,884	6,013	\$540,629	9.13	\$9.85

The comments on the peer analysis of Bishop Dial-A-Ride services in Chapter 6 are also applicable to the Mammoth Dial-A-Ride service.

A profile of the Roaring Forks Transportation Authority (RFTA) in the Aspen and Glenwood Springs area is provided in Appendix A. RFTA is a good example of a seamless public transportation system that has developed in many ways that ESTA would like to develop in the future.

**Summary of Key Issues and Opportunities**

1. Bus stop signage. There was consensus that bus stop signage is a significant issue in the Town of Mammoth Lakes. The photograph below sums up the issue. While there is a vast array of signage, there is very little information available to let a passenger know if and when the bus they need to get to their destination stops there.



Volume II of the SRTP and subsequent work by subcontractor Transit Marketing for the Town of Mammoth Lakes is addressing this issue with an integrated bus stop signage scheme.

2. Vehicle Branding. ESTA does not currently have a single brand. Rather it has a number of de facto brands which it has inherited from previous organizations. These are illustrated in the collage of photos below



The transit network in the Eastern Sierra region includes a wide variety of vehicle types branded in an even wider variety of ways. Many of these vehicles are operated by ESTA; others are operated by Mammoth Mountain or the Forest Service. The following is a discussion of several branding issues:

- Minivans and cutaway style vehicles branded as Inyo-Mono Transit, Inyo-Mono Dial-a-Ride, or ESTA. Many are white with red and blue stripes, some are red, some are blue (to coincide with the red and blue routes in Bishop), and the newest are white with gold and blue stripes.

- Unbranded cutaway style vehicles with small logos for the Town of Mammoth Lakes and ESTA decal on the side. Larger transit style buses branded as the Crest (Carson Ridgecrest Eastern Sierra Transit) or as Mammoth (Mammoth Mountain's buses).
- Red and green historic style trolley vehicles operated in the Town of Mammoth lakes.
- Seasonal buses used by the Forest Service's contractor to shuttle visitors to Reds Meadow and the Devil's Postpile.

The various vehicle paint schemes (with the exception of Mammoth Mountain buses which are clearly associated with the ski area) tell the potential user little about where the bus goes or what area it actually serves.

The Marketing Plan in Volume II of the Short Range Transit Plan recommends a vehicle branding scheme that addresses these issues in a comprehensive manner.

3. Linkage to the airport when air service begins. Air service to the Town of Mammoth Lakes will begin on December 18, 2008. While some stakeholders expressed a need for public transportation to meet the daily trip, the combination of hotel shuttles and rental cars will adequately serve the transportation needs of air travelers.
4. Serving future growth in Mammoth Lakes. The Town of Mammoth Lakes has a General Plan policy "limit total peak population of permanent and seasonal residents and visitors to 52,000 people." The Land Use Element of the General Plan further states: "An overarching principle of the community is to maintain the town's compact urban form, protect natural and outdoor recreation resources, and prevent sprawl. The Town established the Urban Growth Boundary limiting the area available for future development to achieve these principles." These policies of compact growth with an Urban Growth Boundary are very supportive of future transit service development in Mammoth Lakes.

In order to achieve the goals of the General Plan, the Town has established a series of districts for detailed planning and public input. District planning is now underway in various stages for the Clearwater, Mammoth Crossings, the Sherwin, Hidden Creek Crossing and Sierra Star and Snowcreek VIII.

In reviewing the draft site plans for several of these developments as part of the district planning process, bus stop improvements are being included, but there has not been adequate consideration on how and if the existing Town of Mammoth Lakes transit services can effectively serve the planned bus stop in new developments with available TOT dollars. It is recommended that the

Town of Mammoth Lakes undertake such an assessment as an integral part of the District Plans. The potential transit demand for each District Plan should be compiled and considered in a comprehensive manner. There are many transit industry examples of bus turnouts and bus shelters that have been built as part of the local development approval process, but the local and regional transit service cannot serve the bus stop for a variety of operational and funding considerations.

The Short Range Transit Plan includes a new year round LIFT route to serve these new developments in 2012/13 if development progresses to the point to justify implementation. 3,700 new annual hours are utilized as a placeholder until the District Plan process considers transit operations in a more comprehensive manner. It should be also noted that an ESTA Board member has proposed a very innovative concept for potentially utilizing MMSA gondolas to provide some of the internal transit circulation now being provided by buses. If these ideas and concepts receive traction from MMSA, it may eliminate the need for expanding the number of ESTA provided hours.

## **US Forest Service Reds Meadow Shuttle**

The US Forest service has approached ESTA about partnering with the Forest Service Inyo National Forest (INF) to manage and operate the Reds Meadow Shuttle service. At its October Board meeting, the ESTA Board asked staff to begin negotiations with INF and Mammoth Mountain Ski Area (MMSA) to develop a specific proposal. The Short Range Transit Plan assumes these negotiations are successful and that ESTA will assume responsibility for the Reds Meadow Shuttle for the 2009 season. The Reds Meadow Shuttle starts at the Main Lodge of MMSA and is an important summer component of local Mammoth transit services. Having ESTA manage and operate the Reds Meadow Shuttle would be an important step forward in developing a seamless transit system in the Eastern Sierra.

This section borrows directly from INF correspondence<sup>3</sup> to incorporate background information.

### Overview of Existing Reds Meadow Shuttle

The Reds Meadow shuttle began operation in 1979 and continues to run today. INF began requiring shuttle usage shortly after the narrow, winding road down to Reds Meadow was paved, easing access and increasing usage beyond what was safe and appropriate for resource protection. INF has contracted out the shuttle operations since 1979.

---

<sup>3</sup> Much of this section is taken directly from the September 24, 2008 memo from Matt Peterson to ESTA.

The majority of visitors enter the Reds Meadow Valley using the mandatory shuttle system. However, some visitors are granted access in their private vehicle if they fall under one of the following exceptions:

- Have a disabled placard
- Are camping overnight at one of the campgrounds in the valley
- Have a floatation device, such as a car top boat, canoe, or kayak
- Are staying overnight at Reds Meadow Resort
- Are towing horse trailers or other livestock
- Arrive before 7:00 AM or after 8:00 PM (check station operating hours are 7:00 AM to 8:00 PM)

The Forest Service maintains and operates the Minaret Vista Check Station, which is located at the beginning of the Reds Meadow Valley Road at the top of Minaret Vista. From the check station, INF staff (and occasionally Devils Postpile staff) stop all private vehicles wishing to access the valley (during check station operating hours) and determine if they fall under one of the exceptions or if the passengers will be required to ride the mandatory shuttle. The check station is only staffed between the hours of 7:00 am and 8:00 pm and private vehicles are allowed to access the valley unrestricted before or after these hours.

Over the last five years, the number of visitors riding the shuttle has varied between 50,000 and 56,000 (Exhibit 7-5). The larger ridership in 2002 is probably explained by changing fees. From 1998 to 2001, the fee for an adult ticket was \$9; in 2002, the fee was lowered to \$5. Since 2003, the adult ticket has been \$7.

**Exhibit 7-5**  
**Number of shuttle passengers and shuttle trips, 2002-2007**

	Passengers	Bus trips
2002	62,716	3,549
2003	53,930	3,002
2004	55,449	3,009
2005	50,978	2,649
2006	52,633	3,012
2007	53,327	2,705

Potential Partnership Opportunities

INF has proposed the following roles and responsibilities in this partnership.

**ESTA Roles**

- Provide rolling stock and drivers
- Provide bus maintenance
- Collect and keep fees to cover costs

**INF Roles**

- Staff the Minaret Vista checkpoint
- Maintain bus stops
- Staff ticket booth at Mammoth Mountain Adventure Center

After discussion at the October Board meeting, there is also a desire to partner with MMSA to utilize the vehicles for the shuttle in the summer and at MMSA during the winter months. This is logical progression in the seamless transportation system.

### Key Issues

INF is hoping that ESTA can take over management and operation of the shuttle in the summer of 2009. The following are key issues that are currently being negotiated, and how they are handled in the Short Range Transit Plan.

1. Provide Rolling Stock: The ESTA Board is interested in a rolling stock that could have multiple purposes and uses. There is an opportunity to apply for ATPPL funding for rolling stock, but the approval and procurement process is likely to take two or more years. The SRTP assumes that ESTA leases buses from MMSA for two years, and successfully applies for an ATPPL grant for ten new buses. It is assumed that ESTA can utilize its current spare fleet to provide some additional capacity, especially wheelchair accessibility as needed.
2. Fee Structure: The current adult day pass is \$7.00, but there are multiple fee categories, for children, camping, tour buses, etc. The current fee in National Forest jargon is an expanded amenity fee. INF is working to change this fee type to a standard amenity fee, which is a more appropriate fee for visitors accessing Reds Meadow and its amenities (parking, restrooms, interpretive sites, trailheads, etc.). INF's hope is that ESTA will be able to charge visitors a lower fee for the shuttle and that combined with the new standard amenity fee, the overall cost for visiting Reds on the shuttle will be the same or very similar to the current fee. The Short Range Transit Plan has reduced the average fee paid from \$6.10 to \$5.75 to reflect the desired fee structure change.
3. Maintenance: It is assumed in the Short Range Transit Plan that bus maintenance can take place at either the Town of Mammoth or MMSA facilities.

## **ESTA and MMSA Transit Service**

MMSA operate an extensive winter route system with 29 buses, 27 full-time employees, 8 part-time employees and four supervisors. They currently transport approximately 600,000 riders per year, but have gone as high as 800,000 annually. The service is oriented to skiers to the mountain, but anyone can ride.

During the winter, the MMSA ski area transit service operates from 7:00 am to



5:30 pm with five routes. Service is operated approximately every 15 minutes, but dispatchers adjust buses to meet demand.

In the summer, MMSA operates a bike shuttle from the Village to the Main Lodge. It's open to others, but paid mountain bikers receive first priority.

During the Short Range Transit Plan process, MMSA management expressed a strong desire for a seamless transportation system. The prospect of ESTA operating the MMSA service was conceptually discussed as a potential means to achieving a seamless transportation system in the ESTA service area.

There are significant issues that would need to be addressed before ESTA could assume responsibility for MMSA services. Institutionally, this would be significant endeavor for ESTA, and careful planning would need to take place. All of the major functional areas of a transit system would need to be considered in merging operations with ESTA's.

Operations: Drivers, supervision, and dispatching. MMSA has demand-based scheduling that is dependent on demand and the number of ski visits. Adaptation of the number of vehicle revenue hours operated in a particular season would need to be adjusted based on the number of visitors, which is dependent on snow conditions, the economy etc. Mammoth Mountain has very specific standards for dress code. There are significant opportunities for joint utilization of staff, especially, if ESTA also assumes the Red Meadow shuttle and other potential shuttles.

Fleet Maintenance: MMSA has a state of the art maintenance facility that is also utilized for snow equipment maintenance. Institutional arrangement would need to have MMSA mechanics continue maintaining the fleet or give ESTA employees access to the maintenance facility under contract. Fleet procurement and ADA accessibility are major issues that would need to be resolved.

Management and administration: Development of a management and administration structure that enables MMSA to have a comfort level that outsourced transportation services are provided in a manner that support their overall business objectives and for ESTA to have management controls that support their overall mission would be a critical institutional task. A financial reporting system that works for both parties is also a critical management function. Finally, the contract terms would need to be a win-win outcome for both parties and would undoubtedly be the subject of much negotiation.

Marketing and Public Information: Some of bus branding and signage issues are addressed in Volume II, the Marketing Plan for the Short Range Transit Plan. Website linkage, customer service, and the regular updating of passenger information due to the ever changing schedules are timely but very important customer service tasks.

The above is only a preliminary discussion of some of the issues that would need to be resolved. The Financial Plan in the next chapter recommends that either a Caltrans grant be obtained to fully study this issue, or that it be included in the ATPPL feasibility study under the purview of INF since there is strong interrelationship between the ESTA, INF, and MMSA interests in moving the Eastern Sierra seamless transportation system forward.

## 8. Financial Plan

The financial plan provides the details on costs and revenues from FY 2008/09 to FY 2013/14 based on the recommendations in previous chapters. The financial plan is based on a series of assumptions that are clearly stated at the outset for both expenditures and revenues sources. Sections are then provided on operating costs and revenues and capital costs and revenues. Finally, a one-page summary of costs and revenues over five years is provided.

### Key Expenditure and Revenue Source Assumptions

The following is a summary of the expenditure and revenue assumptions that are utilized in the financial plan from FY 2008/09 to FY 2013/14. The financial plan tables in this chapter incorporate these assumptions.

#### Expenditure Assumptions

- Overall inflation rates will remain at historical levels of 3% for all cost centers unless otherwise noted below.
- Labor negotiations have resulted in known labor costs for two years with an average increase of 5% per year. Starting in FY 2010/11, the average labor costs increase by 4%.
- Fuel costs will rise faster than inflation at 5% per year over 2007/08 levels. The financial plan assumes the recent decline in fuel costs are temporary.
- The ESTA Board has directed the Executive Director to establish a \$500,000 operating reserve. The financial plan assumes that \$100,000 per year is set aside for the operating reserve.
- The financial plan assumes there is a 20% increase in administrative staffing to accommodate overall program growth between FY 2009/10 and FY 2010/11. Another 5% increase in staffing is provided in FY 2012/13 to support the significant increase in vehicle revenue hours.

#### Fare and Fee Revenues

- In rural areas such as ESTA, fares need to be 10% of operating costs. In FY 2007/08, including the January 1, 2008 fare increase, ESTA fares were \$329,851 or 11.7% farebox recovery ratio. In addition, \$20,969 in special fares were received. With the September 2008 fare increase, the FY 2008/09 budget includes \$471,367, a 43% increase in fare revenue. The financial plan assumes 100% of the FY 2008/09 fare revenues are received. For subsequent years, fare revenues are based on expected service plan improvements in productivity and average fares for different service types

based on September 2008 average fares. Another 10% fare increase is implemented in FY 20011/12.

- In all scenarios, special fares are assumed to decline to zero in order to meet FTA regulations.
- The financial plan includes fares from the two- year demonstration 395 express bus service. An average fare of \$26 is assumed, compared to the average fare in FY 2007/08 of \$22.62 for CREST. This is based on the average fare for September 2008, after the recent fare increase. The passengers per revenue vehicle hour for the 395 service increases from 1.7 to 2.5 passengers per hour based on improved convenience.
- The financial plan assumes successful negotiation between ESTA and the Forest Service for a partnership to manage and operate the Reds Meadow Shuttle. In 2007, the average fee per visitor was \$6.10 for 53,327 customers resulting in total 2007 fees collected of \$326,000. INF does not track the number of actual passenger trips. The SRTP is assuming two one-way trips equating to an average fare of \$3.05 for 2007. Based on a desired reduction in fee by the Forest service, the average fare was reduced to \$2.88 per passenger in 2009/10 with a 10% increase in 2011/12. The actual fee structure will need to be negotiated between ESTA and the forest service.

#### State and Local Revenue Descriptions and Assumptions

- The Local Transportation Fund is part of the funds received from Transportation Development Act (TDA) monies. TDA funds are derived from the state sales tax and are earmarked for transportation purposes. The law (SB 325, enacted in 1971) created a local transportation fund (LTF) in each county that is funded from ¼ cent of the base statewide six-cent retail sales tax that is collected in each county. In both Inyo and Mono counties, available LTF dollars are utilized for transit purposes. LTF funds received by ESTA in FY 2007/08 were \$1.37 million and represented 50% of ESTA's FY 2007/08 actual operating budget.
- Inyo County LTF funds have grown at a rate of less than 1% since FY 2005/06. In FY 2003/04 and FY 2004/05, LTF funds in Inyo County increased by 22%. The five-year average has been 5% since 2003/04. In Mono County, LTF funds allocated jumped by 12% between FY 04/05 and FY 05/06. However, LTF funds have actually declined by 3% in the past couple of fiscal years. While the average increase of both Inyo and Mono County LTF allocations have been closer to 5% over the past five fiscal years, the financial plan is utilizing just a 1% per year average increase over the next five years. This conservative assumption is based on known economic realities.

- A second state funding source is State Transit Assistance (STA). These funds are derived from the Public Transportation Account. STA funds can be utilized for both operating and capital purposes, but are subject to performance criteria for the utilization for operating purposes. The availability of STA funds has varied widely and has become a significant wild card in transit funding in the California budget deliberations. It is increasingly difficult to predict the STA funding levels that will be available to ESTA. ESTA received \$176,515 in STA funds in FY 2007/08.

The revised State Budget has drastically reduced State Transit Assistance funds by 59% in FY 2008/09. To be conservative, STA funds are kept at FY 2008/09 levels.

- 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, and two directly benefit ESTA for use in capital procurements. The Public Transportation Modernization, Improvement and Service Enhancement Account (PTMISEA) is currently being utilized this fiscal year to purchase replacement buses. The Transit System Safety, Security, and Disaster Response Account of Proposition 1B has small allocations for security measures such as video cameras on buses, and lighting at bus stops.

A letter was released on October 10, 2008 by the State Controller's office stating that Inyo County was eligible for \$102,539 and Mono County was eligible for \$62,062 for a total of \$164,541. This is a significant reduction over earlier estimates, and the FY 2008/09 budget was \$260,500. The financial plan keeps the FY 2009/10 at the actual FY 2008/09 level of \$164,541, and increases it thereafter at 5% per year, due to the low FY 2008/09 base.

- The financial plan assumes that the Town of Mammoth Lakes will continue its policy of allocating 1% of the TOT to ESTA for contract services. The revenue available is based on negotiations between ESTA and the Town of Mammoth Lakes for the number of service hours and the hourly rate. The hourly rate is assumed to increase by 5% per year for the first two years, followed by 4% for the remaining three years of the Short Range Transit Plan.

### Federal Funding Descriptions and Assumptions

- Congress will reauthorize federal spending for both operating and capital purposes in its six-year authorization. ESTA currently utilizes Federal Transit Administration (FTA) 5311 funds. Funding is apportioned by statutory formula that is based on the latest US Census figures of areas less than 50,000. ESTA received \$125, 899 in FY 2007/08. FTA 5311 can be utilized for operations, capital, and administration. The maximum Federal share for capital and

project administration is 80%, with the exception for the projects to meet ADA requirements, FTA funding may be funded at 90%. The maximum federal share for operating assistance is 50%. ESTA also received FTA 5311 (f) funds to support the CREST service. In FY 2007/08, ESTA received \$200,057 in FTA 5311 (f) funds.

Historically, there has been a jump in revenues available the first full year of federal reauthorization, sometimes more than 15% in the first year. Given recent events in Washington DC, a conservative 5% jump is assumed in FY 2010/11, and 3% annually thereafter. for the baseline and balanced scenario.

- ESTA has applied for four grants totaling \$205,000 from Caltrans to receive FTA 5316 (Job Access Reverse Commute)/5317(New Freedom) funding to support mobility management activities and to offset operating expenses of the Mammoth Express and Lone to Bishop commuter services. This is a competitive process and funding is not certain. The baseline and balanced funding scenario assumes a \$63,000 grant award inflated by 3% annually. The financial plan assumes full funding of the grant applications.
- At the October ESTA Board meeting, the Forest Service made a proposal that ESTA take responsibility for operating the Reds Meadow shuttle. Negotiations with the Forest Service and MMSA are planned for the next few months. The financial plan assumes that negotiations are successful. The financial plan assumes that buses are leased for the first two years of Reds Meadow operation, while the bus procurement process is simultaneously underway.

### Planning Grants

- The SRTP assumes that ESTA would take over the MMSA operations sometime during the five year planning horizon. This would be a complex transition for ESTA, and a separate study on the institutional and financial implications is recommended.

Caltrans has six different planning grant programs. The institutional and financial feasibility of adding the Forest Service and MMSA as partners would be through a Partnership Planning grant. This grant funds transportation studies of multi-regional significance. A second grant funding potential is the Transit Technical and Planning Assistance, which requires a lower match amount, but cannot exceed \$100,000.

It is possible that the Forest Service Alternative Transportation in Parks and Public Lands (ATPPL) planning feasibility grant that was just approved could be utilized to address some of these institutional partnership issues.

- The second planning grant required during the five-year planning horizon addresses the need for a permanent and larger ESTA operations and maintenance facility. The potential partnerships with the Forest Service and

MMSA need to consider these factors, and therefore a single larger grant application for considering both studies at the same time would be desirable. The combined study would be approximately \$180,000 and therefore would exceed the maximum of the Transit Technical Planning Assistance. Some of these issues could also be addressed in the feasibility study that the Forest Service has been recently granted utilizing ATPPL funds. The Forest Service has shown a willingness to collaborate with ESTA on these issues.

## Operating Costs

There are five main components of operating costs:

- The amount of service supplied
- Driver costs
- Administrative costs
- Fuel costs
- Cost model to estimate operating costs

### Service Supplied

The number of vehicle revenue hours and miles supplied are the primary variables that determine operating costs. Chapter 4 on 395 services, Chapter 5 on rural transit services, Chapter 6 on local Bishop services and Chapter 7 on local Mammoth services all provide recommendations on the amount of service supplied between FY 2008/09 and FY 2013/14.

Exhibit 8-1 provides a breakdown of the service supply by SRTP plan year, broken down by ESTA service type category. In FY 2007/08, the actual number of vehicle revenue hours was 51,546. In FY 2008/09, the number of budgeted vehicle revenue hours is 51,589. The SRTP improvements to all service types are expected to increase the number of vehicle revenue hours to 77,638. This does not include the MMSA services and it also does not include a prospective Whitney Portal shuttle service. Exhibit 8-1 provides a detailed itemization on how vehicle revenues hours are expected to change by plan year.

### Driver Costs

In FY 2007/08, driver wages and benefits were approximately \$1.3 million per year or approximately 47% of total expenditures. To reflect current labor contract agreements, the FY 2008/09 budgeted labor costs were utilized with 5% increases in FY 2009/10 and FY 2010/11. In subsequent years, the wage rate is assumed to increase by 4% annually or 1% higher than historical inflation levels.

Driver costs also escalate in proportion to the number of payroll hours of service provided. Based on the service plan presented in previous chapters, payroll hours are expected to increase from 55,221 in FY 2007/08 to 81,305 in FY 2013/14. Overall driver costs, including wages and benefits, are forecast to increase from \$1.3 million to \$2.4 million between FY 2007/08 and 2013/14, an 80% increase.

**Exhibit 8-1  
Projected Changes in Service Supply**

	FY 2007/08 Actual	FY 2008/09 Budget	FY 2009/10 Projected	FY 2010/11 Projected	FY 2011/12 Projected	2012/13 Projected	2013/14 Projected
<b>Revenue Vehicle Hours</b>							
Town of Mammoth Lakes Trolley/Liift	12,371	13,986	13,986	13,986	13,986	17,691	17,691
Town of Mammoth Lakes Dial-A-Ride	5,918	5,757	5,757	5,757	5,757	5,757	5,757
Bishop Fixed Route	5,614	5,528	5,528	5,528	5,528	5,528	5,528
Bishop Dial-A-Ride/Night Rider	11,757	11,536	8,277	8,277	8,277	8,277	8,277
CREST/395 Routes(1)	8,542	8,825	9,108	16,347	16,347	20,735	25,123
Rural Routes/DAR	6,400	4,650	4,407	5,354	5,354	5,354	5,354
Special/Reds Meadow Shuttle	944	467	4,800	4,800	4,800	4,800	4,800
<b>Total</b>	<b>51,546</b>	<b>50,750</b>	<b>51,862</b>	<b>60,049</b>	<b>60,049</b>	<b>68,142</b>	<b>72,530</b>
<b>SRTP Changes In Revenue Vehicle Hours</b>							
July 1, 2008 reductions		(983)					
CREST Lancaster-Reno Greyhound		283	283				
Reduce Bishop DAR by two buses			(3260)				
Eliminate Bridgeport to Carson City				(824)			
Tecopa Pahrum mileage reimbursement			(255)				
June Lake DAR/Feeder to 395 service				1,772			
USFS Reds Meadow Shuttle			4,800				
395 Two Year Demonstration Project				7,240			
Add Lift route to serve new TOML development						3,704	
Add 3rd daily trip to Lancaster and Reno: peak periods						4,388	
Add 4th daily trip to Lancaster and Reno: peak							4,388
USFS Whitney Portal Shuttle					TBD		
MMSA service delivery						TBD	

(1) For FY 2008/09 Includes CREST, Mammoth Express, Lone Pine Bisop and Bridgeport to Carson City.

(2) For FY 2008/09, includes Benton to Bishop, Lone Pine DAR, Walker DAR, and Tecopa



Administrative and Management Staff Costs

For consistency, the same administrative cost categories are utilized in SRTP as the accounting system that the Town of Mammoth Lakes utilizes. Under that system administrative costs are limited to administrative and management staff and benefit categories. The same wage rate increases for drivers are assumed administrative and management staff. To account for increased administrative and management staffing needs to provide a Rural Mobility Manager; plan and implement the Reds Meadow service, and implement and manage the two-year pilot 395 service, the SRTP assumes that administrative costs will increase by 10% in 2009/10 and by another 10% in 2010/11.

The SRTP forecasts an increase in administrative and management costs from \$528,000 in 2007/08 to \$1,022,000 in 2013/14. This represents a decrease in the percentage of administrative and management costs as part of the total operations budget from 24% to 20% over the five year planning horizon.

Fuel Costs

Fuel costs are a significant wild card in the Short Range Transit Plan. There have been unprecedented swings in fuel costs over the past year. As discussed above, the SRTP is assuming that gas prices, over a five year period, will rise faster than the rate of inflation, at 5% per year on average.

Fuel costs are also correlated to the number of miles being provided. The annual number of total miles travelled by ESTA services is forecast to increase from 817,000 annual miles in FY 2008/09 to 1,526,000 in FY 2013/2014.

Fuel costs are projected to increase from \$261,369 in FY 2007/08 to \$623,385 in FY 2013/14.

Cost Model for ESTA

In order to provide consistent estimates of costs for different services, a cost model was developed that allocates all costs based on vehicle revenue hours and vehicle revenue miles. Mileage based costs include fuel and maintenance costs. All other administrative and direct operating costs were allocated based on vehicle revenue hours. For FY 2007/08, the operating costs were:

(vehicle revenue hours X \$45.75) + (vehicle revenue miles X \$0.60)

Summary of Expenses By Plan Year

Exhibit 8-2 is a summary of operating and administrative expenses by plan year. The actual operating and administrative expenses in 2007/08 was \$2,868,636. In FY 2013/14, after the five-year service plan is fully implemented, operating and costs are expected to increase to \$4.9 million, a 73% increase.

**Exhibit 8-2  
Operating And Administrative Expenditures**

	<b>FY 2007/08</b>	<b>FY 2008/09</b>	<b>FY 2009/10</b>	<b>FY 2010/11</b>	<b>FY 2011/12</b>	<b>FY 2012/13</b>	<b>FY 2013/14</b>
	<b>Actual</b>	<b>Budgeted</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>
<b>Operations Expenditures</b>							
Operator Labor Costs	\$ 953,719	\$ 896,689	\$ 959,553	\$ 1,153,457	\$ 1,199,596	\$ 1,418,130	\$ 1,571,949
Fringe Benefits-Health, Leave, Workers Comp	261,839	270,913	289,905	348,489	362,429	428,453	474,926
PERS and PARS	129,702	156,522	138,795	166,843	173,517	205,127	227,376
Fuel	261,369	332,383	279,692	402,030	422,131	526,332	623,385
Facility Rental	27,278	36,800	37,904	39,041	40,212	41,419	42,661
Other materials and supplies	21,444	16,400	31,000	31,930	32,888	33,875	34,891
Bus maintenance, parts, bus wash	220,143	219,183	191,473	269,981	262,118	320,595	372,479
Contractual Services	208,479	82,483	180,000		85,000		-
Casualty and Liability: Insurance	58,794	60,000	78,380	80,732	91,149	100,472	106,879
Advertising, Printing	63,296	20,000	65,195	150,000	154,500	159,135	163,909
Accounting, Legal, Audit	44,400	66,900	105,000	105,000	108,150	111,395	114,736
Utilities: electric, gas, water, sewer	26,424	27,600	55,000	56,650	58,350	60,100	61,903
Rural Mileage reimbursement program			2,000	2,500	3,000	3,500	4,000
Contribution to Operations Reserve Fund			100,000	100,000	100,000	100,000	100,000
Other Operations Expenditures	63,426	38,800	39,964	41,163	42,398	43,670	44,980
<b>Total Operations Expenditures</b>	<b>\$ 2,340,313</b>	<b>\$ 2,224,672</b>	<b>\$ 2,553,863</b>	<b>\$ 2,947,816</b>	<b>\$ 3,135,437</b>	<b>\$ 3,552,202</b>	<b>\$ 3,944,075</b>
<b>Administration and Management Staff Expenditures</b>							
Admin./Mgmt Staff salary	\$ 345,562	\$ 454,269	\$ 524,681	\$ 600,235	\$ 618,242	\$ 668,628	\$ 688,687
Fringe Benefits-Health and Leave	124,981	\$ 149,343	\$ 172,491	\$ 197,330	\$ 203,250	\$ 209,347	\$ 215,628
PERS (retirement)	57,779	\$ 81,694	\$ 94,357	\$ 107,944	\$ 111,182	\$ 114,518	\$ 117,953
<b>Total Administrative/Management Staff</b>	<b>\$ 528,323</b>	<b>\$ 685,306</b>	<b>\$ 791,528</b>	<b>\$ 905,509</b>	<b>\$ 932,674</b>	<b>\$ 992,493</b>	<b>\$ 1,022,268</b>
<b>Total Operating &amp; Admin. Expenditures</b>	<b>\$ 2,868,636</b>	<b>\$ 2,909,978</b>	<b>\$ 3,345,391</b>	<b>\$ 3,853,325</b>	<b>\$ 4,068,111</b>	<b>\$ 4,544,695</b>	<b>\$ 4,966,344</b>

## Operating Revenues

There are three primary sources of operating revenues utilized by ESTA:

- Fares and Fees
- State/local funds
- Federal Funds

### Fares and Fees

In FY 2007/08, fare revenues were \$350,820. Systemwide, ESTA had a 12.2% farebox recovery ratio (fare revenues divided by operating and administrative expenses).

ESTA has recently raised fares twice in January 2008 and then again in September 2008. The FY 2008/09 ESTA budget anticipates a 43% increase in fare revenues to \$471,357.

In FY 2009/10, with the assumed implementation of the Reds Meadow shuttle by ESTA, fares and fees are expected to jump to \$763,417. The SRTP assumes that Reds Meadow fees cover 100% of the direct operating costs that ESTA provides. The overall farebox recovery by ESTA is expected to increase to 22.8% in FY 2009/10.

The existing CREST service in the 395 corridor generates significant fare revenue per passenger. In FY 2007/08, there were a total of 5,474 passengers that generated \$124,928 in fare revenues or \$22.62 per passenger. Based on September 2008 statistics, the average fare is expected to increase to \$26.00 per passenger. The implementation of the pilot 395 service is expected to dramatically increase fare revenues and the farebox recovery ratio when it is introduced in FY 2010/11. Overall fare revenues are forecast to increase to \$1.2 million and an overall farebox recovery ratio for all ESTA services of 31.3%.

In FY 2011/12, a 10% increase in fares is recommended for to keep up with assumed cost inflation.

With the full implementation of the service plan in 2013/14, fare revenues and fees are expected to account for \$2.1 million with an expected farebox recovery ratio of 42.7%.

Fare revenues and fees are the product of passenger boardings. Exhibit 8-3 shows the projected ridership and resulting fare revenue by type of service. It is important to note that in FY 2007/08, CREST had 3% of the ESTA ridership, but 37% of the ESTA fare revenue. After the full implementation of the service plan, assuming four daily round trips on 395 during peak winter and summer months, the CREST/395 ridership is forecast to grow to 49,298 in 2013/14, which represents 7% of the ESTA ridership.

**Exhibit 8-3  
Expected Passengers And Fare Revenue By Service**

	<b>FY 2007/08 Actual</b>	<b>FY 2008/09 Projected</b>	<b>FY 2009/10 Projected</b>	<b>FY 2010/11 Projected</b>	<b>FY 2011/12 Projected</b>	<b>2012/13 Projected</b>	<b>2013/14 Projected</b>
<b>Expected Passengers</b>							
Bishop Dial-a-Ride	41,320	34,963	31,451	33,107	34,762	36,417	36,417
Bishop Fixed Route	25,011	20,490	27,638	33,165	38,693	44,221	44,221
Lone Pine to Bishop	11,052	9,792	10,324	11,098	11,615	12,389	12,389
Lone Pine Dial-a-Ride	6,480	5,179	5,726	6,166	6,607	7,047	7,047
Benton to Bishop	1,531	1,304	1,350	1,450	1,550	1,650	1,650
Tecopa	188	186	-	-	-	-	-
Walker Dial-a-Ride	2,265	1,773	1,810	4,526	4,526	4,888	5,069
June Lake DAR			-	4,783	5,138	5,492	5,846
CREST	5,523	5,816	8,334	22,981	27,359	35,262	49,298
Mammoth Express	5,474	4,951	5,659	6,366	7,073	7,073	7,073
Mammoth Trolleys	158,810	209,209	217,578	225,946	234,314	242,683	242,683
Mammoth Lift Fixed Route	66,904	73,035	78,653	84,272	84,272	125,853	125,853
Mammoth Dial-a-Ride	26,664	22,031	23,028	24,180	25,331	26,483	26,483
Special/Reds Meadow	10,242	10,242	105,822	113,280	113,280	113,280	113,280
Services Discontinued 07/08	1,736						
<b>Total</b>	<b>363,200</b>	<b>398,971</b>	<b>517,374</b>	<b>571,321</b>	<b>594,519</b>	<b>662,738</b>	<b>677,310</b>
<b>Expected Fare Revenue</b>							
Bishop Dial-a-Ride	\$ 57,848	\$ 70,276	\$ 63,217	\$ 66,544	\$ 76,858	\$ 80,518	\$ 80,518
Bishop Fixed Route	\$ 16,674	\$ 21,310	\$ 28,743	\$ 34,492	\$ 44,265	\$ 50,588	\$ 50,588
Lone Pine to Bishop	\$ 34,033	\$ 41,614	\$ 43,878	\$ 47,168	\$ 54,299	\$ 57,918	\$ 57,918
Lone Pine Dial-a-Ride	\$ 8,345	\$ 11,134	\$ 12,310	\$ 13,257	\$ 15,625	\$ 16,667	\$ 16,667
Benton to Bishop	\$ 4,201	\$ 5,411	\$ 5,603	\$ 6,018	\$ 7,076	\$ 7,532	\$ 7,532
Tecopa	\$ 629	\$ 744	\$ -	\$ -	\$ -	\$ -	\$ -
Walker Dial-a-Ride	\$ 3,967	\$ 5,354	\$ 5,467	\$ 13,668	\$ 15,035	\$ 16,238	\$ 16,839
June Lake DAR	\$ -			\$ 10,284	\$ 12,151	\$ 12,989	\$ 13,827
CREST	\$ 124,928	\$ 151,215	\$ 216,681	\$ 597,517	\$ 782,463	\$ 1,008,502	\$ 1,409,933
Mammoth Express	\$ 27,846	\$ 30,352	\$ 34,688	\$ 39,024	\$ 47,696	\$ 47,696	\$ 47,696
Mammoth Trolleys	\$ 1,030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mammoth Lift Fixed Route	\$ 1,102	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mammoth Dial-a-Ride	\$ 37,453	\$ 46,484	\$ 48,590	\$ 51,020	\$ 58,794	\$ 61,466	\$ 61,466
Special/Reds Meadow	\$ 7,449	\$ 7,477	\$ 304,239	\$ 325,680	\$ 358,248	\$ 358,248	\$ 358,248
Services Discontinued 07/08	\$ 10,118						
<b>Total</b>	<b>\$ 335,623</b>	<b>\$ 391,372</b>	<b>\$ 763,417</b>	<b>\$ 1,204,673</b>	<b>\$ 1,472,509</b>	<b>\$ 1,718,363</b>	<b>\$ 2,121,234</b>

Due to high expected farebox recovery of CREST/395 services, fares generated by the 395 services represents 66% of total fare revenues.

Fares and user fees are expected to represent a growing proportion of the ESTA budget. In FY 2007/08, fares and fees represented 13% of the revenues received. In FY 2013/14, fare and fee revenues are projected to be almost 41% of all ESTA revenues.

### State/Local Funds

State funding sources are expected to be flat or actually decline over the next five years. The biggest source of funds currently utilized by ESTA is the Local Transportation Fund, collected from ¼ cents of the sales tax. LTF monies are expected to only increase marginally over the next five years, from \$1,375,000 to \$1,445,000. The other major state funding source, State Transit Assistance (STA) funds are projected to remain constant at \$149,000 for all five SRTP plan years.

The Town of Mammoth Lakes provided \$427,000 in transient occupancy tax (TOT) to support contract services operated by ESTA in Mammoth Lakes. In order to fund a new LIFT route to serve new development, the amount of TOT is expected to increase to \$647,000 in FY 2013/14. This increase would need to be negotiated between the Town of Mammoth Lakes and ESTA.

State and local funds are forecast to be a declining proportion of the overall ESTA operating budget between FY 2007/08 and FY 2013/14. In FY 2007/08, local and state funds represented 75% of the actual operating revenues received by ESTA. By 2013/14, state and local funding is forecast to be \$2,365,000, or approximately 46% of the ESTA operating revenues.

### Federal Funds

In FY 2007/08, ESTA received \$326,000 in Federal Transit Administration (FTA) funds. ESTA has applied for grant funding through the FTA 5316/5317 funding program to support rural mobility management efforts. Federal funding is expected to increase to \$703,000 in FY 2013/14.

Federal funding is a relatively small proportion of overall ESTA funding. In FY 2007/08, actual federal funding received represented 12% of the budget. By 2013/14, federal funding is expected to increase slightly to 13.5% of overall revenues.

### Summary of Operating Revenues

Exhibit 8-4 provides a detailed summary by plan year of revenue forecast for fare and fee revenues, local/state, and federal funding sources.

**Exhibit 8-4  
Operating Revenue Forecasts**

<b>Operating Revenue Source</b>	<b>FY 2007/08 Actual</b>	<b>FY 2008/09 Budget</b>	<b>FY 2009/10 Projected</b>	<b>FY 2010/11 Projected</b>	<b>FY 2011/12 Projected</b>	<b>FY 2012/13 Projected</b>	<b>FY 2013/14 Projected</b>
<b>1. Fares</b>							
Fares from farebox	329,851	471,367	459,178	878,993	1,114,261	1,360,115	1,762,986
Special Transit Fares/Charter	20,969	12,000					
USFS User Fees			304,239	325,680	358,248	358,248	358,248
<b>Total Fare Revenues</b>	<b>\$ 350,820</b>	<b>\$ 483,367</b>	<b>\$ 763,417</b>	<b>\$ 1,204,673</b>	<b>\$ 1,472,509</b>	<b>\$ 1,718,363</b>	<b>\$ 2,121,234</b>
<b>2. Local/State</b>							
Advertising Revenues	4,985	6,000	6,180	35,000	36,050	37,132	38,245
Facility Rental	3,600	5,320	5,480	5,644	5,813	5,988	6,167
Interest	5,479	8,000	8,240	8,487	8,742	9,004	9,274
Town of Mammoth Lake TOT	427,436	395,680	407,550	419,777	432,370	627,837	646,672
TDA: Local Transportation Fund (Article 8)	1,374,748	1,356,508	1,388,495	1,402,380	1,416,404	1,430,568	1,444,874
TDA: CTSA Admin (Article 4.5)	35,525	35,525	36,591	37,688	38,819	39,984	41,183
TDA: State Transit Assistance (STA)	176,515	149,255	149,255	149,255	149,255	149,255	149,255
Kern Regional Transit			24,000	25,200	26,460	27,783	29,172
LTC/Caltrans Planning Revenue		\$ 82,483	\$ 159,354		\$ 75,251		
Other Local Revenue	2,112						
<b>Local /State Total</b>	<b>\$ 2,030,400</b>	<b>\$ 2,038,771</b>	<b>\$ 2,185,145</b>	<b>\$ 2,083,432</b>	<b>\$ 2,189,164</b>	<b>\$ 2,327,550</b>	<b>\$ 2,364,843</b>
<b>3. Federal</b>							
FTA Section 5311 (f) (intercity rural)	200,000	\$ 194,000	260,000	286,650	295,250	304,107	313,230
FTA Section 5311 (rural)	125,899	130,840	134,765	145,749	150,121	154,625	159,263
FTA Section 5316 (JARC)/5317(New Freedom)		63,000	205,000	211,150	217,485	224,009	230,729
<b>Federal Total</b>	<b>\$ 325,899</b>	<b>\$ 387,840</b>	<b>\$ 599,765</b>	<b>\$ 643,549</b>	<b>\$ 662,855</b>	<b>\$ 682,741</b>	<b>\$ 703,223</b>
<b>TOTAL Operating Revenues</b>	<b>\$ 2,707,118</b>	<b>\$ 2,909,978</b>	<b>\$ 3,548,328</b>	<b>\$ 3,931,654</b>	<b>\$ 4,324,529</b>	<b>\$ 4,728,654</b>	<b>\$ 5,189,300</b>

## Capital Expenditures

There are four primary categories of capital expenditures for Eastern Sierra Transit Authority

- Fleet procurement
- Facility planning, design, and construction
- Bus stop Improvement
- Safety and security enhancements

### Fleet Procurement

ESTA utilizes a range of 9 to 24 vehicles, depending on the day of week. Fridays are the peak day and require 24 vehicles as shown in Exhibit 8-5 below.

**Exhibit 8-5  
Peak Day Vehicle Needs: Fridays**

<b>Service Type Operated Fridays</b>	<b>Vehicles</b>
Walker DAR	1
Bridgeport - Carson City	1
CREST North	1
CREST South	1
Mammoth - June	1
Mammoth Trolley	3
Mammoth Lift	2
Mammoth DAR	2
Mammoth to Bishop	1
Benton to Bishop	1
Bishop DAR	5
Bishop Fixed Rt	2
Local Lone Pine	1
Lone Pine to Bishop	2
<b>TOTAL</b>	<b>24</b>

Exhibit 8-6 summarizes the FY 2008/09 fleet for both ESTA and Town of Mammoth Lakes owned vehicles. When the arrival of seven new buses is complete this fiscal year, ESTA will own 47 buses. Nine buses are currently slated for salvage after the delivery is complete. There is currently a peak pullout of 17 ESTA owned vehicles, with a need for 11 spare buses. With the arrival of the heavy duty Blue Bird bus, there may be an opportunity to substitute some cutaway buses with medium duty buses on 395 services including the Lone Pine-Bishop and Mammoth Express services.

The Town of Mammoth Lakes own 12 buses with seven currently operating in ESTA peak pullout service.

**Exhibit 8-6  
Summary of FY 08/09 Fleet**

2008/09 Fleet After Bus Delivery	ESTA Owned					Total
	Peak Pullout	Spares	Staff	Reserve	Inactive/ Salvage	
Heavy Duty	1	0				1
Medium Duty	1	3				4
Cutaway	13	7		7	9	36
Minivan/Sedan	2	1	3			6
<b>Total</b>	<b>17</b>	<b>11</b>	<b>3</b>	<b>7</b>	<b>9</b>	<b>47</b>

2008/09 Fleet	TOML Owned		
	Peak Pullout	Spares	Total
Heavy Duty	0	0	0
Medium Duty	3	3	6
Cutaway	4	2	6
Minivan/Sedan	0	0	0
<b>Total</b>	<b>7</b>	<b>5</b>	<b>12</b>

The Short Range Transit Plan includes fleet procurements in three distinct categories:

- Fleet replacement: after the vehicle useful life is up.
- Fleet expansion purchases: ESTA owned vehicles based on service plan requirements.
- Fleet expansion leases: vehicles leased by ESTA, typically for expansion purposes on an interim basis until the procurement process can be completed.

Exhibit 8-7 provides a year-by-year schedule for vehicle procurements. The table includes the year that the grant application for funding is included. Typically, it is one to two years after the funding application when a vehicle is delivered. The table includes a column “Model Year Replacing”. This is only applicable to replacement vehicles, and the column describes the model year that the procurement will replace.

Over the five-year period, the fleet plan calls for:

- 20 bus replacement purchases
- 18 buses leased (for the Reds Meadow and 395 pilot demonstration)
- 21 expansion bus purchases (for Reds Meadow and for 395 service if pilot program is successful)



**Figure 8-7  
Fleet Plan**

<b>Grant,Order Year</b>	<b>Delivery &amp; Plan Year</b>	<b>Quantity</b>	<b>Bus Type</b>	<b>Type</b>	<b>Model Year Replacing</b>	<b>Old Seated Capacity</b>	<b>New Seated Capacity</b>
FY 2008/09	FY 2009/10	1	Minivan	Replacement	2002	7	7
FY 2008/09	FY 2010/11	10	Heavy Duty	Expansion	N.A.	N.A.	41
FY 2008/09	FY 2008/09	10	Heavy Duty	Lease	N.A.	N.A.	41
FY 2009/10	FY 2010/11	2	Cutaway	Replacement	2003	14-15	15
FY 2009/10	FY 2010/11	5	Tour Coach	Lease	N.A.	N.A.	45
FY 2010/11	FY 2011/12	3	Heavy Duty	Replacement	2002	23	27-31
FY 2010/11	FY 2011/12	8	Cutaway	Replacement	2003	13-17	15
FY 2010/11	FY 2011/12	2	Minivan	Replacement	2003	7	7
FY 2011/12	FY 2012/13	3	Tour Coach	Lease	N.A.	N.A.	45
FY 2011/12	FY 2012/13	1	Cutaway	Expansion	N.A.	N.A.	15
FY 2011/12	FY 2012/13	2	Cutaway	Replacement	2006	14	14
FY 2012/13	FY 2013/14	2	Cutaway	Replacement	2007	15	15
FY 2012/13	FY 2013/14	10	Tour Coach	Expansion	N.A.	N.A.	45

### Facility Design and Construction

The existing ESTA facility at the airport is inadequate for the system expansion required for the seamless transit system. Earlier in this chapter the need for a facility feasibility study was identified. ESTA can either apply for a Caltrans planning grant or work with the Forest Service's ATPPL grant to define facility needs as part of the partnership with the Forest Service and MMSA area.

The facility construction costs are not known at this time and are not included in the Short Range Transit Plan.

### Bus Stop Improvements/Signage

The branding recommendations in Volume II, Marketing Plan, will require a significant investment in bus stop signage and maps at key bus stop locations.

The SRTP also includes monies for future bus stop improvements include new bus stop shelters, benches, and Americans with Disabilities Act (ADA) access improvements. A total of \$304,000 is included over the five-year plan period.

### Safety and Security Enhancements

At both the federal and state levels, there has been a strong emphasis for safety and security enhancements. These enhancements include security cameras aboard buses, improvement in lighting, disaster preparedness, and facility security. Proposition 1B has a component for safety and security enhancements. A total of \$71,000 is included in the SRTP for this purpose.

### Summary of Capital Expenditures and Revenues

Exhibit 8-8 is a summary of capital expenditures and revenue sources over the five year planning horizon. ESTA is expected to have a capital improvement program of \$14.2 million over the five year planning horizon.

## **Capital Revenues**

There are four main capital funding sources that the SRTP identifies for capital revenues:

- Proposition 1B monies
- State Transportation Improvement Program (STIP)
- FTA Section 5320 (ATPPL)
- FTA Section 5311 (f)

**Exhibit 8-8  
Capital Expenditures and Revenues**

**Capital Expenditures: FY 2008/09 to FY 2013/14**

	<b>FY 2008/09 Budget</b>	<b>FY 2009/10 Projected</b>	<b>FY 2010/11 Projected</b>	<b>FY 2011/12 Projected</b>	<b>FY 2012/13 Projected</b>	<b>FY 2013/14 Projected</b>	<b>Total FY 09-14</b>
Vehicle Replacement Purchase	740,367	42,000	144,200	1,846,460	235,200	\$ 161,000	\$ 3,169,227
Vehicle Expansion Purchase				3,500,000		6,325,000	\$ 9,825,000
Vehicle Leasing		40,000	220,000	180,000	216,000		\$ 656,000
RFP and Design Fees Facility				188,000			\$ 188,000
Facility Construction					To be determined		\$ -
Bus Stop Improvements/Signage		103,767	120,000	80,000			\$ 303,767
Safety and Security Enhancements	11,020	11,351	11,691	12,042	12,403	12,775	\$ 71,282
Misc. Capital Expenses							\$ -
<b>Total Capital Expenditures</b>	<b>\$ 751,387</b>	<b>\$ 197,118</b>	<b>\$ 495,891</b>	<b>\$ 5,806,502</b>	<b>\$ 463,603</b>	<b>\$ 6,498,775</b>	<b>\$ 14,213,276</b>

**Capital Revenues: FY 2008/09 to FY 2013/14**

	<b>FY 2008/09 Budget</b>	<b>FY 2009/10 Projected</b>	<b>FY 2010/11 Projected</b>	<b>FY 2011/12 Projected</b>	<b>FY 2012/13 Projected</b>	<b>FY 2013/14 Projected</b>	<b>Total FY 09-14</b>
<b>Local and State Generated Revenues</b>							
TDA: Local Transportation Fund (LTF)	\$ 73,259						\$ 73,259
Public Transportation Account (via STIP)	\$ 135,686		\$ 70,000	\$ 2,347,000			\$ 2,552,686
Proposition 1B (PTMISEA)	\$ 164,541	\$ 185,767	\$ 195,056	\$ 204,809	\$ 215,049	\$ 225,801	\$ 1,191,023
Proposition 1B (Safety and Security)	\$ 11,020	\$ 11,351	\$ 11,691	\$ 12,042	\$ 12,403	\$ 12,775	\$ 71,282
<b>Federal Funding</b>							
FTA Section 5311 (Rural Transit Funds)							\$ -
FTA Section 5311 c (Rural Tribal Funds)	\$ 55,000		\$ 58,300				\$ 113,300
FTA Section 5311 f (Rural intercity funds)	\$ 225,852			\$ 337,742		\$ 559,952	\$ 1,123,546
FTA Section 5320 ( ATPPL with Forest Service)			\$ 220,000	\$ 3,680,000	\$ 216,000	\$ 4,965,048	\$ 9,081,048
<b>Total</b>	<b>\$ 665,358</b>	<b>\$ 197,118</b>	<b>\$ 555,047</b>	<b>\$ 6,581,592</b>	<b>\$ 443,452</b>	<b>\$ 5,763,577</b>	<b>\$ 14,206,144</b>
From Capital Reserve					\$ 20,151	\$ 800,000	
Capital Reserve Balance	\$ 172,000	\$ 150,774	\$ 209,929	\$ 985,020	\$ 964,869	\$ 229,670	

### Proposition 1B monies

There are 16 different programs under Proposition 1B, and two directly benefit ESTA for use in capital procurements. The Public Transportation Modernization, Improvement and Service Enhancement Account (PTMISEA) is currently being utilized this fiscal year to purchase replacement buses. Over the five year SRTP, ESTA is expected to receive \$1.2 million in capital funds.

The Transit System Safety, Security, and Disaster Response Account of Proposition 1B has small allocations for security measures such as video cameras on buses, and lighting at bus stops. ESTA is expected to receive about \$113,000 in Proposition 1B monies.

### State Transportation Improvement Program (STIP)

Every two years, the California Transportation Commission programs funds for a variety of projects that relieve congestion on state highways and local streets, including transit construction projects. Seventy-five percent of STIP funds are distributed to the counties. The remaining 25 percent is programmed for intercity highway and rail improvements. The Inyo and Mono Local Transportation Commission include bus replacements in their STIP applications. Over five years, there are \$2,553,000 in STIP monies programmed. Inyo and Mono LTCs are the only rural counties that utilize STIP funding for bus replacement

### FTA Section 5320 (ATPPL)

Administered by the Federal Transit Administration in partnership with the Department of the Interior and the Forest Service, the Alternative Transportation in Parks and Public Lands (ATPPL) program funds capital and planning expenses for alternative transportation systems for access to public lands. The Short Range Transit Plan assumes that ATPPL funding will continue when Congress reauthorizes SAFETEA-LU. An application for ten buses would be made for 2009/10 funding for ten buses for the Reds Meadow shuttle in collaboration with the Inyo National Forest. If the 395 pilot demonstration is successful, ATPPL funds would also be utilized to partially fund ten buses for the 395 service which would provide access to public lands from Reno to Lancaster. FTA Section 5311(f) monies would also be utilized. The SRTP has programmed \$8,881,000 in ATPPL funds over the next five years.

### FTA Section 5311 (f)

ESTA recently received a 5311(f) federal grant for its new Bluebird bus. ESTA will continue to access funding for buses on the CREST and other 395 services as appropriate. \$1.1 million in FTA 5311(f) are programmed for the five years of the SRTP.

## **Summary of Expenditures and Revenue**

Exhibit 8-9 is a summary of the operating and capital expenditures and revenues necessary to achieve the seamless public transportation system in the ESTA service area by FY 2013/14. Overall, ESTA is expected to generate approximately \$39.5 million in revenues over five years. Expenditures will be slightly less at \$37.9 million in order to create both operating and capital reserves.

**Figure 8-9  
Summary of Expenses and Revenues**

	FY 2008/09 Budgeted	FY 2009/10 Projected	FY 2010/11 Projected	FY 2011/12 Projected	FY 2012/13 Projected	FY 2013/14 Projected	5-year Total
<b>EXPENSES</b>							
<b>Operations/ Admin. Expenditures</b>							
Operator Labor expenses and benefits	\$ 1,288,230	\$ 1,386,987	\$ 1,582,158	\$ 1,714,927	\$ 1,954,075	\$ 2,205,529	\$ 10,131,906
Administrative labor and benefits	\$ 528,323	\$ 685,306	\$ 791,528	\$ 905,509	\$ 932,674	\$ 992,493	\$ 4,835,833
Fuel and Lubricants	332,383	279,692	402,030	422,131	526,332	623,385	\$ 2,585,953
Casualty and Liability Insurance	60,000	78,380	80,732	91,149	100,472	106,879	\$ 517,613
Maintenance	220,143	219,183	191,473	269,981	262,118	320,595	\$ 1,483,494
Other Expenditures	480,900	695,842	805,403	664,413	769,024	717,461	\$ 4,133,044
<b>Total Operating Expenditures</b>	<b>2,909,978</b>	<b>3,345,391</b>	<b>3,853,325</b>	<b>4,068,111</b>	<b>4,544,695</b>	<b>4,966,344</b>	<b>\$ 23,687,843</b>
<b>Capital Expenditures</b>							
Vehicle Replacement Purchase	740,367	42,000	144,200	1,846,460	235,200	161,000	\$ 3,169,227
Vehicle Expansion Purchase	-	-	-	3,500,000	-	6,325,000	\$ 9,825,000
Vehicle Leasing	-	40,000	220,000	180,000	216,000	-	\$ 656,000
RFP and Design Fees Facility	-	-	-	188,000	-	-	\$ 188,000
Facility Construction	-	-	-	-	To be determined		\$ -
Bus Stop Improvements/Signage	-	103,767	120,000	80,000	-	-	\$ 303,767
Safety and Security Enhancements	11,020	11,351	11,691	12,042	12,403	12,775	\$ 71,282
<b>Total Capital Expenditures</b>	<b>751,387</b>	<b>197,118</b>	<b>495,891</b>	<b>5,806,502</b>	<b>463,603</b>	<b>6,498,775</b>	<b>\$ 14,213,276</b>
<b>Total Expenditures</b>	<b>\$ 3,661,365</b>	<b>\$ 3,542,509</b>	<b>\$ 4,349,216</b>	<b>\$ 9,874,612</b>	<b>\$ 5,008,298</b>	<b>\$ 11,465,119</b>	<b>\$ 37,901,120</b>
<b>REVENUES</b>							
<b>Operations Revenues</b>							
Fare Revenues	\$ 471,367	\$ 459,178	\$ 878,993	\$ 1,114,261	\$ 1,360,115	\$ 1,762,986	\$ 6,046,900
USFS Fees	-	304,239	325,680	358,248	358,248	358,248	\$ 1,704,663
Town of Mammoth Lakes TOT	395,680	407,550	419,777	432,370	627,837	646,672	\$ 2,929,886
Local Transportation Fund	1,356,508	1,388,495	1,402,380	1,416,404	1,430,568	1,444,874	\$ 8,439,230
State Transit Assistance	149,255	149,255	149,255	149,255	149,255	149,255	\$ 895,531
FTA 5311	324,840	394,765	432,399	445,371	458,732	472,494	\$ 2,528,600
Other Operating Revenues	212,328	444,844	323,170	408,619	343,899	354,772	\$ 2,087,632
<b>Total Operating Revenues</b>	<b>2,909,978</b>	<b>3,548,328</b>	<b>3,931,654</b>	<b>4,324,529</b>	<b>4,728,654</b>	<b>5,189,300</b>	<b>\$ 24,632,443</b>
<b>Capital Revenues</b>							
Public Transportation Account (via STIP)	135,686	-	70,000	2,347,000	-	-	\$ 2,552,686
Proposition 1B (PTMISEA)	164,541	185,767	195,056	204,809	215,049	225,801	\$ 1,191,023
Proposition 1B (Safety and Security)	11,020	11,351	11,691	12,042	12,403	12,775	\$ 71,282
FTA Section 5311 c (Rural Tribal Funds)	55,000	-	58,300	-	-	-	\$ 113,300
FTA Section 5311 f (Rural intercity funds)	225,852	-	-	337,742	-	559,952	\$ 1,123,546
FTA Section 5320 ( ATPPL with Forest Service)	-	-	220,000	3,680,000	216,000	4,965,048	\$ 9,081,048
From Capital Reserve	-	-	-	-	20,151	800,000	\$ 820,151
<b>Total Capital Revenues</b>	<b>592,099</b>	<b>197,118</b>	<b>555,047</b>	<b>6,581,592</b>	<b>463,603</b>	<b>6,563,577</b>	<b>\$ 14,953,036</b>
<b>Total Revenues</b>	<b>\$ 3,502,077</b>	<b>\$ 3,745,446</b>	<b>\$ 4,486,701</b>	<b>\$ 10,906,121</b>	<b>\$ 5,192,257</b>	<b>\$ 11,752,877</b>	<b>\$ 39,585,479</b>
From Capital Reserve	-	-	-	-	20,151	800,000	\$ 820,151
Operating Reserves		\$ 100,000	\$ 200,000	\$ 300,000	\$ 400,000	\$ 500,000	
Capital Reserves	\$ 172,000	\$ 150,774	\$ 209,929	\$ 985,020	\$ 964,869	\$ 229,670	

## Appendix A

### Roaring Forks Transit Agency

#### Overview

The Roaring Fork Transit Agency (RFTA) has been in operation since 1983, and functions as a Rural Transportation Authority. RFTA includes the communities of Aspen, Snowmass Village, Pitkin County, Basalt, a portion of Eagle County, Carbondale, Glenwood Springs and our newest member, New Castle. RFTA provides commuter bus service from Aspen to Glenwood Springs (Roaring Fork Valley), Glenwood to Rifle (Hogback), intra-city service in Aspen and Glenwood Springs, ski shuttle service to the four Aspen Skiing Company ski areas, Maroon Bells Guided Bus Tours, and a variety of other seasonal services.<sup>1</sup>

RFTA is the closest example of a seamless transportation system that serves several towns, two counties, multiple ski areas, and the US Forest Service. RFTA has forged many of the partnerships with major ski destinations and the Forest Service that ESTA aspires to. While there are significant differences in the operating environment, the institutional relationships and seamless nature of the system development are noteworthy for ESTA management and Board.

#### Historical Development

Severe traffic congestion on the roads leading to Aspen and Glenwood Springs was the driving force for developing a seamless transportation system. Providing transportation choices was a critical part of the vision in meeting the mobility needs of the region. The region's multi-modal approach started with the formation of the Roaring Fork Transit Agency in 1983. Since then, transit ridership has reached almost four million annually, and the transit system has become the state's second largest. In 1997, with assistance from the Colorado Department of Transportation and Great Outdoors Colorado, Valley jurisdictions, joining together as the Roaring Fork Railroad Holding Authority (RFRHA), purchased the Denver and Rio Grande Western Rail line between Glenwood Springs and Aspen to preserve a valley-wide corridor for transit and trail development. In November 2000, Valley residents in seven jurisdictions approved the formation and funding of the Roaring Fork Transportation Authority (RFTA), the state's first Rural Transportation Authority, based on the Colorado Rural Transportation Authority Act passed by the Colorado legislature in 1997. One result of the November 2000 election was the merger of the pre-existing RFRHA into RFTA, which assumed all of RFRHA's responsibilities.

While severe congestion on access roads to major destinations represents a difference in operating environments between the RFTA and ESTA service

---

<sup>1</sup> RFTA website

areas, the lack of affordable housing in the major destinations is shared. In 2000, the median value of homes in Aspen was \$1 million, while over 40 miles away in Glenwood Springs, the median value was \$235,000.<sup>2</sup>

Today RFTA serves nine municipalities and three counties in a 70-mile corridor along Colorado Highway 82 and Interstate 70. RFTA provides fixed route commuter service between the towns, demand-response service, and free local routes within two communities. It also provides shuttles to skiing, with a contract with the Aspen Skiing Company, and to hiking areas including Maroon Bells under contract to the US Forest Service. RFTA is also constructing a regional recreational trail, while preserving the Rio Grande Corridor for a future fixed-guideway system.

RFTA year-round workforce was about 180 people in 2007, and increased to about 225 in the winter. RFTA has a fleet of 82 vehicles that run a 10 percent biodiesel blend. Climate change is a priority for the region, with Glenwood Springs and Aspen signing the U.S. Mayors Climate Protection Agreement. They carried 4.1 million passengers in 2006.

## Partnerships

RFTA has achieved several of the key partnerships that ESTA sees as part of its long range vision:

- RFTA partners with Aspen Skiing Company, which employs approximately 3,400 people in the ski season, to provide free shuttles to ski areas and lodges. In 2007, RFTA provided approximately 19,000 hours of service to Snowmass, Buttermilk and Highlands.<sup>3</sup>
- RFTA partners with the National Forest to provide service to the Maroon Bells area from June 16 through September 5 and then runs on Friday, Saturday and Sunday through September. Similar to the Reds Meadow Shuttle, the road is closed to cars during the daytime.
- Similar to the current arrangement between ESTA and the Town of Mammoth Lakes, RFTA has a service contract with the town of Aspen to provide local services.

## Dial-A-Ride Policies

The dial-a-ride policy for RFTA is much more restrictive than the services provided by ESTA. For RFTA, seniors and disabled individuals unable to use regular bus service may be eligible for ADA Paratransit service within the city

---

<sup>2</sup> National Association of Development Organizations Research Foundation, April 2007

<sup>3</sup> Source: Spreadsheet provided by RFTA staff: "RFTA Cost Allocation and Long Term Projections (Final).xls."



limits of Aspen and Glenwood Springs. This program is provided under the guidelines of the Americans with Disabilities Act. This program is open to those who have disabilities in these categories:

- Persons unable to board, ride or exit a wheelchair lift equipped bus
- Persons who do not have access to an RFTA bus with a wheelchair lift
- Persons whose disability does not allow them to travel to and from the stop

There is also a general public dial-a-ride in the southern portion of Aspen where it would not be cost-effective to operate fixed route service.

Overall, due to the strategic natures of dial-a-ride and ADA Paratransit policies, the more expensive dial-a-ride services are only 3% of overall ridership.

### Funding

The following is a breakdown of the projected budget revenues for 2009: \$10,958,705 Sales and Use Tax

\$ 499,536	Vehicle Registration and Corridor License Fees
\$ 7,939,816	Total Service Contracts
\$ 1,359,660	Federal Grants
\$ 4,243,361	Farebox revenues
\$ 198,247	Housing Rental Revenue
\$ 355,918	Misc. Revenues
<b>\$ 25,555,244</b>	<b>Total All revenues</b>

The following is an overview of the projected annual 2009 budg by function.

Expenditures by Function	Projected Budget 2009
Human Resources	14,415,582
Operating Expenditures	6,587,671
Misc. Capital	79,526
Facilities Plan	1,452,618
Information Technology	31,096
Rolling Stock	-
Trail Capital	855,165
Debt Service	1,618,775
Reserves	444,777
<b>Total</b>	<b>25,485,210</b>

Source: Funding Spreadsheet provided by RFTA

RFTA provides annual reports of cost allocation by service type by jurisdiction. The costs include both operating and capital costs. A ratio of revenues to total costs by type of service is provided. A sample spreadsheet has been provided to ESTA for consideration in future reporting.

## **Future Vision<sup>4</sup>**

The RFTA Board of Directors, with the input from Roaring Fork Valley communities, agreed in 2003 to begin to implement Bus Rapid Transit (BRT) to meet the increasing demand for convenient and reliable transit service in the face of increasing growth and traffic congestion in the region. The Corridor Investment Study, completed after five years of study effort, found that BRT along the SH 82 corridor, from Glenwood Springs to Aspen, could meet the region's future transit needs as effectively as a rail system, at a substantially lower cost to implement over the next twenty years. While installing rail along the RFTA-owned Rio Grande Railroad right of way is the longer-term vision, the need for the substantially greater amount of funds makes rail construction a longer-term reality. Implementing BRT will not preclude future investment in rail.

BRT, in a variety of forms, is used in many cities around the world. It is a collection of elements that, when blended properly, will provide more effective transit service and comfortable facilities, while meeting increased ridership demands. The concept behind BRT is to create a bus system that acts more like a rail system but at a lower cost— more timely, convenient and comfortable for passengers. BRT will be able to provide shorter and more reliable travel times for passengers. The BRT project is a system of guideways, vehicles, stations, service, route structure, and intelligent transportation elements that work together to make a bus system function more like a rail system.

---

<sup>4</sup> RFTA, Vision 2017, verbatim.