

Del Norte County Regional and Intercity Bus Service Development Plan

Final Report



Prepared for

Del Norte Local Transportation Commission

Prepared by

LSC Transportation Consultants, Inc.

DEL NORTE COUNTY
REGIONAL AND INTERCITY BUS SERVICE
DEVELOPMENT PLAN

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Chapter 1

Introduction and Study Area Characteristics

INTRODUCTION

Public transportation is a vital service to many Del Norte County residents, and to the region as a whole. Transit services provide mobility to the County's residents, including access to important medical, recreational, social, and economic services and opportunities. In addition to being important to the quality of life of Del Norte County residents, public transit services assist in the functioning of educational programs, public and private employers, and social service programs throughout the County.

Regional passenger transportation in particular is a key issue to the residents of Del Norte County. The challenging geography of the area makes mobility difficult both within the County as well as in making connections with the nation's intercity transportation network. With the elimination of Greyhound service, there are few intercity public transportation options in or out of the County:

- ♦ Expensive air service to Arcata, Sacramento, and San Francisco.
- ♦ Four transit round-trips on Monday, Wednesday, and Friday between Brookings, Oregon and the Smith River Rancheria via Curry Public Transit.
- ♦ The Redwood Coast Transit Authority (RCTA) also provides service south to Arcata. At present, RCTA operates two regional/intercity routes: Route 10 connecting Crescent City with Klamath (two round-trips per day), and Route 20 connecting Smith River to Crescent City to Arcata (5 round-trips per day between Crescent City and Smith River, and two round-trips per day between Crescent City and Arcata). While these routes serve some outlying communities, other areas, such as along the US Highway (US) 199 corridor, have no existing public transportation service.

This study is being conducted to analyze the existing intercity bus services, evaluate alternatives to provide new or enhanced intercity bus service, and recommend a plan for implementing the selected alternatives. This *Technical Memorandum* is an interim document presenting a review of existing services, primarily focusing on RCTA's intercity routes; reviews and recommends transit goals and objectives for intercity service; analyzes intercity transit demand; and evaluates service alternatives. Upon the review and selection of alternatives, a plan will be developed for intercity bus service. The chapters presented in this *Technical Memorandum* and the subsequent plan will be combined into the Regional and Intercity Bus Development Plan.

STUDY ISSUES

This study takes direction from specifically identified study issues surrounding regional and intercity bus service. These issues were identified by RCTA staff and local representatives in Del Norte County and Crescent City, and include the following:

- ♦ **Optimal Destinations** – Which regional and intercity destinations are most important to reach? Which will provide the best connections to other transportation networks? Which

destinations will provide the best medical, social service, and educational opportunities for Del Norte residents?

- ♦ **Funding** – What public and private sources of revenue are available? Which services will qualify for FTA 5311(f) grant funding, and how much will be available? How much subsidy will be required, and where will it come from? What cost-sharing opportunities or expectations are involved?
- ♦ **Fares** – What are the appropriate fares for intercity service? What discounts would be appropriate? Can a “universal” fare be developed for using multiple transit systems? Can a ticket-exchange program be used (i.e. with Greyhound)?
- ♦ **Interstate Travel** – Are there any issues with crossing state lines (California/Oregon)?
- ♦ **System Evaluation/Performance Standards** – What performance standards should be established for intercity bus service? How can the service quality best be monitored?
- ♦ **Demand** – What is the demand for regional and intercity travel, by market target?
- ♦ **Capital** – What is the appropriate vehicle plan for intercity and regional services? What passenger amenities are necessary? What other capital facilities and staff (if any) will be required to provide the transit services called for in the study documents?
- ♦ **Marketing and Outreach** – What is the best marketing program to promote regional and intercity bus service among both potential riders and the general public, while making effective use of a limited marketing budget? How can the internet be used in the marketing strategy?
- ♦ **Span of Service** – What are the best hours and days to operate service?

These issues should be considered as part of a comprehensive look at the role of regional and intercity bus service in Del Norte County and the service plan that best serves this role. This study will afford the leadership of the area an opportunity to take a long-range look at the intercity bus services and identify the optimal manner in which intercity bus service can meet both the present and the future needs of the area.

REVIEW OF PREVIOUS STUDIES AND PROJECTS

There are a number of recent studies and projects that have preceded this study which address transit issues and planning. These studies and their relevance to the current plan are described below.

Performance Audit of the Redwood Coast Transit Authority, FY 2003-2004 to 2005-2006, JKaplan and Associates, May 2007.

A mandated Triennial Performance Review was completed in June of 2007. This was the first ever audit for the RCTA. The auditor found that, in general, RCTA operates effective and efficient transit services to riders in Del Norte County through its service known as the Redwood Coast Transit (RCT). Farebox ratios are above that required by state Transportation

Development Act (TDA) law, and costs, on a per hour basis, have been very reasonable over the audit period. RCT systemwide ridership has continued to show increases for each year of operation. During the period covered in the audit, between FY 2003-2004 and FY 2005-2006, systemwide annual ridership grew from about 47,000 to almost 63,000, an increase of about 34 percent. Recommendations made by the auditor are summarized below:

- ♦ Ensure that the fiscal auditor reports accurate fiscal information for fares and operating costs, and that the farebox ratio is calculated correctly. Also, ensure that the audit include prior year's information. Ensure that the audit reports are completed and available for review in a timelier manner. There were inconsistencies in the reporting of financial data. It will be important for both the Del Norte LTC and the RCTA to thoroughly review the findings presented in each annual fiscal audit report to ensure that the key values are accurately representing the transit operation and that the farebox ratio is also calculated correctly, including any exemptions that may be applicable.
- ♦ Consider expanding the Redwood Coast Transit Annual Report to include a brief write up that summarizes accomplishments in the prior year, planned future activities, and presents how the system performed relative to the adopted standards. Include the five TDA performance indicators.
- ♦ Correctly report Dial-A-Ride (DAR) program service hours.
- ♦ Develop an update to the 2002 Transit Development Plan to more accurately reflect the current service operation. Include performance measures and standards. Consider undertaking the plan's analyses over a two year period to allow the recent changes implemented in April 2007 to settle in and achieve some stability before the new services are evaluated.

Because the system has evolved significantly since the last plan was written, it is important to develop an updated version that reflects current services being offered and includes performance measures and standards that can be used to track system performance over time.

- ♦ Consider development of an abbreviated interim plan document between the periods when a full scale Transit Development Plan is not scheduled for updating. The "miniplan" - which in reality would be an Interim Financial and Performance Report - should focus specifically on performance standards and current system performance; modifications to existing standards should be made as needed. Future year projections of costs, revenues, and farebox ratios should be updated. The Annual Report, referenced above, may be able to address this recommendation.
- ♦ Clarify standards and definitions for no shows, accidents, and roadcalls. Each measure should be tracked and reported as part of the regular monthly reporting and should include comparisons to adopted standards.
- ♦ Working with the Del Norte LTC, consider establishing an annual funded work element that will assist the Transit Authority in improving monitoring of the day to day system operation.

The RCTA has been implementing these recommendations.

Regional Transportation Plan

The Regional Transportation Plan (RTP) defines the mobility conditions, needs and actions necessary for a coordinated and balanced regional transportation system. It is based on the existing system and describes the development needs for all transportation modes in Del Norte County. Its preparation and implementation is done at the direction of the Del Norte LTC, which uses the document to direct future Del Norte County transportation improvements. This document provided information of existing public transportation services, future transit needs, public transportation policies, short and long-term public transportation actions, and the funding environment.

Draft Coordinated Public Transit - Human Services Transportation Plan, FLT Consulting and Caltrans, in progress.

As a requirement to receive certain FTA funds, transit agencies must complete a Human Services Transportation Coordination Plan. The Del Norte County LTC hired FLT Consulting to conduct their coordination plan, which is currently in progress. The *Draft Coordinated Public Transit – Human Services Transportation Plan Existing Conditions* report was published in April, 2008.

Final Report of the California Statewide Rural Intercity Bus Study, KFH Group, Inc. in association with Judith Norman Transportation Consultant and Landsman Transportation Planning, LLC, March 2008.

This statewide study was conducted on behalf of the State of California Department of Transportation, Division of Mass Transportation (Caltrans). This study documents the analysis, policy recommendations and proposed program developed for the Caltrans Division of Mass Transportation. This project focuses on the development of policies and projects as part of a plan to support a network of transportation services to link rural areas to cities and towns throughout the State to each other and to national intercity transportation networks. The national intercity transportation networks are supported through the Federal Transit Administration (FTA) Section 5311(f) program.

The study includes an inventory and assessment of existing intercity bus service throughout California, an evaluation of demand, an analysis of funding, a description of outreach, and a discussion of opportunities and options for rural intercity bus service. The study includes the following specific references to Del Norte County and rural Northern California:

- ♦ Chapter 2, which is an inventory of services, and Appendix A identifies RCTA as an intercity bus provider with services from Smith River (Del Norte County) to Arcata (Humboldt County). The appendix shows connections provided between RCTA and Amtrak Thruway, Greyhound and Curry County Transit (Oregon).
- ♦ Chapter 2 also shows service provided by the Yurok Tribal Government between Willow Creek and the Arcata, noting that this service connects with Humboldt Transit Authority.
- ♦ Chapter 3, which is an assessment of intercity services, states that the RCTA service from Smith River to Arcata provides a workable daily connection from Del Norte County to both Greyhound and Amtrak services headed southbound toward San Francisco. However, the study notes that connecting from the south to RCTA service poses more problems, potentially requiring an overnight stay in Arcata.

- ♦ Chapter 4, which discusses funding, indicates that no cost estimates were developed from the Eureka/Arcata to Coos Bay, Oregon corridor because regional transit already exists. The study cites the Curry County Public Transit service between Coos Bay and Crescent City (this service actually goes as far as Smith River, not Crescent City), and the RCTA service between Eureka/Arcata to Crescent City (note, however, the previous chapter identified problems with this service).
- ♦ Chapter 4 also identifies specific components that should be incorporated into defining “meaningful connections.” These include:
 - **Interlining** – making this a requirement will generate a direct route between scheduled services and allow users to purchase one ticket for the trip, and provide user information about the entire trip.
 - **Shared Facility** – meaning that services offering connections should be housed in the same facility in order to produce the most convenient transfer. This allows for shared marketing as well.
 - **Scheduling** – establishing an order of magnitude that incorporates some sense of convenience between the connecting services. In essence, if a user must wait more than three hours for connecting services, does this suffice as a meaningful connection?
- ♦ Chapter 5 presents unmet needs, largely garnered from public outreach. The findings for the North Coast are that there is a need for service along the US 299 corridor (Humboldt County to Redding), and from Del Norte County to Oregon. New service plans based on surveys suggest creating an interline agreement with Amtrak to Arcata, and that funding will be applied for to provide a connection from Del Norte County into Oregon at Grants Pass, where Greyhound and Amtrak services can be accessed.
- ♦ Greyhound Lines, International (GLI) participated in the study through a conference call in order to identify issues, needs and potential service areas for intercity bus. Regarding service from Eureka/Arcata to the Oregon border, GLI stated they were aware of a partnership between the local transit operator in Oregon and the Oregon DOT in providing an intercity route connecting South Coos Bay (Oregon) and Arcata/Eureka (California). They also stated that there was bus service between Arcata and Redding (along Highway 299), but when the 5311(f) subsidy for the three year program ran out, the service was discontinued. Ridership on this route was very low, and GLI estimated demand was low.
- ♦ Chapter 6 discusses broad issues and policy concerns. It also lists program opportunities such as Google Transit, the FTA Pilot Program, and a Greyhound Rural Feeder Program.
- ♦ Finally, Chapter 7 discusses the integration of program recommendations into departmental, local, and regional planning practices. These are recommended on a statewide basis and may be referred to in the service evaluation of this *Del Norte County Regional and Intercity Bus Development Plan*, if appropriate.

Del Norte County General Plan, Mintier and Associates, Jones and Stokes Associates, Steve Lowens, PE, Del Norte County Community Development Department; January 2003.

The *General Plan* included the goals and policies in the transportation and circulation section of the report. The statements which might particularly affect intercity bus service are highlighted.

Public Transportation

8.C. Goal: To develop and maintain a safe and efficient public transportation system that reduces congestion, and provide viable alternative transportation **in and through** Del Norte County.

Policies

8.C.1. The County and City, jointly, shall continue to work with public transportation service providers to **plan and implement additional services within and to the County** that are timely, cost effective, and responsive to growth patterns and ridership demand.

8.C.2. The County shall continue to **pursue all available sources of transit funding** for transit services.

8.C.3. In conjunction with the Local Transportation Commission, the County **shall consider the transportation needs of senior, disabled, minority, low-income, and transit-dependent persons in making decisions regarding public transportation services** and in compliance with the Americans with Disabilities Act.

8.C.4. The County shall continue to support efforts to provide demand-responsive service (“dial-a-ride”) and other transportation services for those unable to use conventional transit.

8.C.5. The County shall give **highest priority for public transit facilities and services within or connecting to urban areas of high intensity use** and/or focused commuter-employment areas.

8.C.6. The County shall encourage connectivity between public walkways, bicycle routes, and transit services through provision of bicycle racks and in sitting bus stops.

Del Norte County Passenger Facilities Plan, LSC Transportation Consultants, Inc., June 2007.

To support the growing and changing transit service, LSC prepared the *Passenger Facility Development Plan*, which provides passenger facility improvement standards specific to Del Norte County. Through this study, all existing passenger facilities for Redwood Coast Transit, both locally in Crescent City and regionally from Smith River to the Humboldt County line, were inventoried and recommendations were made for developing future passenger facilities. The study product is a tool for individual jurisdictions and business leaders throughout Del Norte County to consider how best to incorporate land uses and road networks that support public transportation, while providing transportation infrastructure that supports overall community goals.

Transit Development Plan for Redwood Coast Transit, Nelson/Nygaard, August, 2002.

A Transit Development Plan (TDP) was completed in 2002. The TDP study examined the current service, and goals, objectives, measures, and standards were developed in order to guide the system in providing efficient and effective service. The plan, while helpful, was not completely satisfactory to the local decision-makers, and has only been used as a reference; it was never adopted as an actionable plan.

STUDY BACKGROUND

Regional passenger transportation is a key issue to the residents of Del Norte County. The challenging geography of the area makes mobility difficult both within the county as well as in making connections with the nation's intercity transportation network. Located off of the nation's Interstate highway and passenger rail network and provided with only limited air passenger service, intercity bus service is of greater importance to Del Norte County than to many other regions of similar population.

The area, moreover, has a long history of intercity public transportation. As shown in Figure 1, in 1946 the Greyhound system included service from Del Norte County south along US 101 to San Francisco, north along US 101 to Astoria, Oregon, as well as service along US 199 connecting Crescent City with Grants Pass, Eugene, Portland and beyond. Thirty years later in 1976, the Greyhound route network still included service along all three US highway legs serving Crescent City (though the route to the north left the Pacific Coast at Newport for direct service to Portland).

On April 2, 2005, Greyhound stopped its last service to Crescent City and Del Norte County, after which service along US 101 from the Bay Area was terminated at Arcata. As discussed in greater detail below, RCT stepped up to fill this need, with the establishment of Route 20 service between Crescent City and Arcata. In addition, the RCT Route 20 service north to Smith River, combined with Curry County Transit service to Coos Bay and Porter Stage Lines service to Eugene, provides a cumbersome bus connection to intercity services in Oregon.

STUDY AREA CHARACTERISTICS

Geography of Del Norte County

Del Norte County is the northernmost coastal county in California, bordered by Oregon on the north, Humboldt County on the south, and Siskiyou County on the east. It is physically isolated and sparsely populated. The terrain is mountainous and forested, with cool, wet weather. Crescent City, 17 miles south of the Oregon line, is the county seat. Other communities include Smith River, Fort Dick, Gasquet, Hiouchi and Klamath. The road system includes US Highway 101, which connects Crescent City to Brookings, Eugene, Portland and Seattle to the north, and Arcata, Eureka, San Francisco and Los Angeles to the south. US Highway 199 connects Crescent City with Grants Pass, Oregon.

Population

Estimates of current population are made by the California Department of Finance's Demographic Research Unit. The population of the County in 2008 is estimated to be 25,877 people (excluding those incarcerated), with over 65 percent (17,002) residing in the Crescent City area. Population by Census Block Group (CBG) is shown in Table 1 and Figure 2.

FIGURE 1
Historical Greyhound Map

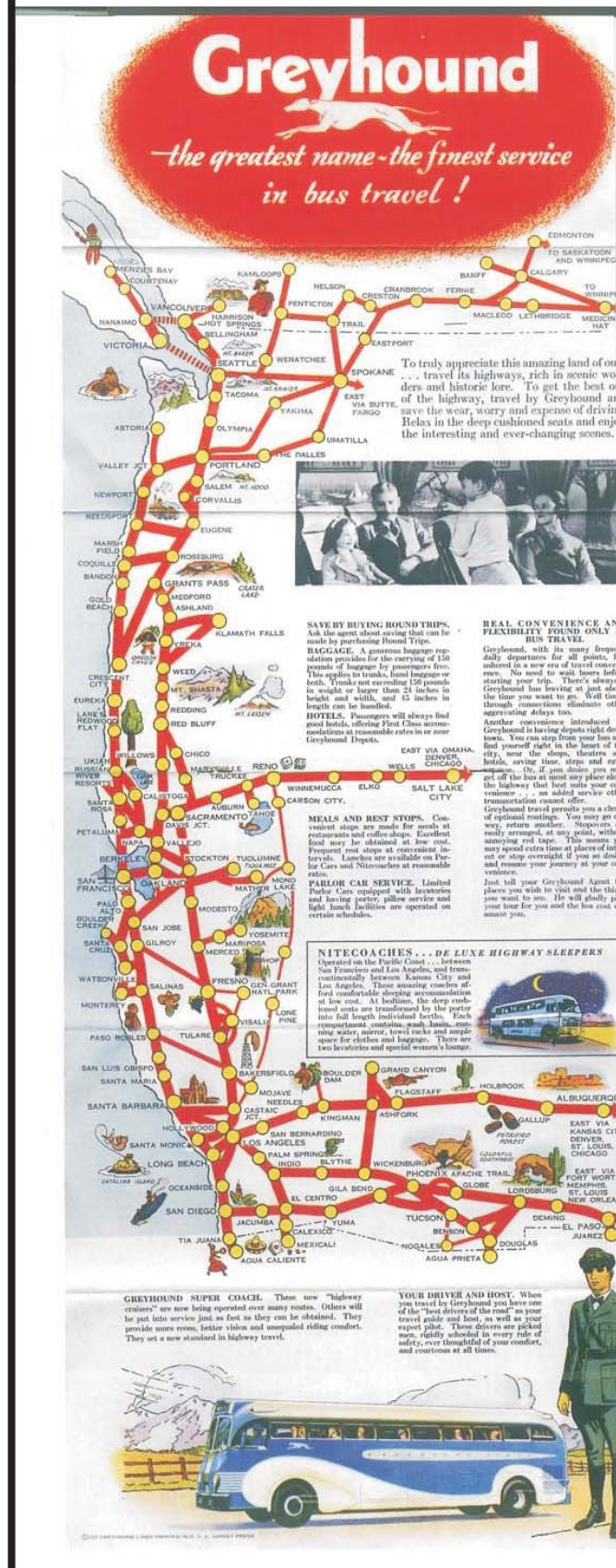
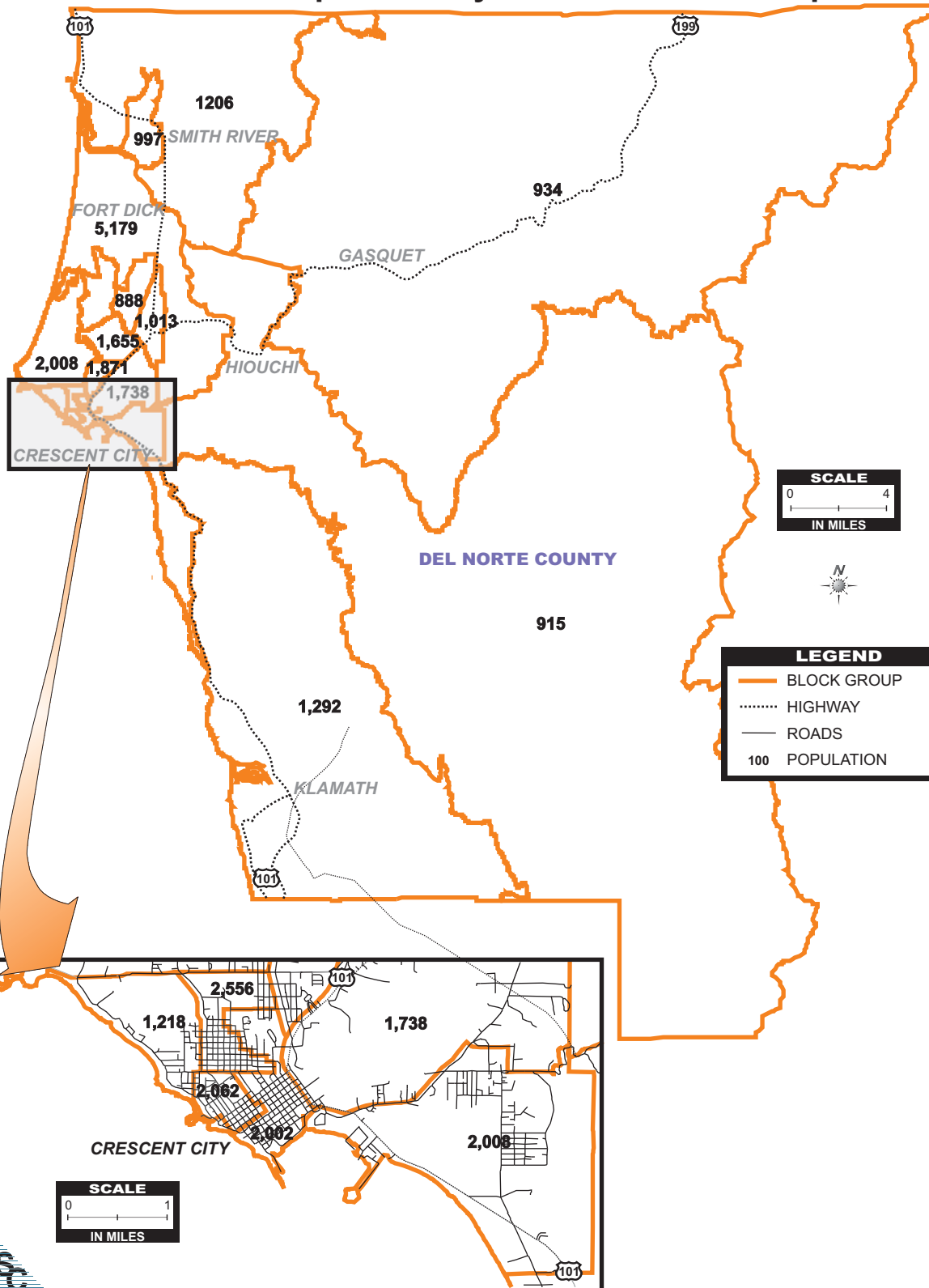


TABLE 1: Del Norte County 2008 Estimated Population Characteristics

Census Tract	Block Group	Area Description	Total Persons	Incarcerated Pop.	Total Residential Pop.	Households	Workers Outside the Home	Youth (10-17)		Elderly (65+)		Mobility-Limited		Below Poverty		Zero Vehicle Households	
								#	%	#	%	#	%	#	%	#	%
1.01	1	Downtown/Historic Crescent City	2,002	116	1,886	861	769	242	12.8%	268	14.2%	123	6.5%	608	32.2%	241	28.0%
1.01	2	Downtown/Historic Crescent City	2,062	--	2,062	779	633	300	14.5%	238	11.6%	165	8.0%	640	31.0%	200	25.7%
1.02	1	Eastern Crescent City	1,738	--	1,738	652	555	236	13.6%	317	18.2%	124	7.1%	405	23.3%	54	8.2%
1.02	2	Eastern Crescent City	2,008	--	2,008	730	769	284	14.1%	219	10.9%	155	7.7%	364	18.1%	65	8.8%
1.03	1	Northern Crescent City	1,655	--	1,655	580	806	273	16.5%	211	12.7%	96	5.8%	117	7.1%	50	8.6%
1.03	2	Northern Crescent City	2,008	--	2,008	708	751	384	19.1%	201	10.0%	126	6.3%	673	33.5%	56	7.9%
1.03	3	Northern Crescent City	1,218	--	1,218	512	501	177	14.6%	186	15.3%	105	8.6%	186	15.3%	25	4.9%
1.03	4	Northern Crescent City	2,556	--	2,556	876	1,184	430	16.8%	293	11.5%	188	7.4%	371	14.5%	86	9.8%
1.03	5	Northern Crescent City	1,871	--	1,871	765	611	260	13.9%	321	17.2%	177	9.5%	405	21.6%	145	19.0%
		Crescent City Area	17,118	116	17,002	6,463	6,581	2,586	15.2%	2,254	13.3%	1,259	7.4%	3,769	22.2%	922	14.3%
2.01	1	No. of Crescent City: Lake Earl	888	--	888	322	411	147	16.6%	110	12.3%	94	10.6%	42	4.7%	14	4.5%
2.01	2	No. of Crescent City: Elk Cross Rd.	1,013	--	1,013	405	466	118	11.7%	229	22.6%	70	6.9%	115	11.3%	7	1.6%
2.01	3	Fort Dick (Including Pelican Bay)	5,179	3,441	1,738	574	816	285	16.4%	235	13.5%	18	1.1%	72	4.1%	17	2.9%
2.02	1	Smith River, Including Rancheria	1,206	--	1,206	497	463	122	10.2%	282	23.4%	88	7.3%	156	12.9%	12	2.4%
2.02	2	Smith River, Historic	997	--	997	338	447	136	13.7%	102	10.2%	20	2.0%	266	26.7%	7	2.0%
2.02	3	Gasquet	934	--	934	384	317	158	16.9%	120	12.9%	87	9.3%	246	26.3%	0	0.0%
2.02	4	Hiouchi	915	--	915	402	463	98	10.7%	177	19.4%	28	3.1%	110	12.0%	9	2.2%
2.03	1	South of Crescent City to Klamath	1,292	108	1,184	463	497	148	12.5%	216	18.3%	89	7.5%	149	12.6%	30	6.5%
		TOTAL STUDY AREA	29,543	3,782	25,877	9,849	10,460	3,799	14.7%	3,725	14.4%	1,753	6.8%	4,924	19.0%	1,018	10.3%

Source: 2000 U.S. Census factored by growth rate for total population. Growth rate of 7.4 percent (2000 to 2008) from CA Dept. of Finance. Percentages of youth, elderly, below poverty, and zero vehicle households applied to 2008 population estimate. Mobility limitations were available on a county-wide basis (21.3 percent), applied to each census block group.

FIGURE 2
Del Norte Population by Census Block Group



Transit-Dependent Population

Nationwide, public transit ridership is drawn in large part from the “potentially transit-dependent” population consisting of the youths and elderly, the low-income, the disabled, and members of households with no available vehicles:

- ♦ **Youths** represent a transportation-dependent population, as those younger than 18 are often unable to drive and may not have a parent available to transport them. In particular, junior high school students who are independent enough to attend after-school activities but are unable to drive are a representative group. The population between 10 and 17 years of age (inclusive), delineated by population district, is presented in Table 1. Approximately 3,799 transit-dependent youths live in Del Norte County, comprising 14.7 percent of the total population.
- ♦ The **elderly** population 65 years of age and older comprised 14.4 percent of Del Norte County’s population (3,725 individuals), which is higher than the statewide average of 10.7 percent.
- ♦ The U.S. Census also counts the population living **below the poverty level**, defined by a number of factors including household income and the number of dependent children in a household. Residents living below the poverty level comprise 19 percent of the County’s population, compared to 13.2 statewide. As shown in Table 1, the areas with the greatest percentage of population below the poverty level include the historic neighborhoods of Crescent City, as well as the vicinity north of Washington Boulevard to Old Mill Road, and the area between US 101 and Lake Earl.
- ♦ The 2000 U.S. Census data also shows that 6.8 percent (1,753 persons) of the County’s population was comprised of residents reporting that they had a **disability** limiting going outside of the home (mobility limitations). Table 1 depicts the mobility-limited population of each census block group in the County.
- ♦ The number of **households without a vehicle available** is perhaps one of the strongest indicators of a transit-dependent household. As shown in Table 1, the downtown core of Crescent City has as high as 28 percent of households without a vehicle available.

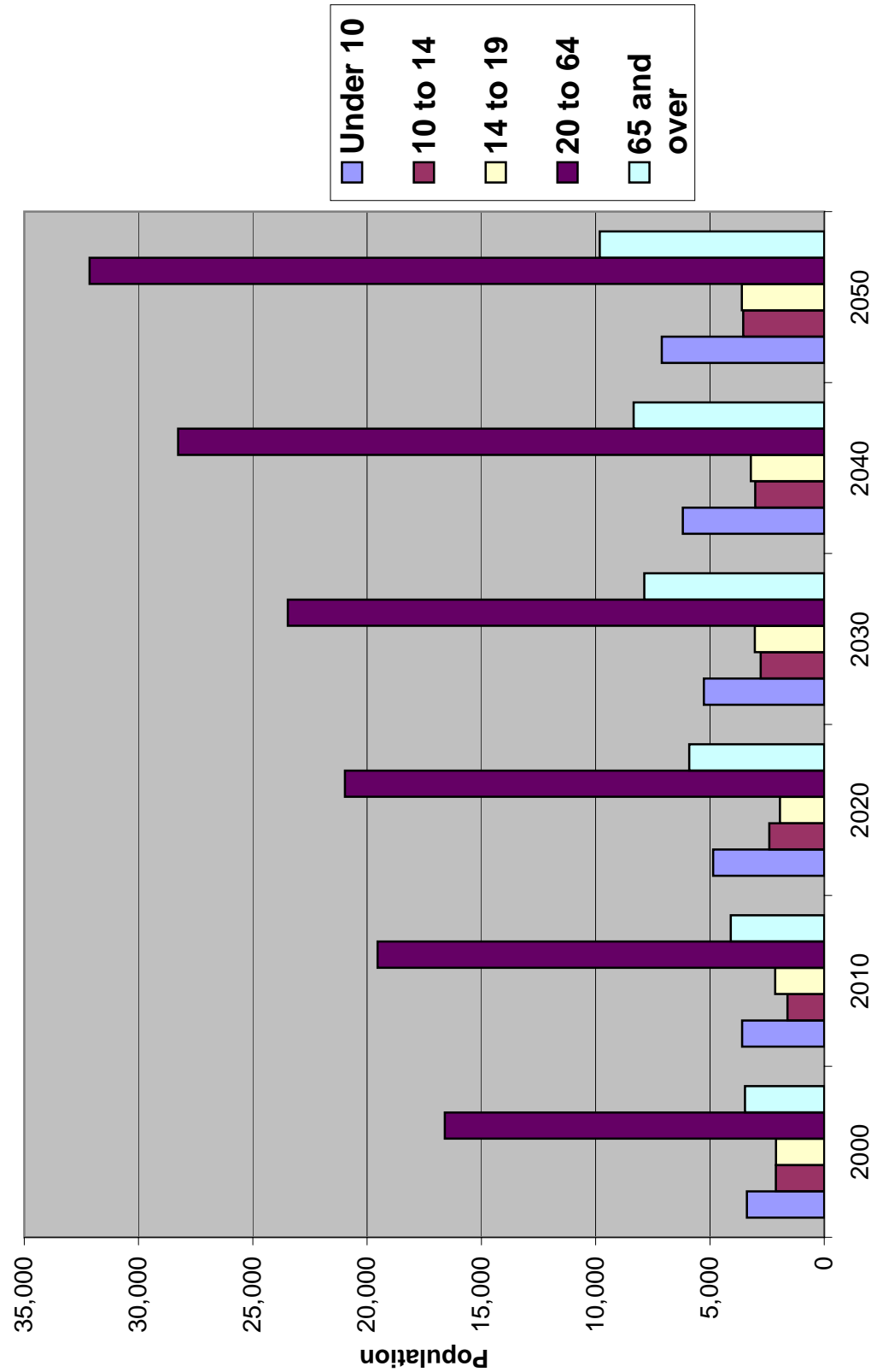
Population Projections

The California Department of Finance estimates population by age from the year 2000 to the year 2050. As shown in Figure 3, the growth in elderly population will continue to outpace growth in all other age groups up to 2050. The adult non-elderly general population (age 20 to 64) is forecast to increase throughout the period, but decrease proportionate to other groups after 2010. The proportion under 10 years of age will remain level, while the percentage of teenagers will fluctuate. Total population is forecast to be 30,983 in 2010 (a 12 percent increase over 2000), increasing to 56,218 in 2050. The strongest growth is projected from 2010 to 2020 and from 2020 to 2030, slowing in the following two decades.

Economy

Del Norte County has a service-oriented economy, which is a shift away from its agricultural roots. The largest employers are the Pelican Bay State Prison, government, retail businesses, followed by health care and social services, and accommodations/food services. The service-oriented economy reflects the tourism of the area.

Figure 3: Del Norte County Population Growth by Age Group



Source: California Department of Finance Population Estimates by Age

Review of Redwood Coast Transit Authority Services

While there are a number of public and private transportation services operating in Del Norte County, the primary focus of this study is on service provided by the RCTA. Other providers are reviewed in Chapter 3.

REDWOOD COAST TRANSIT AUTHORITY

The RCTA became an official operating body in July of 2004. RCTA service is provided under the policy direction of a policy board, made up of five members, with two representatives each from the City of Crescent City and Del Norte County and one at-large member appointed by the other members. RCTA is managed by a part-time transit manager who is contracted to guide and manage the private sector service provider. The manager also has the responsibility to develop appropriate reports and required end of year state and federal filings, and apply for and manage grants for both operating funds and capital projects, including bus and van purchases as well as facility improvements. In addition, Mark Wall Associates, the firm hired by the RCTA in 2004, has had job duties that include marketing the service in the community and representing the RCTA at local, regional, and state meetings.

Redwood Coast Transit (RCT)

RCT operates both fixed-route and DAR service in Crescent City and two intercity Coastal Routes. A description of each service is provided below.

Crescent City Fixed-Route Service

RCT operates four local fixed-routes using two buses on hourly headways in Crescent City, as shown in Figure 4. All routes meet at the Cultural Center, which is the main transfer location. The local fixed-route service was expanded from a two-route service in June of 2006. The Crescent City service is available from 6:30 AM to 7:30 PM Monday through Saturday. The base fare is \$1.00, with discount fares of \$0.50 for seniors and individuals with disabilities. Each route takes under half an hour to run and can be described as follows:

- ♦ **Route 1 (Blue) Parkway/El Dorado** operates in a counter-clockwise direction serving US 101 to Washington Boulevard, serving the commercial core, then Del Norte High School, and residential neighborhoods along El Dorado and H Streets before returning to the Cultural Center.
- ♦ **Route 2 (Red) A/Inyo/Washington** is paired with Route 1 and covers much of the same area in a clockwise direction, serving the neighborhoods around A and Inyo Streets, Del Norte High School, and the commercial core around Northcrest and Washington Boulevard.
- ♦ **Route 3 (Green) Northcrest** makes an out-and-back trip along Northcrest north of town to the C.A.N. on Standard Veneer Road.

FIGURE 4
RCT Crescent City Fixed-Routes



- ♦ **Route 4 (Orange) Bertsch/Howland Hill** is paired with Route 3 and makes a small loop in town before serving lodging south along Highway 101 to Sandmine Road. The route then serves the Bertsch/Howland Hills residential neighborhood and Elk Valley Casino, returning to the Cultural Center via Elk Valley Road.

Dial-A-Ride

DAR is door-to-door demand-response service operated in Crescent City by RCT for elderly and disabled persons, as well as the general public. Service is provided Monday through Saturday, from 7:00 AM until 7:00 PM. Up to three 12-passenger wheelchair lift-equipped vans are in service during peak hours.

Coastal Routes

RCT operates two long-distance coastal routes, as shown in Figure 5, and described below:

- ♦ **Route 10 Del Norte Coast/Klamath:** This route, designed for commuters, provides one morning and one afternoon round trip Monday through Saturday. The morning bus leaves the Crescent City Cultural Center at 6:15 AM, travels on US 101, serves the Requa Base, exits at Ehlers Avenue to serve the town of Klamath, and arrives at the Steelhead Lodge in Klamath Glen at 7:30 AM. The return trip arrives at the Cultural Center at 8:00 AM. The afternoon run departs Crescent City at 3:45 PM, serves Klamath at 5:00 PM, and arrives back in Crescent City at 6:04 PM. In addition to scheduled stops, passengers may call ahead to arrange for a pick-up at additional locations.
- ♦ **Route 20 Smith River/Arcata:** This intercity route was initiated July 1, 2005, to replace the Greyhound Bus Lines service which included Del Norte County with the intercity bus and rail network. Route 20 operates between Smith River, seven miles south of the Oregon border, and Arcata, 90 miles south of Crescent City in Humboldt County. Each Monday through Saturday, five trips are made to Smith River and two trips to Arcata. The schedule is shown in Table 2.

As indicated by the schedule, the first run departs the Cultural Center at 6:15 AM, arriving at Rays in Smith River at 6:35 AM, and at the Lucky 7 Store at 6:45 AM. Passengers can transfer to the Curry Public Transit Coastal Express which leaves at the Lucky 7 Store at 6:45 AM arriving in Brookings, Oregon at 7:15 AM, or as far north as North Bend at 10:50 AM. The Coastal Express only operates this route Mondays, Wednesdays, and Fridays. This connection can be made again at 9:15 AM as far as Brookings. Returning passengers can make the connection from the Coastal Express at 2:15 PM and 6:45 PM.

In Arcata, passengers have a number of transit options. The Arcata Mad River Transit System (AMRTS) operates local service on hourly headways in Arcata. The Redwood Transit System (RTS) operates service between Scotia in the south and Trinidad in the north, as well as limited service to Willow Creek to the east. Using RTS to get to Eureka, passengers can then use Eureka Transit to get around locally. Greyhound Lines, Incorporated, and Amtrak Thruway both have services in Arcata, which provide intercity connections to and from the south, as discussed in the next chapter.

FIGURE 5
RCT Coastal Routes

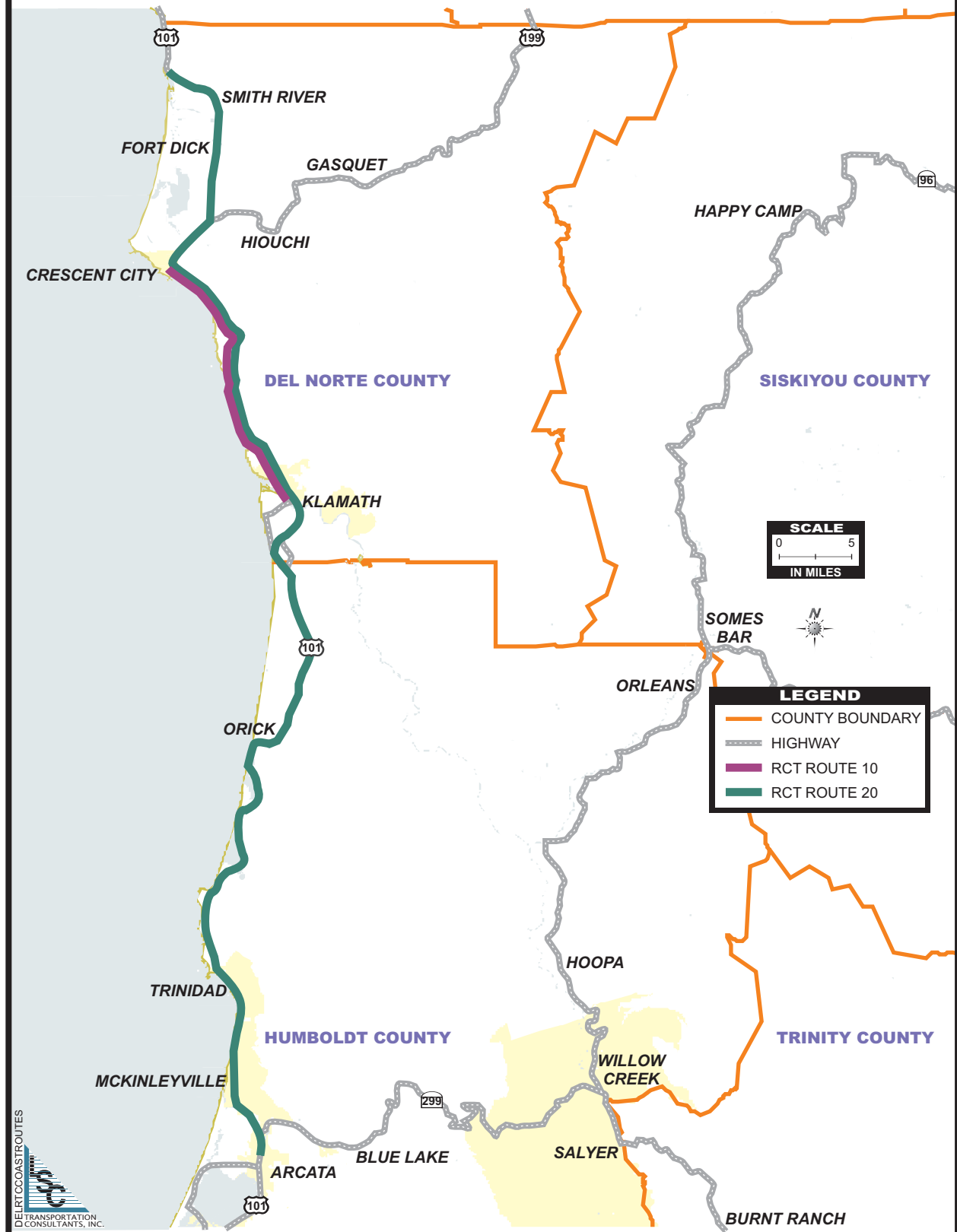


TABLE 2: RCT Route 20 Schedule

Smith River / Arcata Southbound					
Stop Location	AM			PM	
Smith River					
Lucky 7 Store (departs)	6:45	9:20	2:20	6:35	8:00
Salmon Harbor / Ship A Shore	6:48	9:23	2:23	6:38	8:03
Ray's Food Place	6:53	9:28	2:28	6:43	8:08
Ft. Dick Market	7:01	9:36	2:36	6:51	--
Pelican Bay State Prison	7:05	9:40	--	--	--
J & L Market	7:12	9:47	2:46	7:02	--
C.A.N. (Standard Veneer Rd)	--	9:50	2:50	--	--
Crescent City					
Cultural Center (arrives)	7:26	10:00	3:00	7:15	8:20
Cultural Center (departs)	7:30	--	3:05	--	--
Woodland Villa	7:55	--	3:30	--	--
Pem-Mey (Klamath Townsite)	8:15	--	3:46	--	--
Gold Bear Casino	8:17	--	3:48	--	--
Orick - Redwood N.P. Office	8:45	--	4:16	--	--
Trinidad Park 'N Ride	9:14	--	4:42	--	--
Arcata					
Arcata Transit Center (arrive)	9:32	--	5:00	--	--

Arcata / Smith River Northbound					
Stop Location	AM			PM	
Arcata					
Arcata Transit Center	--	--	10:10	--	5:15
Trinidad Park 'N Ride	--	--	10:30	--	5:35
Orick - Redwood N.P. Office	--	--	10:55	--	6:00
Gold Bear Casino	--	--	11:20	--	6:40
Steelhead Lodge (Klamath Gle	--	--	11:30	--	--
Pem-Mey (Klamath Townsite)	--	--	11:50	--	6:45
Woodland Villa	--	--	11:55	--	6:51
Crescent City					
Cultural Center (departs)	6:15	10:00	1:30	5:30	7:20
Ray's Food Place	6:18		1:33	5:33	7:23
C.A.N. (Standard Veneer Rd)	--	--	1:38	--	--
J & L Market	--	--	1:45	5:41	7:31
Pelican Bay State Prison	--	--	1:52	--	--
Ft. Dick Market	--	--	1:56	5:51	7:41
Smith River					
Ray's Food Place	6:35	--	2:04	5:59	7:49
Salmon Harbor / Ship A Shore	6:40	--	2:10	6:05	7:55
Lucky 7 Store (arrives)	6:45	--	2:15	6:10	8:00

RCT Fare Structure

The fare structure for the various RCT services is presented in Table 3. The base fare for local Crescent City routes is \$1.00, with a 50 percent discount for seniors and disabled. DAR fares for the general public are \$3.50 for same day service, or \$2.50 for a advanced reservation. Seniors and disabled passengers pay \$2.00 same day service and \$1.00 for service with advanced reservations.

Fares on the Coastal Routes depend on where one travels. Between Del Norte County and Humboldt County the single fare is \$20.00. Between Smith River and Crescent City the base fare is \$1.00, and within Humboldt County the fare is \$2.00. There are two pass options as well, some of which provide very significant discounts. Passengers can purchase a \$24.00 multi-system pass, which allows them to use all RCT and Arcata Mad River Transit System services all day. For \$30.00, passengers can buy a "Redwood Rider" pass which allows unlimited rides between Smith River and Arcata for five days after the first use. The Redwood Rider is the best option for passengers who regularly travel between Del Norte and Humboldt Counties.

Vehicle Fleet

The RCTA vehicle fleet consists of 11 vehicles, plus one on order. The vehicle roster is shown in Table 4. All of the vehicles are wheelchair accessible, with one or two wheelchair tie-down positions, and range in seating from 12 to 18 passengers. Two of the older vehicles are gasoline fueled, as are two of the 2005 Ford Eldorados, and the rest are diesel fueled.

Ridership

Over the last three years, RCT systemwide ridership has been steadily increasing, from 58,170 in 2004-05, to 66,890 in 2006-07, an increase of 15 percent. Monthly ridership is fairly steady, with increases in early spring, and dips in late spring, as shown in Figure 6.

Figure 7 shows ridership by month over the past three years for Routes 10 and 20. No definitive monthly ridership patterns occur. Ridership was highest on the Klamath Route 10 in early 2004-05, but ridership shifted to the Smith River-Arcata Route 20 when it was introduced later in the year. The ridership on Route 10 in 2004-05 was 10,950. In 2006-07, the Smith River-Arcata Route 20 showed strong ridership growth, with a total of 12,864 passenger-trips provided for the year.

Boarding and Alighting

A survey of boarding and alighting by stop was conducted for Routes 10 and 20 from March 8 to 14, 2008. Table 5 shows the boarding and alighting by run for Route 10, Route 20 to Crescent City, and Route 20 to Arcata. On Route 10, approximately 30 percent of travel occurs on the morning run, and almost 70 percent occurs in the afternoon. Route 20 data is summarized as a northern segment between Smith River and Crescent City, and a southern segment between Arcata and Crescent City, though passengers often continue from one segment to the other. On the Smith River portion of Route 20, the highest numbers of boardings occur at 6:45 AM southbound, and 5:30 PM northbound (equal to 34 percent of the ridership on this segment), allowing passengers to stay the entire day in Crescent City. However, there is steady ridership all day long.

TABLE 3: RCT Fare Structure		
Cash Fares		Passes
Service	Discount¹	Type of Pass
Crescent City Routes		
Bus Routes	\$0.50	
Dial-A-Ride		
Same Day Service	\$2.00	
One Day Advance Reservations	\$1.00	
Coast Routes 10 and 20		
Between Del Norte & Humboldt County	\$20.00	
Between Smith River & Crescent City	\$1.00	
Within Humboldt County	\$2.00	
		Multi-System Day Pass
		Good for all Redwood Coast Transit, Redwood Transit System and Arcata Mad River Transit System Routes
		\$24.00
		Redwood Rider
		Good for unlimited rides between Smith River and Arcata for five days after the date first used.
		\$30.00
		Transfers
		Pay only the difference in price when transferring to a route with a higher priced fare.
		No charge
Children aged 6 or under (up to two per paying adult) are free.		
<p>Note 1: Discounts apply to seniors age 60 and over, and individuals with a disability as shown by a Medicare ID Card, a California DMV Disabled Person ID, a Veteran ID card, or an ADA Paratransit Eligibility ID card.</p> <p>Source: Redwood Coast Transit Riders Guide, 10-22-07</p>		

TABLE 4: Redwood Coast Transit Authority Vehicle Roster

Vehicle No.	Year	Chassis Make	Body Make	Fuel	Fixed Seats	Folding Seats	WC Positions	Length	12/31/06 Mileage	Replacement Schedule
267	1998	Ford	Eldorado	Gas	12	0	1	23'	240532	2005/06
268	1998	Ford	Eldorado	Gas	12	0	1	23'	171143	2005/06
269	1998	Ford	Eldorado	Diesel	16	6	1	25'	206206	2006/07
270	1999	Ford	Eldorado	Diesel	12	6	1	23'	196624	2006/07
271	2002	Ford	Eldorado	Diesel	16	4	1	23'	110042	2009/10
272	2003	Ford	Eldorado	Diesel	16	4	1	23'	126088	2010/11
273	2003	Ford	Eldorado	Diesel	16	4	1	23'	124410	2010/11
274	2003	Ford	Eldorado	Diesel	16	4	1	23'	119888	2010/11
275	2003	Ford	Eldorado	Diesel	16	4	1	23'	100070	2010/11
276	2003	Ford	Eldorado	Diesel	16	4	1	23'	107222	2010/11
277	2005	Ford	Eldorado	Gas	12	6	2	23'	28363	2012/13
278	2005	Ford	Eldorado	Gas	12	6	2	23'	23201	2012/13
Ordered	2007	Chevy	Eldorado	Diesel	18	6	2	32'		2013/14
Ordered	2007	Chevy	Eldorado	Diesel	18	6	2	32'		2013/14

Source: RCTA March 2008

**Figure 6: RCT Total
Ridership by Month 2004-2006**

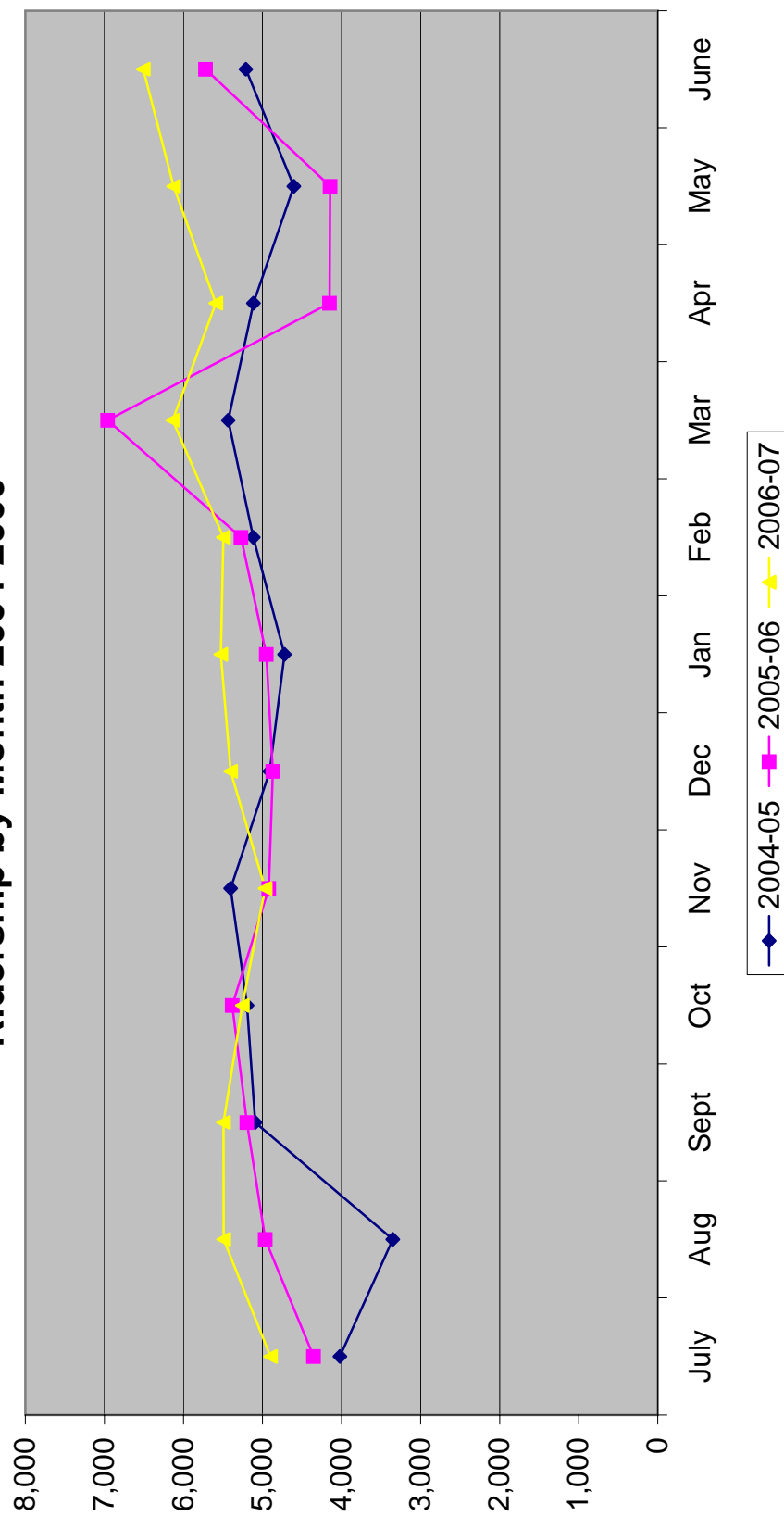


Figure 7: RCT Route 10 and 20 Ridership by Month

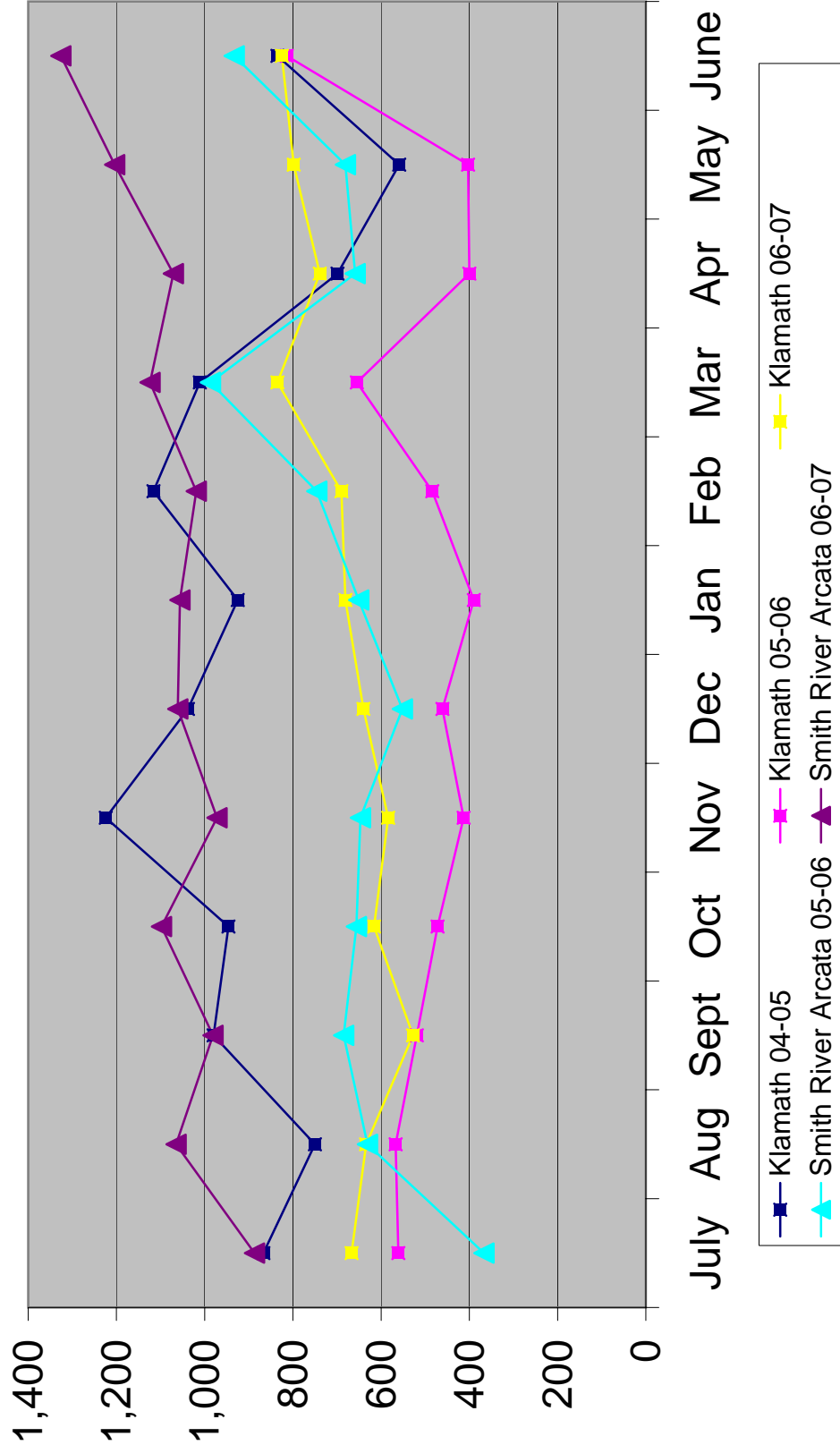


TABLE 5: Boarding and Alighting by Run

Route 10					
Departure Time	Direction of Travel	Number		Percent of Total	
		On	Off	On	Off
6:15 AM	SB	26	9	23%	8%
7:45 AM	NB	10	32	9%	28%
<i>Subtotal</i>		36	41	32%	36%
3:45 PM	SB	59	52	53%	45%
5:15 PM	NB	17	22	15%	19%
<i>Subtotal</i>		76	74	68%	64%
Total		112	115	100%	100%
Route 20 Smith River -- Crescent City					
Departure Time	Direction of Travel	Number		Percent	
		On	Off	On	Off
6:15 AM	NB	4	4	3%	3%
6:45 AM ¹	SB	24	12	18%	9%
<i>Subtotal</i>		28	16	21%	12%
8:30 AM ¹	NB	15	13	11%	9%
9:20 AM	SB	10	12	8%	9%
<i>Subtotal</i>		25	25	19%	18%
1:30 PM	NB	15	12	11%	9%
2:20 PM ¹	SB	17	18	13%	13%
<i>Subtotal</i>		32	30	24%	22%
5:30 PM	NB	22	20	17%	14%
6:35 PM	SB	10	12	8%	9%
<i>Subtotal</i>		32	32	24%	23%
7:30 PM	NB	7	16	5%	12%
8:00 PM	SB	9	19	7%	14%
<i>Subtotal</i>		16	35	12%	25%
Total		133	138	100%	100%
Route 20 Crescent City -- Arcata					
Departure Time	Direction of Travel	Number		Percent	
		On	Off	On	Off
7:30 AM	SB	48	61	28%	36%
10:10 AM	NB	56	48	32%	29%
<i>Subtotal</i>		104	109	60%	65%
3:05 PM	SB	34	33	20%	20%
5:15 PM	NB	35	26	20%	15%
<i>Subtotal</i>		69	59	40%	35%
Total		173	168	100%	100%

Table 6 summarizes the same data by direction of travel. As shown, there are significantly more individuals using Route 10 to go southbound (65 percent) than to go northbound (35 percent), most likely indicating that passengers are finding ways other than transit to get to Crescent City from the southern portion of the County.

The directional information is not as clear for Route 20, since trips are made from Crescent City north to Smith River and south to Arcata, and some of the boardings and alightings are destined for Crescent City while others are through trips. Still, a pattern shows stronger ridership northbound (72 percent) to Smith River from Crescent City compared to southbound (28 percent). The ridership to and from Arcata, however, is nearly equal in each direction.

Tables 7 and 8 show boarding and alighting by stop, including weekly averages and weekly totals. As indicated, the majority of southbound travelers board at Rays or the Cultural Center, and disembark at Pem-Mey. A few also board or alight at Camp Marigold, Hunter Creek Circle, and the Requa Base. Requa Base, for example, has two regular passengers who disembark in the morning and return in the afternoon.

As shown in Table 8, the terminal points on Route 20 (Cultural Center, Lucky 7 Store, and Arcata Transit Center) are also the busiest. Orick had an average of five daily southbound boardings and three daily northbound boardings, totaling 8.5 percent of all Route 20 boarding and alightings. On average, two passengers board at Pelican State Prison each weekday, with the majority traveling south to Arcata. The Pelican Bay ridership equates to 3.8 percent of the Route 20 ridership. A number of passengers board at the Community Assistance Network (C.A.N.) site north of Crescent City. This site is also served by the local Crescent City routes.

Finally, boarding and alighting data was summarized by day of the week. On Route 10, the busiest days were Thursday, Friday and Monday (respectively). Only 5 passengers rode on the two round trips on Saturday, compared with an average of 16 on weekdays.

On Route 20, Wednesday was the busiest day of the week to Smith River, with 14 boardings. Saturday had only 6 boardings, but Friday was the slowest day with 5 boardings. Route 20 to Arcata was busiest on Monday, then Friday and Saturday, possibly indicating some weekend visits to Arcata. Tuesdays and Thursdays were the slowest days.

On-Time Performance

On-time performance was tracked for Routes 10 and 20 from March 8 to March 14, 2008. During this week, the routes were on-time over 95 percent of the time. However, there were a handful of times when the bus departed stops several minutes early.

RCTA Budget

The RCTA budget is presented in Table 9 for FYs 2005-2006 through 2007-2008. As indicated, operating expenditures in 2006-2007 totaled \$886,744. Of this, \$685,000, or 77 percent, was used for the RCT operations and maintenance contract. Fuel costs totaled \$96,000, or 11 percent of the operating cost. Another 8 percent was expended for management of the service (\$67,654). The capital expenditures in 2006-2007 were \$187,296, most of which was put in Capital Reserve.

TABLE 6: Routes 10 and 20 Boarding and Alighting by Direction of Travel

Route 10 by Direction of Travel					
Departure Time	Direction of Travel	Number		Percent of Total	
		On	Off	On	Off
6:15 AM	SB	26	9	23%	8%
3:45 PM		59	52	53%	45%
SB Subtotal		85	61	76%	53%
7:45 AM	NB	10	32	9%	28%
5:15 PM		17	22	15%	19%
NB Subtotal		27	54	24%	47%
Total		112	115	100%	100%
Route 20 to Smith River					
Departure Time	Direction of Travel	Number		Percent	
		On	Off	On	Off
6:15 AM	Northbound	4	4	5%	4%
8:30 AM ¹		15	13	18%	14%
1:30 PM		15	12	18%	13%
5:30 PM		22	20	27%	21%
7:30 PM		7	16	9%	17%
Subtotal		63	65	77%	68%
6:45 AM ¹	Southbound	24	12	29%	13%
9:20 AM		10	12	12%	13%
2:20 PM ¹		17	18	21%	19%
6:35 PM		10	12	12%	13%
8:00 PM		9	19	11%	20%
Subtotal		19	31	23%	32%
Total		82	96	100%	100%
Route 20 to Arcata					
Departure Time	Direction of Travel	Number		Percent	
		On	Off	On	Off
7:30 AM	SB	48	61	28%	36%
3:05 PM		34	33	20%	20%
Subtotal		82	94	47%	56%
10:10 AM	NB	56	48	32%	29%
5:15 PM		35	26	20%	15%
Subtotal		91	74	53%	44%
Total		173	168	100%	100%
Note 1: Route continues to/from Crescent City					
Source: LSC Transportation Consultants, Inc., from onboard survey March 8-14, 2008					

TABLE 7: Route 10 Boarding and Alighting by Stop

Stop Location ¹		Average Weekday		Total Weekly		Percent by Direction		Total Percent	
		On	Off	On	Off	On	Off	On	Off
S o u t h b o u n d	Ray's / Safeway	4	0	23	0	27%	0%	21%	0%
	Cultural Center	6	0	30	0	35%	0%	27%	0%
	Camp Marigold	0	2	0	12	0%	20%	0%	10%
	Hunter Creek Circle	1	2	6	8	7%	13%	5%	7%
	Requa Base	0	2	1	8	1%	13%	1%	7%
	Pem-Mey (Klamath Town Site)	2	3	8	15	9%	25%	7%	13%
	Klamath Mill Road	0	0	2	0	2%	0%	2%	0%
	Debacker Rd (Star Mobile Home Park)	0	1	0	5	0%	8%	0%	4%
	Arrow Mills Rd	0	1	0	4	0%	7%	0%	3%
	Klamath Glen (Steelhead Lodge)	3	2	15	9	18%	15%	13%	8%
	Subtotal Southbound	16	12	85	61	100%	100%	76%	53%
N o r t h b o u n d	Pem-Mey (Klamath Town Site)	1	1	5	3	19%	6%	4%	3%
	Requa Base	2	0	8	0	30%	0%	7%	0%
	Hunter Creek Circle	1	1	4	4	15%	7%	4%	3%
	Camp Marigold	0	0	3	3	11%	6%	3%	3%
	Woodland Mills	1	0	7	1	26%	2%	6%	1%
	Wilson Creek Road	0	0	0	1	0%	2%	0%	1%
	Cultural Center	0	8	0	42	0%	78%	0%	37%
	Subtotal Northbound	5	10	27	54	100%	100%	24%	47%
Total		21	22	112	115			100%	100%
Note 1: Stops not shown had no passenger activity. Source: LSC Transportation Consultants, Inc., from onboard survey March 8-14, 2008									

March 8-14, 2008

Source: LSC Transportation Consultants, Inc., from onboard surveys, March 2008.

TABLE 9: Redwood Coast Transit Authority Budget

Expense Items	FY 2005-06 Actual	FY 2006-07 Actual	FY 2007-08 Estimated
Accounting Services	\$4,000	\$4,000	\$4,000
Legal Services	\$1,000	\$1,000	\$2,500
Maintenance-Bus Shelters	\$1,000	\$3,000	\$3,000
Postage	\$35	\$20	\$25
Operations Contract	\$549,291	\$685,000	\$742,604
Operations Contract - 5311(f) project	\$124,000	--	--
Other Services	\$0	--	--
Transit Manager Services	\$60,396	\$67,654	\$79,608
Advertising, Brochures, Printing	\$5,000	\$10,000	\$20,000
Rent-Structures	\$19,890	\$20,070	\$20,773
Fuels & Lubricants	\$95,000	\$96,000	\$110,000
OPERATING SUB-TOTAL	\$859,612	\$886,744	\$982,510
Bus Access Projects	\$30,000	--	--
Two 13-22 Passenger Buses	\$0	--	\$140,000
Two 13-22 Passenger Buses	--	--	\$170,000
One 24-Passenger Bus	\$111,280	--	\$111,279
One 24-Passenger Bus	--	--	\$125,000
Transit Facility	\$5,000	\$6,122	\$6,000
Bus Stops/Shelters	\$20,000	\$15,000	\$30,000
Capital Reserve	\$208,551	\$166,174	\$4,873
CAPITAL SUB-TOTAL	\$374,831	\$187,296	\$587,152
TOTAL EXPENSES	\$1,234,443	\$1,074,040	\$1,569,662
Revenue Items			
Operating Revenue			
TDA-LTF	\$713,539	\$619,521	\$465,500
TDA-LTF Carryover	--	\$57,933	\$180,197
State Transit Assistance	\$53,600	\$92,198	\$72,460
FTA Section 5311	\$123,848	\$229,777	\$107,880
FTA Section 5311-F Operating	\$42,591	\$54,732	\$58,524
Passenger Fare Revenue	\$56,000	\$88,000	\$115,000
Fare Revenue from 5311(f) Project	\$38,082	\$56,958	--
Special Transit Fares	\$50,000	\$50,000	--
Misc Refunds/reimbursements	\$5,000	\$5,000	\$5,000
Unrestricted Cash Balance	\$72,933	--	--
<i>Total Operating Revenue</i>	<i>\$1,155,593</i>	<i>\$1,254,119</i>	<i>\$1,004,561</i>
Capital Revenue			
LTF Carryover (reserved for Capital)	--	--	\$140,000
State Transit Assistance (Prop 1B)	--	--	\$235,629
FTA Section 5311-F Capital	--	--	\$110,622
FTA Section 5311-F (Grant 645409A1)	\$78,850	--	\$78,850
<i>Total Capital Revenue</i>	<i>\$78,850</i>	<i>\$0</i>	<i>\$565,101</i>
Total Revenue	\$1,234,443	\$1,254,119	\$1,569,662

Source: RCTA.

Operating costs increased by 3 percent from 2005-2006 to 2006-2007 and by 11 percent from 2006-2007 to 2007-2008 (estimated). The larger increase is across the board in a variety of cost categories. At the same time, revenue increased by 9 percent and 14 percent in the respective years.

Total operating revenue for 2006-2007 was \$1.2 million, while \$1.0 million is budgeted for 2007-2008. Nearly half of this came from the Local Transportation Fund (LTF), generated from a one-quarter cent sales tax. Federal 5311 funding accounts for nearly a quarter of the revenue, and fares account for approximately 11 percent.

Service Performance Analysis

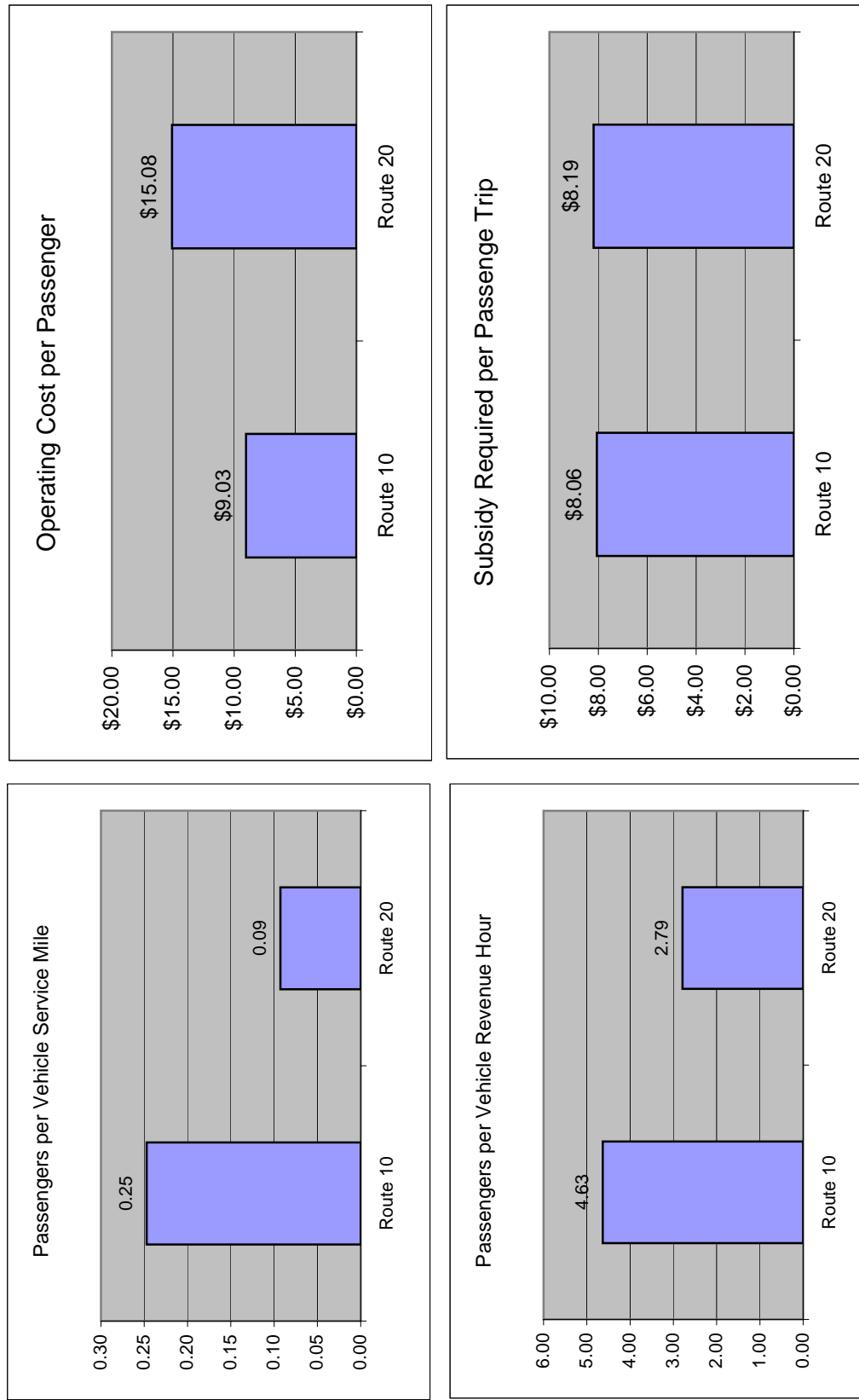
To gain further insight into the efficiency and effectiveness of the RCT services, it is useful to review ridership and operating data for Routes 10 and 20. Ridership and operating statistics for FY 2006-2007 summarized by RCTA showing passenger activity, fares, and operating quantities. Table 10 shows a summary of operating characteristics and performance indicators for Routes 10 and 20. The service quantities, costs, and ridership for each service were used to evaluate a variety of transit service performance measures:

- ♦ Figure 8 graphically illustrates the service effectiveness of the RCT system based on the number of **passenger-trips per vehicle service-miles**. As shown, Route 10 carries 0.25 passengers per mile, while Route 20 carries 0.09 passengers per mile. These numbers reflect the long travel distances of the routes.
- ♦ Also shown in Figure 8, the **passenger-trips per vehicle revenue hour** are 4.63 on Route 10, and 2.79 on Route 20. For a long distance intercity route, Route 10 shows good productivity, while Route 20 has moderate productivity.
- ♦ Dividing the estimated operating cost by the number of passenger-trips served on each route yields the **cost per passenger-trip**. As shown in Table 10 and Figure 8, operating cost is somewhat higher per passenger trip on Route 20 (\$15.08) than on Route 10 (\$9.03).
- ♦ The **subsidy per passenger-trip** is calculated by subtracting fare revenues from the costs of each route and dividing by the number of passenger-trips. This is a particularly useful performance measure, as it directly relates the key public “input” to a public transit program (subsidy funding) with the key “output” (passenger-trips). As shown in Figure 8, the both Route 10 and 20 have very similar subsidy requirements per passenger trip, at \$8.06 and \$8.19 respectively.
- ♦ The **farebox ratio** is calculated by dividing the passenger revenues by the operating costs. Also shown in Table 10 and Figure 8, the farebox ratio is 10.7 percent on Route 10 and 45.6 percent on Route 20. The high ratio on Route 20 is due to the \$20.00 fare charged for single trips between Del Norte and Humboldt County.

TABLE 10: Financial Operating and Performance Indicators, Fiscal Year 2006-07

Performance Measure	Quarter				Total Annual
	1	2	3	4	
Route 10: Klamath					
Operating Cost	\$19,403	\$18,433	\$18,714	\$17,635	\$74,185
Operating Cost per Passenger	\$10.61	\$10.02	\$8.53	\$7.49	\$9.03
Operating Cost per Vehicle Revenue Hour	\$42.46	\$40.51	\$41.68	\$42.70	\$41.82
Total Passengers	1,829	1,840	2,193	2,354	8,216
Passengers per Vehicle Revenue Hour	4.00	4.04	4.88	5.70	4.63
Passengers per Vehicle Service Mile	0.21	0.21	0.25	0.35	0.25
Vehicle Revenue Hours	457	455	449	413	1,774
Vehicle Service Miles	8,625	8,975	8,855	6,785	33,240
Farebox Revenue	\$1,641	\$1,521	\$1,221	\$3,571	\$7,954
Fare Ratio	8.5%	8.3%	6.5%	20.2%	10.7%
Subsidy Required per Passenger Trip	\$9.71	\$9.19	\$7.98	\$5.97	\$8.06
Route 20: Smith River - Arcata					
Operating Cost	\$42,340	\$48,451	\$50,792	\$52,091	\$193,674
Operating Cost per Passenger	\$14.44	\$15.47	\$15.90	\$14.51	\$15.08
Operating Cost per Vehicle Revenue Hour	\$42.47	\$41.45	\$41.67	\$42.73	\$42.07
Total Passengers	2,933	3,131	3,194	3,589	12,847
Passengers per Vehicle Revenue Hour	2.94	2.68	2.62	2.94	2.79
Passengers per Vehicle Service Mile	0.09	0.09	0.09	0.10	0.09
Vehicle Revenue Hours	997	1,169	1,219	1,219	4,604
Vehicle Service Miles	31,416	36,392	35,192	35,576	138,576
Farebox Revenue	\$17,519	\$18,946	\$16,718	\$35,222	\$88,405
Fare Ratio	41.4%	39.1%	32.9%	67.6%	45.6%
Subsidy Required per Passenger Trip	\$8.46	\$9.42	\$10.67	\$4.70	\$8.19

FIGURE 8: Route 10 and Route 20 Performance Indicators, Fiscal Year 2006-07



Source: RCT, formatted by LSC Transportation Consultants, Inc.

Other Regional and Intercity Transit Providers

There are a number of regional and intercity transit providers which play a role in providing connections in Del Norte County or could potentially be connected with RCT. A brief description of each of these providers is given below, and routes are shown in Figure 9.

NORTHERN CALIFORNIA TRANSIT PROVIDERS

Coastline Enterprises

Coastline Enterprises is the Consolidated Transportation Services Agency (CTSA) for Del Norte County. Coastline Enterprises provides transportation to individuals with disabilities for the purpose of work, medical and dental appointments, and miscellaneous errands. Medical and dental transportation is also provided to elderly clients. Service is offered seven days a week from 7:00 AM to 5:00 PM. Additionally, dialysis transportation is provided to Eureka on Tuesdays, Wednesdays, and Saturdays. Pick-ups begin in Crescent City at 5:00 AM and the vehicle returns from Eureka at approximately 6:00 PM.

Coastline Enterprises operates six vans. Approximately 6,000 disabled and 3,400 seniors are served, plus 420 out of town trips. The operating cost in 2006-2007 was approximately \$95,000. No fares are charged. Revenue sources include a contract with the Regional Center for individuals with disabilities; the Local Transportation Commission contract to provide transportation for seniors, and reimbursements from medical offices for some of the long distance medical trips.

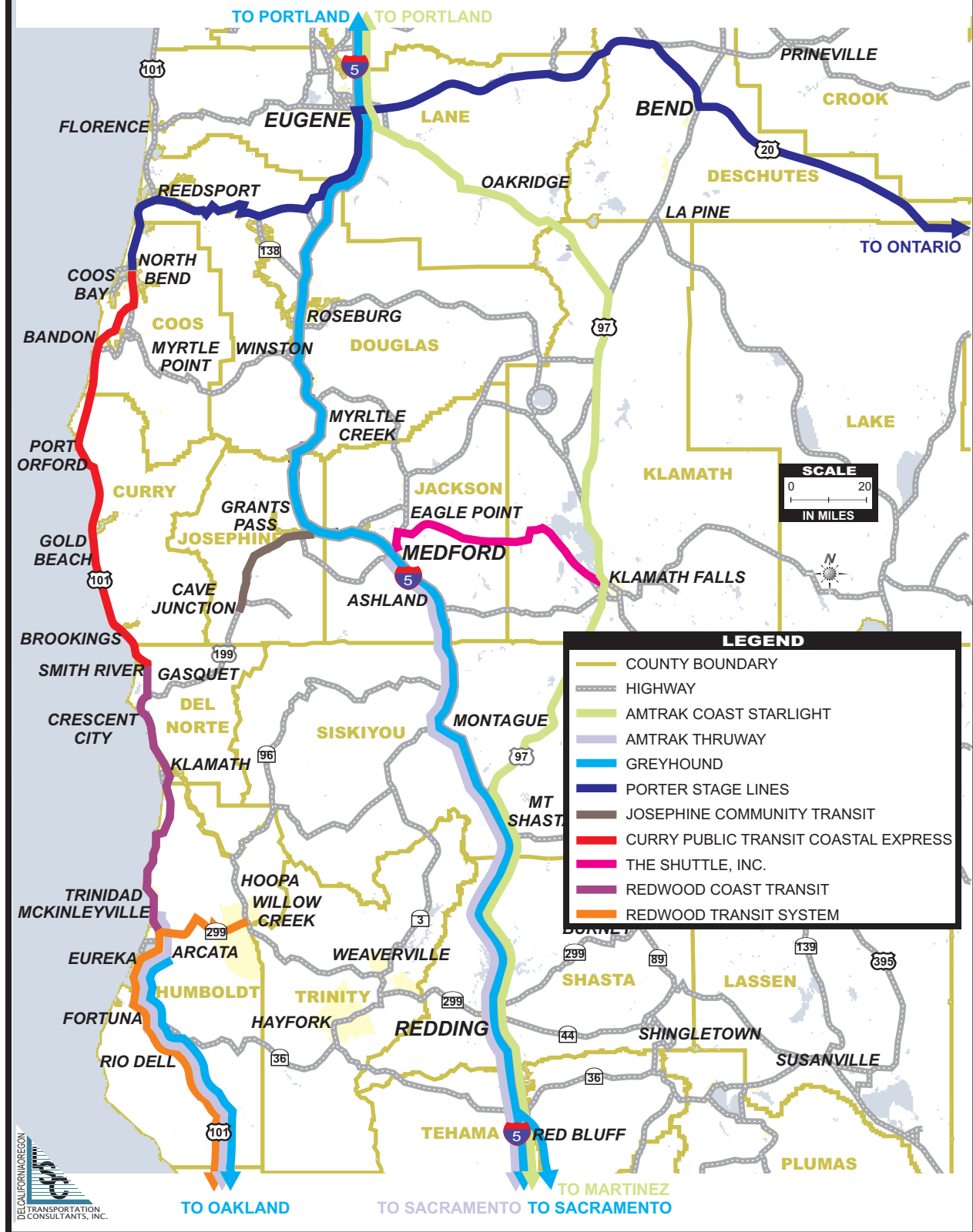
Redwood Transit System (RTS)

RTS is an intercity service operated by the Humboldt Transit Authority. Bus service is provided as far north as Trinidad, and as far south as Scotia. One route also serves Arcata to Willow Creek. Transfers between RTS and Redwood Coast Transit are most conveniently provided at the Arcata Transit Center. Service is not on clock headways, but is offered between 30 minute and 45 minute headways at Arcata Transit Center. Trip planning can be accomplished on Google Transit.

Arcata Mad River Transit System (AMRTS)

The Arcata Mad River Transit System is a local service in Arcata, California. Passengers arriving on RCT Route 20 can transfer to the local service to access medical facilities, Humboldt State University, and shopping. Service is primarily on hourly headways, and trip planning can be accomplished on Google Transit. AMRTS coordinates with RCT to maximize the Route 20 service between Smith River and Arcata, and provides a portion of the revenue for this route since it serves Humboldt County as well.

FIGURE 9
**Northern California and Southern Oregon
 Transit and Rail Routes**



OREGON TRANSIT PROVIDERS

Curry Public Transit – Coastal Express

In the 1980's, local public transit was operated by individual senior centers along the Southern Oregon Coast. In 1997, Chetco Senior Center in Brookings contracted with the Curry County Board of Commissioners to take over all individually-operated systems within Curry County for the benefit of Curry County residents, creating Curry Public Transit.

In 1999 an intercity service was added, and later merged with the Coos County Area Transportation to create the Coastal Express service, extending transport from Brookings to North Bend. In July, 2007, Coastal Express extended into Smith River, connecting with Redwood Coast Transit, enabling travelers to continue south to Eureka and San Francisco.

In 2006 Curry Public Transit, Inc. (CTPI) became a separate 501(c) 3 non-profit corporation. Curry Public Transit provides intra- and inter-city transportation for elderly, disabled, students, and the general public. The fleet of 11 buses and 2 vans are all equipped with wheelchair lifts, and seat between 8 and 14 people. The transit program is small, with one Full Time Equivalent (FTE) administrator, one half-time administrator, one FTE dispatcher, and four fixed-route drivers.

CPTI contracts with various public agencies to provide medical transportation. Five days a week, local DAR service is provided in Brookings, Gold Beach, and Port Orford. DAR in Port Orford is provided with a CPTI vehicle and volunteer drivers. The Coastal Express is operated three days a week. The schedule for the Coastal Express is shown in Table 11. As indicated, the vehicle stops in Smith River four times daily on service days.

The Coastal Express schedule for Smith River was developed as an extension of service already in place from Brookings to North Bend. For this reason, the scheduled times in Smith River are not based on passenger need, but on CPTI vehicle and driver availability. However, the schedule is timed to transfer with RCT's Route 20 so that there are four timed connections on the days CPTI operates the Coastal Express.

During FY 2006-2007, CPTI provided:

- 7,065 fixed-route (Coastal Express) rides
- 22,348 total rides
- 15,431 were provided to elderly and disabled individuals
- 6,917 were provided to the general public
- 15,263 demand service (DAR) rides

Curry Public Transit coordinates with RCT to work towards providing the best connections between the Coastal Express and RCT's Route 20. The Coastal Express was originally operated Monday through Friday, but due to very low ridership and high operating costs service was reduced. The service has been in place for approximately ten months and is operated using a 5311(f) two-year grant. Currently, the Transit Manager estimates there are approximately 20 passenger trips per month which transfer from Route 20. The farebox ratio on the service is approximately 10 percent, with a per-passenger cost of \$26 (averaged from fixed-route from Smith River to North Bend, both long and short trips). The primary trip purpose is to access jobs or shopping in Brookings, with very few trips made for medical purposes. As Brookings does not have a hospital, residents must go to Gold Beach or Crescent City.

TABLE 11: Curry Public Transit Schedule

Brookings/Smith River					
BROOKINGS (Ray's)	HARBOR (Chevron)	RIVER (Rancheria)	HARBOR (Chevron)	BROOKINGS (Ray's)	Notes:
6:15	6:25	6:45	7:05	7:15	Connects with NB 7:20 bus to Coos Bay/North Bend and SB RCT bus with same day connections to Arcata and Eureka
8:45	8:55	9:15	9:35	9:45	Connects with 11:15 NB bus
1:45	1:55	2:15	2:35	2:45	Connects with 3:00 NB bus to Coos Bay/North Bend and SB RCT bus to Crescent City with next day connections to Arcata and Eureka
6:05	6:15	6:35	6:55	7:05	Connects with SB Coastal Express

Brookings/North Bend - Northbound					
BROOKINGS (Ray's)	GOLD BEACH ¹ (Ray's)	PORT ORFORD (Ray's)	BANDON (Ray's)	COOS BAY (Fred Meyer & Porter Stage)	NORTH BEND ² (SOCC-Tioga Hall)
7:20	8:05	8:50	9:35	10:15	10:50
11:15	12:00	12:45	1:30	2:10	2:35
3:00	3:45	4:30	5:15	5:55	6:20

North Bend/Brookings - Southbound					
NORTH BEND ² (SOCC-Tioga Hall)	NORTH BEND Pony Village)	COOS BAY & Porter Stage)	BANDON (Ray's)	PORT ORFORD* (Ray's)	GOLD BEACH (Ray's)
--	7:30	7:40	8:30	9:15	10:45
11:20	11:25	11:40	12:20	1:05	2:35
2:30 ³	2:45	3:10	3:45	4:30	6:00

Note 1: for Nesika Beach pickup/delivery, please call at least 4 hours ahead.

Note 2: for Porter Stage Lines or North Bend Airport pickup, please call at least 4 hours ahead.

Note 3: Stops at North Bend Airport at 2:40 PM.

Bold = P.M.

Source: Curry Public Transit website. Date effective: 7/30/07.

Josephine Community Transit

Josephine Community Transit (JCT) provides fixed-route and DAR service in Grants Pass, Oregon. Deviated fixed-route service is also available three times daily to Cave Junction, which is roughly an hour's drive south of Grants Pass, and an hour's drive northeast of Crescent City on US 199. The schedule for this service is shown in Table 12. This service is supported by a 5311(f) grant and was initiated in 2001. Most passengers are community college students and employees who reside in Cave Junction but attend school or work in Grants Pass. Ridership is highest in the morning and evening, with very few passengers using the midday service. Monthly ridership is between 700 to 800 passenger trips, and the operating cost is approximately \$80,000 per year. There is no service currently available between Crescent City and Cave Junction.

Porter Stage Line

Porter Stage Line operates a route between North Bend and Eugene in Oregon, and eastward to Bend, Burns and Ontario, Oregon. Residents of Del Norte County can potentially access this connection by taking RCT to Smith River and Curry Public Transit to North Bend, but to continue from there requires an overnight stay. Porter Stage Lines is a member of the National Bus Traffic Association and uses ticket interlining.

**TABLE 12: Josephine Community Transit
Cave Junction Schedule**

Stop	Morning	Midday	Evening
<u>Outbound (southwestbound)</u>			
Ann Basker Auditorium	6:00 AM	12:00 PM	5:00 AM
Rogue Community College	--	12:15 PM	5:15 AM
Selma Post Office	6:40 AM	12:40 PM	5:40 AM
Kerby	6:50 AM	12:50 PM	5:50 AM
County Building	6:58 AM	12:58 PM	5:58 AM
Junction Inn	7:00 AM	1:00 AM	6:00 AM
<u>Inbound (northeastbound)</u>			
IV Coalition	7:05 AM	1:05 AM	6:05 AM
Belt Building	7:10 AM	1:10 AM	6:10 AM
Selma Market	7:20 AM	1:20 AM	6:20 AM
Rogue Community College	7:45 AM	1:45 AM	6:45 AM
Ann Basker Auditorium	8:00 AM	2:00 AM	7:00 AM
Service Monday-Friday			
Source: http://www.co.josephine.or.us/Files/JoCoTransit2007Sch.pdf			

INTERSTATE TRANSIT PROVIDERS

Amtrak Coast Starlight

The Amtrak Coast Starlight provides rail service between Seattle and Los Angeles. Connections are available to regional transit systems in Redding, California, and in Klamath Falls or Eugene, Oregon. The current connections from Del Norte County are from Smith River to North Bend through Curry County Transit, transferring to Amtrak Thruway to Eugene. This requires an overnight stay in North Bend. Furthermore, the Coast Starlight is seldom on-time, making it an impractical mode of transportation for anyone needing to maintain a schedule.

Amtrak Thruway

Amtrak Thruway motorcoach services are available between Arcata and Martinez and between Medford and Sacramento. Del Norte passengers currently can access service in Arcata, but not Medford or Redding. In 2004-2005, 3,905 passengers boarded Amtrak Thruway service in Arcata. Southbound service departs the McKinleyville Airport near Arcata at 5:40 AM and 10:10 AM, and arrives at 4:50 PM and 10:05 PM. The trip to Martinez takes roughly 7 hours and 40 minutes. A schedule of the services is shown in Table 13.

Greyhound

Greyhound operates a route from along the I-5 corridor Sacramento to Seattle, going through Redding, Medford, Eugene, and Portland. The schedule from Sacramento to Portland is shown in Table 14. There is currently no access from Del Norte County to this route. On the coast, Greyhound travels from Arcata to Oakland. RCT connects to the southbound route, but the northbound Greyhound does not arrive in Arcata until 9:50 PM, as shown in Table 15. Therefore an overnight stay is required to complete a northbound trip between the Bay Area and Del Norte County using Greyhound and RCT.

TABLE 13: Amtrak Thruway Bus Schedules

Martinez-McKinleyville CA

Read Down	Stop	Read Up
10:15 AM	Martinez	1:30 PM
10:35 AM	Marine World	--
10:40 AM	Vallejo	--
11:10 AM	Petaluma	12:05 PM
11:25 AM	Rohnert Park	11:50 AM
11:35 AM	Santa Rosa	11:40 AM
11:59 AM	Healdsburg	11:15 AM
12:15 PM	Cloverdale	10:50 AM
12:45 PM	Ukiah	10:20 AM
1:20 PM	Willits	9:35 AM
1:50 PM	Laytonville	9:00 AM
2:25 PM	Legget	8:35 AM
2:55 PM	Garberville	8:05 AM
3:45 PM	Scotia	7:10 AM
4:00 PM	Fortuna	6:55 AM
4:20 PM	Eureka	6:30 AM
4:35 PM	Arcata	6:10 AM
4:50 PM	McKinleyville	5:45 AM

Operated daily.

Portland - Grants Pass - Medford

Read Down	Miles	Stop	Read Up
12:05 PM	0	Portland	12:25 PM
4:05 PM	182	Roseford	8:40 AM
5:20 PM	250	Grants Pass	7:20 AM
6:40 PM	279	Medford	5:50 AM

Daily service. Amtrak Thruway motorcoach services in the above table are operated by Greyhound Lines.

Klamath Falls - Ashland, OR

Read Down	Miles	Stop	Read Up
12:05 PM	0	Ashland	1:20 PM
4:05 PM	15	Medford	12:50 PM
5:20 PM	20	White City	12:20 PM
6:40 PM	72	Klamath Falls	10:30 AM

Service operated by The Shuttle-Oregon DOT. Daily.

TABLE 14: Greyhound Bus Sacramento to Portland Schedule

Northbound Schedule										
	1420		1430		1446		1436		1440	
Location	Arrives	Departs	Arrives	Departs	Arrives	Departs	Arrives	Departs	Arrives	Departs
SACRAMENTO, CA	--	12:20am	--	03:30am	--	07:00am	--	06:00pm	--	08:45pm
MARYSVILLE, CA	--	--	--	--	07:50am	07:55am	06:50pm	06:55pm	--	--
OROVILLE, CA	--	--	--	--	08:35am	08:40am	07:35pm	07:40pm	--	--
CHICO, CA	--	--	--	--	09:15am	09:20am	08:15pm	08:20pm	--	--
RED BLUFF, CA	--	--	--	--	10:10am	10:10am	09:10pm	09:10pm	--	--
REDDING, CA	03:00am	03:15am	06:10am	06:40am	10:50am	11:20am	09:50pm	10:20pm	11:25pm	11:55pm
WEED, CA	04:35am	04:35am	08:00am	08:00am	12:40pm	12:40pm				
MEDFORD, OR	06:20am	06:40am	09:45am	10:25am	02:25pm	02:55pm	01:20am	01:35am	02:55am	03:15am
OR	07:55am	08:00am	11:00am	11:05am	03:30pm	03:35pm	--	--	--	--
ROSEBURG, OR	09:15am	09:20am	12:20pm	12:25pm	04:50pm	04:55pm	--	--	--	--
EUGENE, OR	10:35am	10:50am	01:40pm	01:55pm	06:10pm	06:20pm	04:35am	04:45am	06:15am	06:25am
CORVALLIS, OR	--	--	--	--	--	--	--	--	07:15am	07:20am
SALEM, OR	12:10pm	12:15pm	03:15pm	03:20pm	07:40pm	07:45pm	06:05am	06:10am	08:10am	08:15am
WOODBURN, OR	--	--	03:50pm	03:50pm	--	--	--	--	08:45am	08:45am
PORTLAND, OR	01:15pm		04:35pm		08:45pm		07:10am		09:30am	
Southbound Schedule										
	1439		1443		1431		1423		1429	
Location	Arrives	Departs	Arrives	Departs	Arrives	Departs	Arrives	Departs	Arrives	Departs
PORTLAND, OR	--	06:35am	--	12:01pm	--	06:55pm	--	10:00pm	--	11:45pm
WOODBURN, OR	07:20am	07:20am	12:45pm	12:45pm	--	--	--	--	--	--
SALEM, OR	07:50am	08:00am	01:15pm	01:20pm	07:55pm	08:05pm	11:00pm	11:05pm	12:45am	12:50am
CORVALLIS, OR	08:50am	08:55am	02:10pm	02:15pm	--	--	--	--	--	--
EUGENE, OR	09:50am	10:00am	03:10pm	03:25pm	09:25pm	09:40pm	12:25am	12:35am	02:10am	02:30am
ROSEBURG, OR	11:15am	11:20am	04:40pm	04:45pm	10:55pm	11:00pm	--	--	03:35am	03:35am
OR	12:35pm	12:40pm	06:00pm	06:05pm	12:15am	12:20am	--	--	04:50am	04:50am
MEDFORD, OR	01:15pm	02:00pm	06:40pm	07:35pm	01:20am	01:30am	03:35am	04:00am	06:05am	06:15am
WEED, CA	03:45pm	03:45pm	09:20pm	09:20pm	--	--	--	--	08:00am	08:00am
REDDING, CA	05:05pm	05:35pm	10:40pm	11:10pm	04:30am	04:50am	07:00am	07:30am	09:20am	09:50am
RED BLUFF, CA	06:15pm	06:15pm	--	--	--	--	--	--	10:30am	10:30am
CHICO, CA	07:05pm	07:10pm	--	--	--	--	--	--	11:20am	11:25am
OROVILLE, CA	07:45pm	07:50pm	--	--	--	--	--	--	11:59am	12:05pm
MARYSVILLE, CA	08:30pm	08:35pm	--	--	--	--	--	--	12:45pm	12:50pm
SACRAMENTO, CA	09:25pm	--	01:50am	--	07:30am	--	10:10am	--	01:40pm	--

Source: Greyhound Lines, Inc. <http://www.greyhound.com/scripts/en/TicketCenter/Step3.asp>.

TABLE 15: Greyhound Lines Coastal Bus Schedule

Read Down		Stop Location	Read Up	
Arrives	Departs		Arrive	Depart
--	09:50am	ARCATA	09:50pm	--
10:00am	10:00am	EUREKA	09:30pm	09:30pm
10:45am	10:45am	RIO DELL	08:55pm	08:55pm
12:50pm	01:30pm	WILLITS	06:15pm	06:50pm
02:00pm	02:00pm	UKIAH	05:45pm	05:45pm
03:05pm	03:15pm	SANTA ROSA	04:30pm	04:40pm
04:05pm	04:05pm	SAN RAFAEL	03:45pm	03:45pm
04:40pm	--	OAKLAND	--	03:15pm

Source: <http://www.greyhound.com/scripts/en/TicketCenter/Step3.asp>

Chapter 4

Intercity Bus Service Goals and Objectives

BACKGROUND

An important element in the success of any organization is a clear and concise set of goals and the performance measures and standards needed to attain them. This can be particularly important for a public transit agency, for several reasons:

- ♦ Transit goals can be inherently contradictory. For instance, the goal of maximizing cost effectiveness can tend to focus services on the largest population centers, while the goal of maximizing the availability of public transit services can tend to disperse services to outlying areas. To best meet its overall mission, a public transit agency must therefore be continually balancing the trade-offs between goals. Adopting policy statements also allows a discussion of community values regarding transit issues that are at a higher level of discussion than is possible when considering case-by-case individual issues.
- ♦ As a public entity, a public transit organization is expending public funds, and therefore has a responsibility to provide the public with transparent information on how funds are expended and how well it is doing in meeting its goals. Funding partners also have a responsibility to ensure that funds provided to the transit program are being used appropriately. The transit organization therefore has a responsibility to provide information regarding the effectiveness and efficiency by which public funds are being spent.
- ♦ An adopted set of goals and performance standards helps to communicate the values of the transit program to other organizations, the public, and to the organization staff.

RCTA has not adopted goals, objectives, and performance standards. This chapter presents recommended goals, objectives, and standards, specific to the RCT's Intercity Bus Service. Recommended policy statements are also presented.

Transportation Development Act

The California Transportation Development Act (TDA) sets a minimum "farebox return ratio" for each public transit organization using TDA funds (under specific articles of the TDA). Put simply, the farebox return ratio is the ratio of the operating income (largely fare revenues) divided by the non-capital expenses. For RCT, the TDA requires a minimum farebox return ratio of 10 percent (below which a portion of TDA funds would be withheld). It should be noted that new transit services in rural areas are expressly eligible under TDA law for exemption from the minimum 10 percent farebox recovery ratio during the first two years of service. Also, the TDA only requires this ratio to be maintained for the transit system as a whole, rather than on an individual service or route basis. As TDA does not provide any requirements or guidance beyond this single systemwide ratio, establishment of specific transit service performance measures, such as specifically for Intercity Service, is very much a matter of local discretion.

RECOMMENDED GOALS, PERFORMANCE MEASURES, AND STANDARDS

The goals establish general direction for policies and operation, are value-driven and provide a long-range perspective. Standards are quantifiable observable measures that reflect achievement of the goals. The performance measures provide the mechanism for judging whether or not the standards have been met.

Five major goals are identified:

- ♦ a service efficiency goal (reflecting efficient use of financial resources);
- ♦ a service effectiveness goal (reflecting effectiveness in serving passengers);
- ♦ a service quality goal, an accessibility goal; and
- ♦ a planning and management goal.

These policy statements are developed specifically for RCT's Intercity Bus Services. Standards are provided as appropriate, based on observed performance of similar transit systems in California, as well as the existing performance of RCT transit services.

Service Efficiency Goal

To maximize the level of services that can be provided within the financial resources associated with the provision of transit services. The standards should not be strictly applied to new routes for the first two years of service, so long as 60 percent of the standard is achieved after one full year of service and a favorable trend is maintained.

- ♦ **Farebox Recovery Ratio Standard** – The ratio of farebox income to operating costs should meet or exceed 8.0 percent.
- ♦ **Subsidy Standard** – The public operation/administrative subsidy per passenger-trip for service should not exceed \$10 (in FY 2007-2008), based on both industry standards and existing transit system goals. In applying this standard, the length of the trip should be taken into consideration, potentially relaxing the standard for longer trips. This standard should be adjusted annually to account for inflation.

Service Effectiveness Goal

To maximize the ridership potential of RCT service. (The standards should not be strictly applied to new routes for the first two years of service so long as 60 percent of the standard is achieved after one year and a favorable trend is maintained.

- ♦ **Service Effectiveness Standard** – Serve a minimum of 2.5 passenger-trips per vehicle service hour. The Klamath Route exceeded this standard (4.6 passenger-trips), as did the Smith River/Arcata Route (2.8 passenger-trips).

Service Quality Goal

To provide safe, reliable, and convenient transit services.

- ♦ **Passenger Load Standard** – For passenger safety and comfort, vehicles should be sized and the transit service operated to limit typical peak loads to the seating capacity. There should be no standees.

- ♦ **Regional Connectivity Standard** – on a quarterly basis, RCTA should review all connecting schedules to ensure that connections are optimized. Additionally, RCT bus stops should be joint bus stops in all communities with multiple fixed-route providers.
- ♦ **Accident Standard** – Maintain a minimum of 50,000 miles between preventable collision accidents, and 25,000 miles between all types of accidents.
- ♦ **Maintenance Standard** – Maintain a minimum of 10,000 miles between roadcalls.
- ♦ **Vehicle Standard** – Vehicles should be replaced at the end of their useful lives and according to FTA guidelines. The average fleet age should be no more than six years.
- ♦ **Vehicle Cleanliness Standard** – The outside of all vehicles in regular use shall be washed at least weekly. Inside, spot cleaning and trash removal shall be conducted at least daily.
- ♦ **Passenger Complaint Standard** – Passenger complaints shall be less than 1 per 5,000 passenger-trips. Management response should be provided to all complaints within one working day.
- ♦ **Training Standard** – All services shall be provided by trained, courteous, respectful employees, who are sensitive to the needs of passengers.
- ♦ **Passenger Amenity Standard** – Shelter should be provided at all transit stops serving 10 or more passengers per day within Del Norte County. Seating should be provided at all transit stops serving 5 or more passengers per day within Del Norte County.
- ♦ **Service Availability Standard** – RCT should strive to maintain a minimum of connecting service to Arcata and to Oregon.
- ♦ **On-Time Performance Standard** – 90 percent of all trips should be operated “on-time,” defined as not departing early, and no more than 5 minutes late for local services and 10 minutes late for intercity/rural services.
- ♦ **Missed Trips Standard** – The proportion of runs not operated should be no more than 1 percent.

Accessibility Goal

To provide a transit system that is accessible to the greatest number of persons while maintaining the productivity of the system.

- ♦ **Vehicle Accessibility Standard** – Maintain a fully wheelchair-accessible transit fleet.
- ♦ **ADA Goal** – Fully meet the requirements of the Americans with Disabilities Act.

Demand for Regional and Intercity Bus Service

INTERCITY TRANSIT DEMAND

Intercity Demand Model

Estimating intercity transit demand can be difficult as there hasn't been extensive data collected on intercity bus ridership. In order to estimate demand for intercity bus service, a model was used from the report *Planning Techniques for Intercity Transportation Services*, F. Fravel *et al.*, U.S. Dept. of Transportation, 1987. In general, the model considers the following input factors: the number of passengers traveling one-way on a given route is a function of the frequency of service, the population served, the cost to the rider, and the distance for the trip. The model that proved to be appropriate is of the following format:

$$\text{PASS/MO} = \text{CONST} \times \text{RTFREQ}^a \times \text{SERVPOP}^b \times \text{FARE/MI}^c \times \text{DIST}^d$$

where:

PASS/MO = the number of one-way passengers boarding per month for the route segment specified.

CONST = a constant specifically derived for this equation.

RTFREQ = scheduled round trips per week on the route.

SERVPOP = the population served: defined as the sum of the populations of villages, towns, and cities directly along the route, divided by 100.

FARE/MI = fare per mile in cents, found by dividing the cost of a one-way fare between the end points of each route by the one-way distance between the end points of the route.

DIST = one-way distance between the endpoints on the route.

^a = the exponent for round trip frequency

^b = the exponent for service population

^c = the exponent for fare per mile

^d = the exponent for one-way distance

The specific model that was used for the estimation of demand in this study was chosen based on the route distance of the study area. The final equation used for this study was designed for route distances of between 20 and 200 miles.

$$\text{PASS/MO} = 6.871 \times \text{RTFREQ}^{1.093} \times \text{SERVPOP}^{0.409} \times \text{FARE/MI}^{-0.352}$$

Distance was left out of the final equation because this formula was designed specifically for distances of between 20 and 120 miles one way. Intercity trips of different lengths are quite different in terms of trip purpose and frequency.

This equation can then be applied in Del Norte County to estimate the demand on the US 199 Corridor assuming two round trips. The equation becomes:

$$\begin{aligned}\text{PASS/MO} &= 6.871 \times \text{RTFREQ}^{1.093} \times \text{SERVPOP}^{0.409} \times \text{FARE/MI}^{-0.352} \\ \text{PASS/MO} &= 6.871 \times (2 \text{ round trip})^{1.093} \times (23,300 \text{ population}/100)^{0.409} \times 0.10 \text{ fare/MI}^{-0.352}\end{aligned}$$

$$\text{PASS/MO} = 77$$

The equation estimates that there would be 77 passenger trips per month, or 920 per year. It should be emphasized that this represents an upper bound of demand.

Trip Rate Estimation Method

Another method for estimating demand is to examine actual intercity trip ridership to determine trip rates. A trip rate for Route 20 from Smith River to Arcata in 2006/07, for example, could be calculated as follows:

$$\begin{aligned}\text{Annual Ridership} &= 12,864 \\ \text{Population Served} &= 47,000 \\ \text{Trip Rate per Capita} &= 0.27\end{aligned}$$

Trip rates were also calculated per capita for the US 101 Corridor using Greyhound ridership data, as shown in Table 16. Boarding and alighting data were compared with population data to estimate the number of intercity bus trips per capita. These were averaged for all stops, as well as just for the stops which allow boardings and alightings. As shown, the trip rate ranges from a low of 0.10 trips per capita in Bandon (which had only one scheduled bus daily) to a high of 0.85 in Port Orford. The overall average was 0.20 trips per capita. Examining only those sites with boardings and alighting data, the trip rate averages 0.24 annual transit trips per capita. There are other factors which influence demand, such as medical, social or educational activity sites, but these trip rates can be useful in estimating ridership of potential service alternatives.

FUTURE TRENDS IN INTERCITY AND REGIONAL TRANSIT DEMAND

Future change in actual transit demand will be influenced by a variety of factors, including:

- ♦ **Growth in Del Norte County** – Growth in Del Norte County has been slower than the state average, but because of its affordability the growth is typically among lower income families and individuals. This could create a higher demand for intercity service.
- ♦ **Aging of the Population** – Del Norte County already has a high proportion of elderly residents in comparison with California as a whole, and elderly population is forecast to grow at the highest rate of any age category between 2000 and 2010 (18 percent versus an overall growth of 12 percent). This could result in increased demand per capita.
- ♦ **High Fuel Prices** – Intercity bus service becomes more attractive as fuel prices continue to rise.

TABLE 16: Greyhound Trip Rates in the Highway 101 Corridor, 2003												
Location	Daily Schedules	Greyhound Departure & Arrival Information		Greyhound Ticket Revenue			Carrier	Population of Incorporated Cities	Trip Rates			
		Total for 2003	Daily Average	Total for 2003	Daily Average	Tickets Sold			To People Departing	To People Arriving	Rides Per Capita (All)	Rides Per Capita (B&A Stops)
OREGON 2003												
Bandon	1	-		294	0.81	\$0	\$14,586	Greyhound, Inc.	2,870	0.10		
Brookings	2	1,206	3.30	861	2.36	\$59,771	\$42,668	Greyhound, Inc.	5,760	0.36	0.36	
Florence	2	811	2.22	372	1.02	\$40,207	\$18,413	Porter Stage Lines	7,600	0.16	0.16	
Gold Beach	2	692	1.90	357	0.98	\$34,281	\$17,684	Greyhound, Inc.	1,930	0.54	0.54	
Lincoln City	2	418	1.15	755	2.07	\$20,714	\$47,032	Greyhound, Inc.	7,437	0.16	0.16	
McMinnville	2	-	-	304	0.83	\$0	\$25,408	Greyhound, Inc.	26,489	0.01		
Newberg	2	1,250	3.42	1,532	4.20	\$61,941	\$15,051	Greyhound, Inc.	18,064	0.15	0.15	
Newport	2	2,807	7.68	117	0.32	\$139,114	\$75,928	Valley Retriever	9,532	0.31	0.31	
North Bend	2	-	-	356	0.97	\$0	\$5,823	Greyhound, Inc.	9,544	0.04		
Port Orford	2	-	-	982	2.69	\$0	\$17,622	Greyhound, Inc.	1,153	0.85		
Reedsport	2	-	-	1	-	\$0	\$10,515	Porter Stage Lines	4,378	0.00		
Sheridan	2	-	-	394	1.08	\$0	\$5,251	Greyhound, Inc.	5,561	0.07		
Waldport	2	-	-	104	0.28	\$0	\$23,958	Greyhound, Inc.	2,050	0.05		
TOTALS	--	7,184	20	6,429	18	\$356,028	\$319,939		102,368	0.13	0.13	
CALIFORNIA 2005												
Crescent City	2	679	1.86	1688	4.62			Greyhound, Inc.	17,002	0.14	0.14	
Source: Greyhound Lines, Inc (as reported to ODOT and Caltrans).										Annual Average	0.20	0.24

Intercity and Regional Bus Service Alternatives

Del Norte County has three intercity highway access routes: from the south on US 101, from the north on US 101, and from the northeast on US 199. All three directions provide opportunities to connect to a network of regional or intercity bus services. The alternatives evaluated below consider the potential for service or service improvements on each of these access routes.

CRESCENT CITY/OREGON COAST ALTERNATIVES

As mentioned in previous chapters, connections between RCT and CPTI in Smith River theoretically allow passengers to travel from Southern California to Seattle, Washington. In reality, travel times to connecting services such as Amtrak Thruway, Greyhound, and Porter Stage Lines require multiple days on multiple carriers to reach these destinations, and while the connections are possible, the number of passengers making such long distance trips are more likely to find an inland travel route more convenient. The following alternatives focus more on the regional desire of Del Norte County residents to reach southern Oregon or for Curry County residents to access Crescent City. At the same time, better service between the two would improve long distance travel as well.

As the Coastal Express extended its service to Smith River in July of 2007, the service is not yet a year old. However, soon after the service was implemented CPTI decided that it could not afford operations five days per week, and dropped the service to three days. Ridership is still quite low, estimated at approximately 20 passengers per month, but it has been improving. The following alternatives evaluate reducing the number of connections between RCT and CPTI to two daily instead of four connections offered three times per week.

Option A: CPTI Reduces Service to Twice Daily, Monday through Friday

The current Curry Public Transit service provides good flexibility for passengers on the days the service is provided, with four connections available between CPTI and RCT. However, if passengers can only use this service Monday, Wednesday, and Friday, it greatly reduces their travel options. Under this alternative, CPTI would reduce the number of daily trips to Smith River, but would provide service five days per week. The 9:15 AM schedule would be maintained, but the 6:35 PM connection in Smith River would be moved to 5:30 PM. There would be ten runs operated per week instead of the current twelve.

As shown in Table 17, the annual mileage would be reduced by 2,650 and the vehicle hours served would decrease by approximately 100. Based on CPTI's estimated cost of \$1.42 per mile of service, the operating cost would decrease by approximately \$3,760 per year. Though it is more convenient to have a consistent daily schedule, the reduction of four trips to two would create an overall reduction in ridership, from 450 (assuming ridership is only at 75 percent of maximum potential now as a new service), to an estimated 400 annual one-way trips. Based on an average fare of \$3.00, the subsidy required per passenger trip would drop from \$46.22 currently, to \$42.98.

TABLE 17: Intercity Service Alternatives																
Estimated Fiscal Year 2008-2009 Ridership and Cost Analysis: Impacts of ADDITIONAL Service shown																
Alternative	Operating Characteristics of Additional Service										Performance Analysis					
	Total Daily			Total Annual			Ridership Impact		Annual		Marginal		Marginal		Subsidy Per Pass. Trip	
	Veh. Serv. Miles	Veh. Serv. Hours	Veh. Serv. Miles	Serv. Veh. Hours	Operating Days	Operating Cost ¹	Daily	Annual	Farebox Revenue	Subsidy Required	Pass. Per VSM	Pass. Per VSM	Pass. Per Trip			
Crescent City - Oregon Coast Alternatives																
CPTI Coast Route 2X Monday thru Friday	52.0	2.00	12,950	500	249	\$18,390	2	400	\$1,200	\$17,190	0.8	0.03	\$ 45.98	\$ 45.98	\$42.98	
Drop 2X Monday, Wednesday, Friday	(104.0)	(4.00)	(15,600)	(600)	150	(\$22,150)	(3)	(450)	-\$1,350	(\$20,800)	0.8	0.03	\$ 49.22	\$ 49.22	\$46.22	
Subtotal			(2,650)	(100)	--	(\$3,760)		(50)	-\$150	(\$3,610)						
RCT Route 20 to Brookings 2X M-F	52.0	4.00	12,950	1,000	249	\$39,970	2	400	\$1,200	\$38,770	0.4	0.03	\$ 99.93	\$ 99.93	\$96.93	
Crescent City - Highway 199 Alternatives																
Meet JCT in Cave Junction Midday	107	2.50	26,540	620	249	\$31,260	2	430	\$4,300	\$26,960	0.7	0.02	\$ 72.70	\$ 72.70	\$62.70	
Meet JCT in Cave Junction AM/PM	213	5.00	53,090	1,250	249	\$62,880	4	920	\$9,200	\$53,680	0.7	0.02	\$ 68.35	\$ 68.35	\$58.35	
Meet JCT in Cave Junction 3X daily M-F	320	7.50	79,630	1,870	249	\$94,140	6	1,430	\$14,300	\$79,840	0.8	0.02	\$ 65.83	\$ 65.83	\$55.83	
Gasquet/Hiouchi Monday Through Friday	73	4.00	18,130	1,000	249	\$41,790	25	6,230	\$6,230	\$35,560	6.2	0.34	\$ 6.71	\$ 6.71	\$5.71	
Gasquet/Hiouchi 1 Day per Week	73	4.00	3,790	210	52	\$8,770	37	1,900	\$1,900	\$6,870	9.0	0.50	\$ 4.62	\$ 4.62	\$3.62	
Gasquet/Hiouchi 3x/Day, 3 Days/Week	109	6.00	16,380	900	150	\$37,630	50	7,560	\$7,560	\$30,070	8.4	0.46	\$ 4.98	\$ 4.98	\$3.98	
Smith River/Crescent City - Arcata Alternatives																
Additional RCT Midday Run to Arcata M-S	155	4.00	46,660	1,200	301	\$58,860	12	3,700	\$22,550	\$36,310	3.1	0.08	\$ 15.91	\$ 15.91	\$9.81	
Additional RCT Night Run to Arcata M-S	155	4.00	46,660	1,200	301	\$58,860	8	2,410	\$14,680	\$44,180	2.0	0.05	\$ 24.42	\$ 24.42	\$18.33	
Note 1: Operating costs based on 2007-08 allocated contract/maintenance cost of \$35.44 per hour, plus a projected fuel cost of \$0.35 per mile. Source: LSC Transportation Consultants, Inc.																

Option B: Redwood Coast Extends Route 20 to Brookings Twice Daily

In the event that CPTI were to decide to discontinue service due to low ridership, this alternative evaluates the potential for RCT to extend Route 20 to Brookings twice daily in lieu of the current service. As shown in Table 17, the service factors (miles, hours, and ridership) would be the same as under the previous alternative, but RCT's costs for this service would be substantially higher, resulting in a cost per passenger trip of nearly \$100. This indicates that it would be infeasible for RCT to provide this service.

CRESCENT CITY/US 199 ALTERNATIVES

US 199 provides the most direct route to connect with the I-5 corridor cities to the north. If service were provided between Crescent City and Grants Pass, the trip from Crescent City to Eugene could be reduced from the current 8 hours or so to approximately 5 hours. Furthermore, service from Crescent City to Medford could be provided with approximately a three and a half hour trip. The alternatives evaluated below show options for making these connections.

Midday Service to Grants Pass

RCT Service to Meet Josephine Community Transit in Cave Junction

Providing midday service to Grants Pass by meeting Josephine Community Transit in Cave Junction would allow Del Norte residents to take the southbound 12:35 PM Greyhound to Medford and beyond on the Portland-Sacramento line, or the 3:30 PM northbound Greyhound arriving in Portland at 8:45 PM. This would require Josephine Community Transit to move its midday run half an hour earlier so that it would arrive in Grants Pass at 12:30 PM instead of 1:00 PM. Ridership on the midday service is low, according to the JCT Transit Manager. Providing a connection to Greyhound might improve ridership. RCT would then provide service from Crescent City leaving at 10:15 AM, meeting Josephine Community Transit in Cave Junction at 11:30 AM before returning to Crescent City, allowing passengers to arrive in Grants Pass at 12:30 PM. The Greyhound bus departs Grants Pass at 12:40 PM.

This option works reasonably for inbound trips as well, assuming that outbound passengers are making a multiple day trip to such locations as Eugene, Portland or Sacramento. The Greyhound arrives from Portland at 12:35 PM and from Sacramento at 8:00 AM and 11:05 AM. The midday service would not, however, serve a day trip to a location such as Medford.

Providing this service five days per week would add 26,540 miles and 620 hours of service annually, with a marginal operating cost of \$31,260. Ridership would be quite low – on the order 430 trips annually. Therefore, assuming a fare of \$10.00 each way, the subsidy required per passenger trip would be \$62.70.

Morning and Evening Service to Grants Pass

Meet Josephine Community Transit in Morning/Evening in Cave Junction

By providing service to Grants Pass in the morning and evening, a day trip to Medford could be accommodated. Round trips from Crescent City to Eugene would still require an overnight stay, but the travel time to Eugene would be significantly reduced over what is currently available (from 8.75 hours via the coast to 5 hours via US 199). The morning bus would require a

5:45 AM departure from Crescent City to arrive at 7:00 AM in Cave Junction and 8:00 AM in Grants Pass. Northbound Greyhound buses depart at 8:00 AM, arriving in Eugene at 10:50 AM; or the 11:05 AM northbound bus arrives in Eugene at 1:55 PM. Southbound buses leave at 12:40 PM, arriving in Medford at 1:15 PM, or at 6:05 PM, arriving at 7:35 PM (too late to make a return trip). The only trip that could be scheduled in one day would leave Medford at 2:55 PM, allowing a stay of only an hour and forty minutes in Medford. However, the Greyhound schedule is not reliable, with buses more likely to be late as the day goes on. Providing service to Grants Pass in both the morning and evening would not be ideal for day trips or most southbound travel, but would greatly improve travel times for extended travel to locations such as Medford, Eugene, Portland or Seattle.

Providing this service five days per week would add 53,090 miles and 1,250 hours of service annually, with a marginal operating cost of \$62,880. Ridership would still be quite low—on the order of 4 trips per day, or 920 annually. At a fare of \$10.00 one way, the subsidy required per passenger trip would be \$58.35.

Connect with Josephine Community Transit Three Times Daily

Finally, providing three RCT round trips to Josephine Community Transit in Cave Junction would provide the greatest opportunities for connecting to the network of intercity services. Providing this service five days per week would add 79,630 miles and 1,870 hours of service annually, with a marginal operating cost of \$79,840. Ridership would still be on the order of 6 trips per day, or 1,430 annually. At a fare of \$10.00 one way, the subsidy required per passenger trip would be \$55.83.

Extend Greyhound to Grants Pass Daily

Another option to consider would be for Greyhound to provide service along the US 101 and Highway 199 corridors by extending the current route which starts and ends in Arcata. In the morning, the Greyhound bus would depart from Grants Pass at 6:20 AM to arrive in Crescent City at 7:50 AM and Arcata at 9:50 AM. In the evening, the 9:50 PM Greyhound bus would continue to Crescent City, arriving at 11:50 PM, then on to Grants Pass arriving at 1:20 AM. This would allow passengers to continue on to Crescent City with additional travel options available early in the morning to get to Pelican Bay or further to Oregon. Passengers going to Grants Pass would have midday options for further northbound intercity travel. The route would be 131 miles each way, adding 252 vehicle service miles and seven vehicle hours of service daily.

Service to Gasquet and Hiouchi Each Weekday

Alternatively, RCT service could be provided along the US 199 corridor to Gasquet and Hiouchi, but not over the Oregon state line. These are the only populated areas in Del Norte County which currently do not receive transit services. In comparison, the population along US 199 between Crescent City and these towns is greater than the population along US 101 to Klamath, which receives service four times daily (twice via Route 20 enroute to Arcata). Furthermore, by estimating program related demand, it was found demand is higher in the Hiouchi-Gasquet corridor than along the US 101 corridor. The demand was estimated using the Transportation Research Transit Cooperative Research Program (TCRP) Project A-3: Rural Transit Demand Estimation Techniques model, which showed that with two round trips per day, based on transit dependent populations of the area, the Hiouchi-Gasquet corridor has a demand of 3,760 annual one-way trips, compared to the Klamath demand of 2,490 annual one-way trips.

Providing service along US 199 to Gasquet two runs per day, five days per week would require 18,130 vehicle miles and 1,000 vehicle miles of service. The annual marginal operating cost would be \$41,790. The ridership was estimating by comparing the demand of the Hiouchi-Gasquet corridor to the demand of the Klamath corridor with the populations of the two areas, factored by actual ridership on the Klamath route, and then reduced based on the reduced number of daily trips. This estimated ridership was further reduced to represent the seasonal nature of the Hiouchi-Gasquet area, which fluctuates with fishing season and summer recreation, for an estimated ridership on this service of 6,230 annual one-way trips. At a \$1.00 fare (to be consistent with other services), this would require a per-passenger subsidy of \$5.71.

Service to Gasquet and Hiouchi One Weekday

Alternatively, service along US 199 could be provided fewer days per week, in order to provide at least some “lifeline” public transportation to the area while minimizing impacts on overall operating budgets. At the minimum, service could be operated one day per week, such as every Tuesday. This service is estimated to incur an operating cost of \$8,770 per year and serve 1,900 passenger-trips per year. At an average fare equivalent to that generated by Route 10, this would require \$6,870 in annual subsidy. As ridership would be relatively concentrated on this limited service, performance on this alternative would be relatively good, with 9 passenger-trips per vehicle-hour of service and an operating subsidy of \$3.62 per passenger-trip.

Service to Gasquet and Hiouchi Three Times Daily, Three Weekdays per Week

Another option for serving Gasquet and Hiouchi would be to provide the service three times daily, three days per week. This would allow residents to spend part of the day instead of the whole day in Crescent City. It is estimated this service would incur an operating cost of \$37,360 per year and serve 7,560 passenger-trips per year. At an average fare equivalent to that generated by Route 10, this would require \$30,070 in annual subsidy. Ridership would be higher for service provided three times per day, three days per week, than if it were provided twice per day five days per week, based on similar services in other transit systems. The operating subsidy would be an estimated \$3.98 per passenger-trip.

CRESCENT CITY/ARCATA ALTERNATIVES

To the south of Crescent City, Arcata and Eureka offer not only intercity bus connections, but medical, educational, recreational, and social destinations as well. For these reasons, intercity bus service has been more consistently provided south of Crescent City than northward. When Greyhound abandoned its route in 2005, RCTA immediately set out to replace this critical connection. Route 20 from Smith River to Arcata has shown steady growth in the two years that it has been provided. Ridership increased from 8,195 in 2005-2006, to 12,864 in 2006-2007, and grew 40 percent between July and December 2006 (6,064 passenger trips) and the identical period in 2007 (8,527 passenger trips).

The current service requires that passengers leave Crescent City at 7:26 AM, arriving in Arcata at 9:32 AM. The return trip is not available until 5:15 PM, requiring a seven hour and forty-five minute stay. Providing three trips each day would allow passengers greater flexibility to travel either in the morning, the afternoon, or for the whole day. In other areas, providing this greater flexibility results in a substantially increased ridership, particularly for those such as the elderly who find a 12-hour travel day challenging.

Provide Midday Run to Arcata

Under this alternative, a midday trip would be made from Crescent City to Arcata and back. The bus would leave Crescent City at 11:00 AM, arriving in Arcata at 1:00 PM. The return trip would leave Arcata at 1:30 PM, arriving in Crescent City at 3:30 PM. This schedule would provide travelers with roughly a four hour period in the morning or afternoon in the Arcata/Eureka area. Providing this service six days per week would add 46,660 miles and 1,200 hours of service annually, with a marginal operating cost of \$58,860. Based on an elasticity model, ridership would increase by approximately 3,700 annually. At an average fare of \$6.09 (which excludes the prison ridership that would not be increased by this additional run), the annual subsidy requirement would be on the order of \$36,310. The subsidy required per passenger trip would be \$9.81, compared to the current \$8.15 subsidy per passenger trip. It is important to note that subsidy required for any improvements to Route 20 could potentially be funded 50 percent through FTA 5311(f).

Provide Night Run to Arcata

As mentioned previously, passengers arrive on Greyhound and Amtrak arrive in Arcata at 9:50 PM and 10:05 PM, respectively. There currently is no transportation available to proceed northward on to Crescent City, thus requiring passengers to spend the night. This can be an issue for passengers who are trying to get to Pelican Bay for a morning visiting appointment. Under this alternative, an additional run would be provided to Arcata in order to connect with these night arrivals on Greyhound and Amtrak. The RCT bus would leave Crescent City at 7:45 PM, arriving in Arcata at 9:45 PM. The return trip would leave Arcata at 10:15 PM, arriving in Crescent City at 12:15 AM. Providing this service six days per week would add 46,660 miles and 1,200 hours of service annually, with a marginal operating cost of \$58,860. Ridership on this service would be generated from two sources:

- ♦ **Passengers Connecting from Greyhound** – An estimated 12 passengers arrive on Greyhound, and it is estimated that approximately half that many arrive on Amtrak. Based on this existing ridership and the relative need for intercity services, an annual ridership for this run of 1,810 passenger trips annually is estimated.
- ♦ **Local Passengers** – This additional run would also serve residents of Del Norte County and northern Humboldt County with evening activities in Arcata and Eureka. Connecting transit service in the Arcata area is good when college is in session (A&MRTS provides service to the transit center until 9:57 PM when college is in session), but ends at 6:57 PM during the college winter and summer breaks, while connections from the south are less convenient (RTS provides a northbound arrival at the transit center at 8:20 PM). Based on these connections, the existing Route 20 ridership and the relative demand in evening versus daytime transit service seen in other similar transit programs, an estimated 600 additional passenger-trips would be generated.

Total annual ridership on this service is forecast to be 2,410. At an average fare of \$6.09, the annual subsidy requirement would be on the order of \$44,180. The subsidy required per passenger trip would be \$18.33, compared to the current \$8.15 subsidy per passenger trip. As it directly connects with other intercity services, there is a high likelihood that subsidy required for this improvement to Route 20 could potentially be funded 50 percent through FTA 5311(f).

Allow Greyhound to Operate Service between Smith River and Arcata

Given the financial challenges to RCTA, another option would be for Greyhound to provide service between Smith River and Arcata. However, this is unlikely to occur and not recommended for the following reasons:

- ♦ While Greyhound does not disclose its operating costs, typical unit costs for intercity services is on the order of \$4.25 per mile. These costs are on the order of 200 percent higher than RCTA's operating costs. For a given amount of available subsidy, therefore, RCTA could provide a substantially higher level of service than could Greyhound.
- ♦ Greyhound does not have access to funding sources that are not also available to RCTA. Either service levels would need to be lower under Greyhound operation, or fares would have to increase significantly, which would reduce ridership.
- ♦ Greyhound would base its schedule on the overall route along US 101, rather than the needs of Del Norte County. As this schedule is based on the higher demand from Arcata south, the most probable schedule would be a simple extension of the existing Greyhound schedule. While this would provide a southbound morning run that would be reasonably convenient to Del Norte residents, these residents would not have an opportunity to return home until roughly 11:00 PM. It is unlikely Greyhound could address the needs of Del Norte County as responsively as RCTA has done.
- ♦ The Route 20 Service performs well for RCTA in terms of farebox ratio. Discontinuing this service would have a negative effect on overall farebox performance.

For these reasons, this alternative is not recommended, and is not considered further.

MARKETING/TICKETING/INFORMATION SERVICES

Marketing/Information Services

Marketing and information services are especially critical for the success of intercity bus service. A primary role of intercity bus service is to provide connections to transportation networks, and to make this successful, it is imperative that the transit agency provides easily accessible information regarding service availability and schedules. Schedules should be easily available, and should be frequently monitored for accuracy, particularly in regards to connections with other services. Schedules should be available in social service offices, senior centers, lodging, grocery stores, and on the internet.

Participate in Interline Ticketing Program

The National Bus Traffic Association (NBTA) is a non-profit association located in Washington D.C. It is the manager of the Interline Revenue Clearing House and the Tariff Publisher for the Intercity Bus Industry. The NBTA offers intercity bus service providers an opportunity to issue an interline ticket or "thru ticket." This thru ticket allows a passenger to buy a single ticket to travel to a final destination that may require transportation from two or more bus service providers. For example, if a passenger wished to travel from Baton Rouge, Louisiana to Denver, Colorado, he could purchase one ticket for a single fare, though he might be on several carriers. The intercity bus service provider located in his town would provide the ticket and collect the fare. The ticket

would be sent to the clearinghouse, where the amount due each carrier would be calculated based on the proportion of miles of service they provided between the two trip ends. The provider that collected the fare would send a portion of the revenue to the Clearinghouse to be redistributed to the intercity bus providers.

Tickets may be distributed through an Automated Ticketing System. The most common is Greyhound's TRIPS/MAX system and the Gateway/Galaxy software system used by several carriers. The process is used to derive the billing carrier's proportionate share of ticket revenue which is a function of miles transported to thru trip miles (mileage prorate).

Payment is made through the Interline Revenue Clearing House. The Association operates the Interline Revenue Clearing House which provides for the monthly settlement of credit and debit accounts electronically. Each month the carriers submit billing invoices to reclaim their portions of the thru ticket revenue, in addition to other categories of charges aligned with bus operations, such as facilities rents, fuel, maintenance, etc. Carriers can submit their invoices requesting payment from other carriers online through the Association's website at www.bustraffic.org, as well as view the amounts that they owe. Net payments are deposited and credited to the appropriate accounts through an electronic funds transfer.

To participate, RCTA would enter into a sponsorship arrangement with an NBTA member carrier (such as Greyhound), which would secure a membership application. RCTA would pay a nominal annual membership fee to the Association (currently \$100). This would allow RCTA to sell tickets to intercity destinations on the sponsoring carrier's ticket stock from destinations originating on the sponsored carrier's operating lines. RCTA would also honor tickets of NBTA member carriers from intercity points of origin terminating on the sponsored carrier's operating lines. The sponsoring NBTA member carrier will secure all applicable reclaims.

Some of the benefits of participating in the interline ticket program include:

- ♦ Nationwide visibility and quotation of the services offered by sponsored transit agencies
- ♦ Increased ridership
- ♦ Convenience of through ticketing for customers
- ♦ Expanded access for rural residents to the national transportation network
- ♦ A more seamless and coordinated national ground transportation system
- ♦ Access to additional funding sources
 - Ticket Sales Commissions
 - 5311
 - 5311 (f)3
- ♦ Decreased paperwork

There are two California NTBA member carriers:

- ♦ Orange Belt Stages
- ♦ Nash Transit/Lee Corno and Company

In Oregon, there are four NTBA member carriers:

- ♦ Porter Stage Lines/Porter Enterprises, Inc.
- ♦ Valley Retriever Buslines
- ♦ Oregon Coachways, Inc.
- ♦ The Shuttle, Keno, Oregon

Additional information is available at <http://www.kutc.ku.edu/pdf/files/trb06/OPM71Brannan.pdf>.

Trip Planning Software such as Google Transit

The internet is becoming a more mainstream tool every day. Nationwide, an estimated 70 percent of transit dependent passengers and 80 percent of all passengers have access to the internet. Therefore, it makes sense to take advantage of tools on the internet to make transit more accessible and dependable for passengers, particularly for individuals making long distance arrangements.

Google Transit is a no-cost trip planning tool that any transit agency can use. Working with a Google representative, the transit agency provides basic information about available transit services and schedules. Google Transit takes the transit agency's "Transit Feed" and incorporates it into Google Maps and other Google applications that show geographic data. The end result is that a transit user can enter their specific trip requirements at a site linked to the transit agency's website and Google Transit will provide a matching trip itinerary. Several northern California transit systems use Google Transit, including Humboldt Transit Authority, Redwood Transit Systems, Arcata Mad River Transit System, Eureka Transit, Sage Stage, and Sacramento RT.

While Google Transit does not charge a transit agency to provide this service, setting up the site does require some computer knowledge and administrative time on behalf of the transit agency, and maintaining the site would require regular updates. Google Transit is a tool that should be used in addition to the "user-friendly" RCT's rider's guides and phone service.

Funding Options for Regional and Intercity Bus Service

INTRODUCTION

Transit programs rely on multiple sources of funding. Intercity bus programs rely particularly on Federal Transit Administration Section 5311(f) funds. This chapter discusses the funding options available for Del Norte County's intercity services.

FTA Section 5311 – Non-Urbanized Formula Program

Federal transit funding for non-urbanized areas with a population of less than 50,000 is currently provided through the FTA Section 5311 program, which qualifies Del Norte County and Crescent City. A 16.43 percent local match is required for capital programs and a 47.77 percent match for operating expenditures. These funds are administered by Caltrans through a grant application process. Seventy-five percent of California's Section 5311 regional apportionment is redistributed to RTPAs based on the population. Fifteen percent of the state's 5311 apportionment is designated for 5311(f) intercity bus programs and 10 percent is spent on administrative expenses.

The Section 5311(f) funds set aside for the intercity bus program are intended to meet the following objectives:

- ♦ To support the connection between non-urbanized and the larger regional or national systems of intercity bus service.
- ♦ To support services to meet the intercity travel needs of residents in non-urbanized areas.
- ♦ To support the infrastructure of the intercity bus network through planning and marketing assistance and capital investment in facilities.

The intercity program funds are available for both capital and operating funding. Caltrans is currently emphasizing the funding of capital, though requests for operating funding will be considered. Concerning using Section 5311 (18i) funds for transit facilities, the following is from Chapter 53 of the United States Code (codified Federal Transit Act laws):

5311. Financial assistance for other than urbanized areas

(I). Transfer of Facilities and Equipment - With the consent of the recipient currently having a facility or equipment acquired with assistance under this section, a State may transfer the facility or equipment to any recipient eligible to receive assistance under this chapter if the facility or equipment will continue to be used as required under this section.

(F). Intercity Bus Transportation - A State shall expend at least 15 percent of the amount made available in each FY after September 30, 1993, to carry out a program to develop and support intercity bus transportation. Eligible activities under the program include:

(A) planning and marketing for intercity bus transportation

(B) capital grants for intercity bus shelters

(C) joint-use stops and depots

(D) operating grants through purchase-of-service agreements, user-side subsidies, and demonstration projects

5319. Bicycle Facilities

A project to provide access for bicycles to mass transportation facilities, to provide shelters and parking facilities for bicycles in or around mass transportation facilities, or to install equipment for transporting bicycles on mass transportation vehicles is a capital project eligible for assistance under sections 5307, 5309, and 5311 of this title.

Total funding apportionment for FY 2007-2008 is approximately \$20 million dollars statewide. Del Norte County's estimated actual 2007-2008 budget includes total revenue of \$166,404 for Section 5311 funds, including \$58,524 for Section 5311(f). In comparison, the County received a total of \$284,509 in Section 5311 funding in FY 2006-2007, \$54,732 of which was 5311(f).

FTA Section 5316 Job Access and Reverse Commute Program (JARC)

The JARC grant program assists states and localities in developing new or expanded transportation services that connect welfare recipients and other low income persons to jobs and other employment related services. Job Access projects are targeted at developing new or expanded transportation services such as shuttles, vanpools, new bus routes, connector services to mass transit, and guaranteed ride home programs for welfare recipients and low income persons. Reverse Commute projects provide transportation services to suburban employment centers from urban, rural, and other suburban locations for all populations. JARC funding is available for transit services in rural and small urban areas. A JARC applicant must also have a Coordinated Human Services Transportation plan. Del Norte County is in the process of conducting its plan through a consultant. This plan should be completed in the summer of 2008. An 80/20 match is required for capital projects, and at least a 50/50 match for operating assistance projects. The maximum per project per year grant award is \$200,000. The amount available for 2008-2009 for rural areas in California is \$2.7 million. Most intercity options for Del Norte County are not likely to qualify for JARC.

OPPORTUNITIES FOR JOINT FUNDING

There are a number of entities in Del Norte and Humboldt Counties which benefit from RCT services, and several are already funding partners. Del Norte may wish to review these funding partnerships, as well as forge others.

Review Funding Agreement with the Humboldt Transit Authority

The Humboldt Transit Authority (HTA) currently contributes \$5,000 annually to RCTA to support the Smith River to Arcata Route 20. A review of passenger activity indicates that 50 percent of Route 20 boardings/alightings occur in Humboldt County. A detailed review of the boarding/alighting data by direction, moreover, indicates that of total Route 20 ridership 6.1 percent were boardings on southbound runs in Humboldt County or alightings on northbound runs in Humboldt County and thus were passenger-trips made completely within Humboldt

County. Total subsidy for Route 20 is \$105,000 per year, indicating that RCT is funding roughly 95 percent of the subsidy needs while HTA is funding 5 percent. In light of this disparity it would be appropriate for RCTA to negotiate with HTA to fund a larger share of this service.

Include Route 20 in the Jack Pass

The HTA has an agreement with Humboldt State University to provide students with a “Jack Pass” which allows students unlimited use on County-wide transit services, including Arcata Mad River Transit System (AMRTS), Eureka Transit, and Redwood Transit. The pass was instituted in the fall of 2007. The Jack Pass is paid for through activity fees each student pays at the school, with \$15.00 from each student going toward transit. RCTA should consider allowing Jack Pass holders to use Route 20 in exchange for a negotiated fee with HTA.

Route 20 Guarantee from Social Services

Much of the ridership on the Smith River portion of Route 20 is low income, transit dependent individuals who are clients of Social Services. If RCTA is to expand its services by adding intercity service, it may become important to gain Social Services as a funding partner on Route 20 to ensure that this service can be maintained as well.

Joint Funding with ODOT (Curry/Josephine County)

For route services which cross into Oregon, it might be appropriate to seek joint funding from Caltrans and the Oregon Department of Transportation (ODOT). In particular, if RCTA provides connections into Josephine County, or strengthens connections into Curry County, interagency coordination will be very important.

Chapter 8

Regional and Intercity Bus Service Plan

INTRODUCTION

In light of the characteristics and intercity transit needs of the study area, as documented in previous chapters of this report, the following Regional and Intercity Bus Service Plan has been developed for Del Norte County. Each alternative was evaluated in terms of recommended service standards, and those services which meet the standards are recommended for implementation. However, all of the recommended services are contingent on securing adequate funding.

Like many transit agencies across the state, RCTA's revenues are not keeping pace with costs. In particular, RCTA's key source of revenue consists of Local Transportation Funds (LTF) generated from state retail sales tax. These funds are forecast to drop by roughly 1.8 percent between FY 2007-2008 and FY 2008-2009. Along with changes in other revenues, overall revenues are expected to drop by 8 percent in the next fiscal year, as shown in Table 18. This drop is occurring at a time when fuel and labor costs are increasing. Given the current financial situation, the recommended services may not be affordable for several years to come. Nonetheless, the services identified in this plan would meet performance standards and would enhance intercity and regional connections, and should be pursued as soon as financially feasible.

TABLE 18: RCTA Revenue Forecast

	FY 2006-07	FY 2007-08	FY 2008-09
Operating Revenue	Actual	Estimated	Estimated
TDA-LTF	\$619,521	\$465,500	\$457,402
State Transit Assistance	\$92,198	\$72,460	\$289,335
State Transit Assistance (Prop 1B)	\$0	\$235,629	\$0
FTA Section 5311	\$229,777	\$107,880	\$107,880
FTA Section 5311(f) Operating	\$54,732	\$169,146	\$58,500
Passenger Fare Revenue	\$74,246	\$64,192	\$83,500
Fare Revenue from 5311(f) Project	\$45,540	\$57,036	\$58,500
Special Transit Fares	\$23,517	\$0	\$0
Humboldt Share of Route 20 Subsidy	\$0	\$0	\$18,600
Misc Refunds / Reimbursements/Advertising	\$5,000	\$5,000	\$10,000
<i>Total Operating Revenue</i>	\$1,144,531	\$1,176,843	\$1,083,717

Source: RCTA.

SERVICE PLAN

The following services are recommended for implementation should funding become available. These elements improve the intercity and regional bus services within the recommended performance standards, providing a benefit to the residents of Del Norte County.

Initiate Service to Gasquet and Hiouchi

All three options evaluated provide a benefit to the residents of Del Norte County within the recommended service performance standards. However, in light of financial constraints, it is recommended that the service be initiated one day per week to allow Gasquet and Hiouchi residents to access services in Crescent City, including intercity connections via Routes 10 and 20. If additional funding becomes available, it is recommended that the service be expanded to three round-trips per day, three days per week.

Initiate Midday Route 20 Run to Arcata

Adding a midday run to Arcata would greatly enhance the usefulness of Route 20. Passengers would be able to stay half a day in Arcata rather than the current necessity of staying a full day. In similar rural corridors, this has proven to significantly increase overall ridership. Additionally, passengers accessing intercity services could undertake errands in Arcata prior to their intercity departure on Greyhound or Amtrak. The subsidy required per passenger trip would be \$9.81, which attains the recommended \$10.00 subsidy per passenger trip standard. It is expected that this service can be provided with the existing vehicle fleet.

Consider Joint Services between Brookings, Del Norte County, Grants Pass, and Beyond

While this study has not identified cost-efficient potential individual services connecting Del Norte County with Brookings or Grants Pass, there are intercity passenger transportation needs between communities in Oregon (such as Brookings, Grants Pass, and Klamath Falls) that could potentially be served via the US 101 and US 199 corridors in a manner that incidentally serves trips between Del Norte County and Oregon destinations. As the preponderance of population and route mileage for such a service is within Oregon, developing and funding such service is appropriately the purview of Oregon jurisdictions. However, RCTA and Caltrans should be open to consideration of a joint program, so long as it is an effective use of local and state-managed funding sources.

CAPITAL PLAN

Purchase Additional Vehicle for Expanded Gasquet/Hiouchi Service

The initial once-per-week Gasquet/Hiouchi service could be accommodated with an existing RCTA vehicle. Expanding to three or five days per week would require an additional vehicle which would cost approximately \$70,000.

Bus Stop Improvements on Gasquet/Hiouchi Route

Bus stops will need to be established on the Gasquet/Hiouchi route. These should focus on stores and other existing establishments where passengers can wait within existing facilities. It is assumed that no physical improvements will be necessary beyond the provision of bus stop signs. A budget of \$2,000 is identified for this purpose.

MARKETING/TICKETING/INFORMATION SERVICES PLAN

Marketing/Information Services

As outlined in Chapter 6, RCTA should provide easily accessible information regarding service availability and schedules. Schedules should be easily available, and should be frequently monitored for accuracy, particularly in regards to connections with other services. Schedules should be available in social service offices, senior centers, lodging, grocery stores, and on the internet.

Participate in Interline Ticketing Program

This program would cost RCTA \$100 annually and could garner additional ridership with very little effort. It is recommended this alternative be implemented as soon as possible. The first step would be for RCTA to enter into a sponsorship arrangement with an NBTA member carrier. Greyhound would be the likely candidate as the company operates in Humboldt County. This would allow RCTA to sell tickets to intercity destinations on the sponsoring carrier's ticket stock from destinations originating on the sponsored carrier's operating lines. RCTA would also honor tickets of NBTA member carriers from intercity points of origin terminating on the sponsored carrier's operating lines. The sponsoring NBTA member carrier would secure all applicable reclaims.

Trip Planning Software such as Google Transit

This is another relatively low cost marketing tool which is particularly applicable for intercity passengers. RCTA should implement this option as soon as possible.

Marketing for New Gasquet/Hiouchi Route

The initiation of a new service warrants a focused marketing effort. The following marketing strategies are recommended to support a future Gasquet/Hiouchi route:

- ♦ Posters in stores and other activity centers along the route providing the schedule, information on trips that can be accomplished with the service, and the phone number and website address for further information.
- ♦ Prominent (such as quarter-page) ads in local papers for at least two weeks prior to initiation of service.
- ♦ Mailings to all residences or postal boxes along the new route.
- ♦ Installation of bus stop signs.
- ♦ Free rides during the first two weeks of service.
- ♦ Provision of news release describing the first day of service.

A budget of \$3,000 should be allocated for this effort.

FINANCIAL PLAN

The first phase of this plan (when financially feasible) will be to provide one-day-a-week Gasquet/Hiouchi service. This will require \$8,770 per year in additional annual costs for the service. Subtracting \$1,900 in revenues, overall subsidy requirements will increase by an estimated \$6,870 per year. In addition, \$5,000 in “start up” costs will be required for bus stop improvements and marketing. It is assumed that an existing vehicle could be used to provide this service.

If local financial resources expand in the future, under this plan service would expand to provide Gasquet/Hiouchi service three times per day three days a week, as well as to provide a mid-day Route 20 round-trip between Crescent City and Arcata. In total, these services would increase RCTA annual operating costs by \$96,500. Subtracting \$30,100 in revenues generated by the additional 11,300 passenger-trips, required subsidy would increase by \$66,400. Expansion to three days per week on US 199 would also require the purchase of an additional vehicle, incurring a capital cost of approximately \$70,000.

Under current financial conditions, RCTA is more likely to reduce services than to expand. It is recommended that the services outlined in this plan be implemented when and if financial conditions improve.

ALTERNATIVES CONSIDERED BUT NOT INCLUDED IN PLAN

In evaluating alternatives, it is important to determine which potential solutions are not effective. The following alternatives were dismissed because they did not meet performance standards or did not provide the desired benefit:

- ♦ **Curry Public Transit Reduces Service to Twice Daily, Monday through Friday:** This alternative would result in a slight cost reduction for Curry Public Transit, but would negatively impact the scheduling of drivers for the remainder of their fixed routes and would result in a reduction in ridership.
- ♦ **Redwood Coast Extends Route 20 to Brookings Twice Daily:** The per-passenger subsidy for RCT to extend service to Brookings would be exorbitant at \$96.93. Even if Curry Public Transit is unable to continue this service, it would be infeasible for RCT to provide this service.
- ♦ **RCTA Connections for Service to Grants Pass:** All of the options for providing service along the US 199 corridor into Oregon resulted in per-passenger subsidies ranging from \$55.83 to \$62.70—far above the recommended standard of \$10.00 per passenger trip. The low ridership and high cost of these services make them infeasible.
- ♦ **Extend Greyhound to Grants Pass Daily:** This alternative would not generate enough ridership to make it feasible, and was therefore dismissed.
- ♦ **Provide Night Run to Arcata:** This alternative was intended to address the concern that passengers wishing to get from intercity locations to Crescent City are “stranded” in Arcata. However, providing an additional night time run would require a subsidy per passenger trip of \$18.33, which exceeds the recommended subsidy of \$10.00 per passenger trip.