

**Redwood Coast Transit  
Short Range Transit Plan**

**Technical Memorandum #2:  
Phase I Findings**

**ADMINISTRATIVE DRAFT FOR REVIEW**

**January 17, 2019**

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## Introduction

The Short Range Transit Plan (SRTP) is a blueprint for Redwood Coast Transit service over the next five years. This Technical Memorandum #2 provides an overview of the findings from Phase 1, which includes Tasks 1 through 4 of the SRTP process. The sections include:

1. System Overview
2. Public Involvement, Market Research, & Transit Needs
3. Mission Statement, Goals, and Performance Standards
4. Candidate Service and Capital Improvements

Phase II of the SRTP process builds on the findings from Phase I and will evaluate and develop a five-year plan for service alternatives, capital assets, system finances, marketing activities, Coordinated Transportation Services Agency activities, and the management model.

# Section 1: System Overview

## STUDY AREA CHARACTERISTICS

### Governance

The Board of Supervisors is the governing body for Del Norte County. The Board of Supervisors enacts ordinances and resolutions, adopts the annual budget, approves contracts, appropriates funds, and appoints certain County officers and members of various boards and commissions.

Crescent City is the county seat and the only incorporated city in Del Norte County. Crescent City uses a Council-Manager form of municipal government. Councilmembers are elected to four-year terms. RCTA is governed by a five-member board of directors composed of two Board of Supervisors (appointed) and two Crescent City City Councilpersons, plus one “at-large” community member appointed by the other 4 Board members. RCTA is an independent Joint Powers Authority (JPA) but does utilize the County for its accounting needs.

### Geography & Climate

**Figure 1: Project Area Context**



Del Norte County is California's northernmost coastal county (Figure 1). The land area covers approximately 1,006 square miles. Crescent City covers approximately 2 square miles of land and the greater Crescent City area covers 59 square miles. The mouth of Elk Creek, where it flows into the Pacific Ocean, is in Crescent City. The nearest city is Brookings, Oregon, approximately 20 miles to the north.

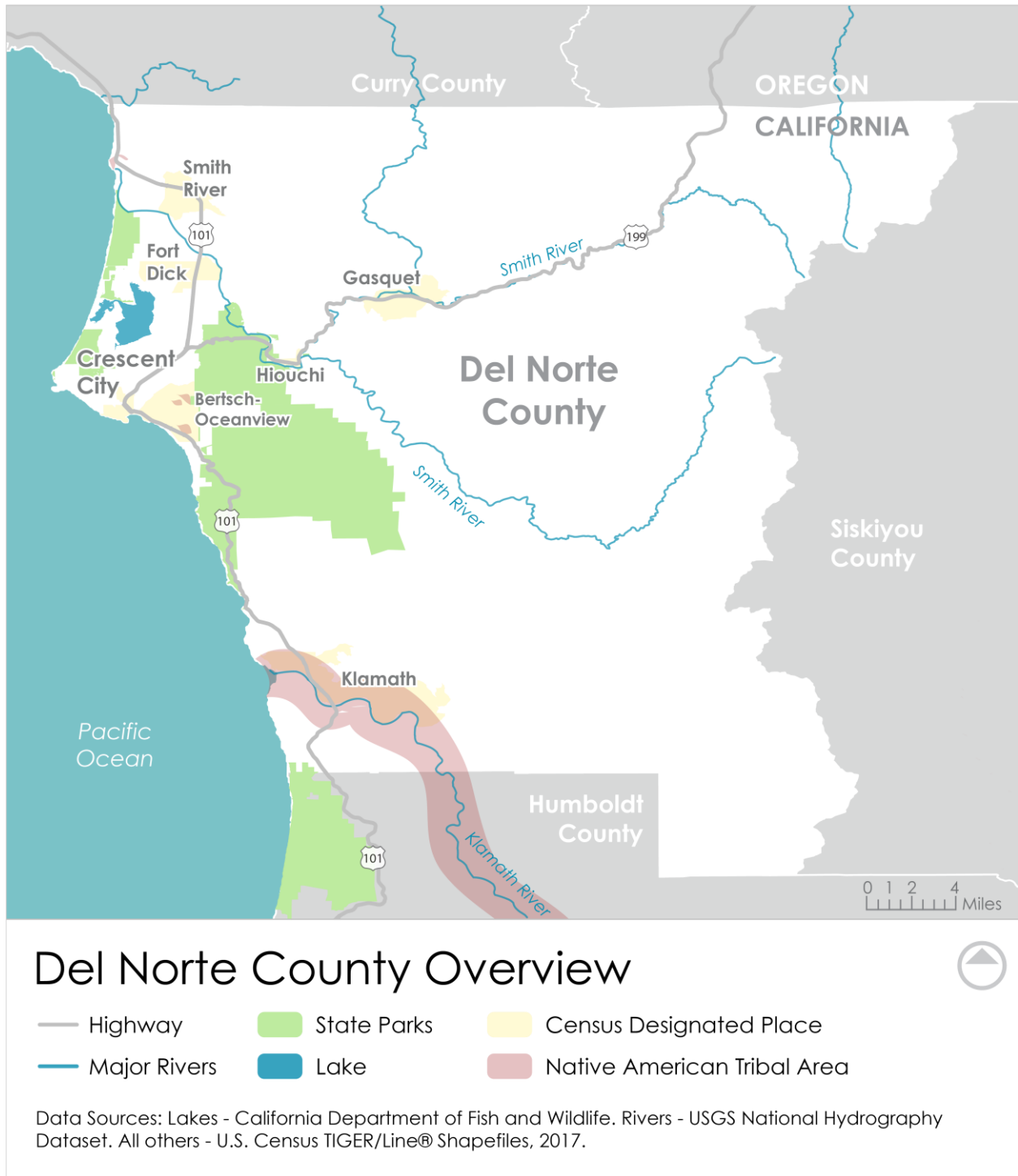
Del Norte County is bounded by Curry County in Oregon to the north, Siskiyou County to the east, Humboldt County to

the south, and the Pacific Ocean to the west (Figure 2). Crescent City is the county seat and is located on the coast approximately 20 miles along Highway 101 from the Oregon border. Regionally, Crescent City is located approximately 85 miles north of Eureka in Humboldt County, about 26 miles south of Brookings, Oregon, and 83 miles southwest of Grants Pass, Oregon and Interstate 5.

The main north-south route through Del Norte County is US Highway 101, which provides access to coastal towns and cities to the north and south. Del Norte County has two main routes providing access to inland communities: State Route, or SR 197/US Highway 199 to Hiouchi and Gasquet, and Route 169 to Klamath Glen. SR 197/US Highway 199 connects US Highway 101 to the Interstate 5 in Oregon.

The county's topography includes inland mountain ranges of coniferous forests, low coastal mountain ranges with temperate forests and the Redwood State and National Parks, and rugged coastlines with gray sand beaches on the Pacific coast. The climate of Del Norte County is consistently mild along the coast, becoming more variable inland. In Crescent City and along the coastal fringe, there is minimal temperature fluctuation. Coastal daytime temperatures average 45-55 degrees during winter months. Temperatures increase to 55-65 degrees during mid-summer and early fall months, with higher temperatures when coastal fog disperses. Inland, temperature differences are more marked. Del Norte County/Crescent City area's annual rainfall generally ranges between 70 - 80 inches, with the heaviest rainfall occurring from November through March. Weather plays a factor in transit operations in winter.

Figure 2: Map - Del Norte County Overview



## Demographics & Socioeconomics

### Population

The U.S. Census 2017 population estimates Del Norte County's population at 27,470, which is a 4% decrease from the County population in 2010.

Comparatively, the State population increased by 6% during the same period.

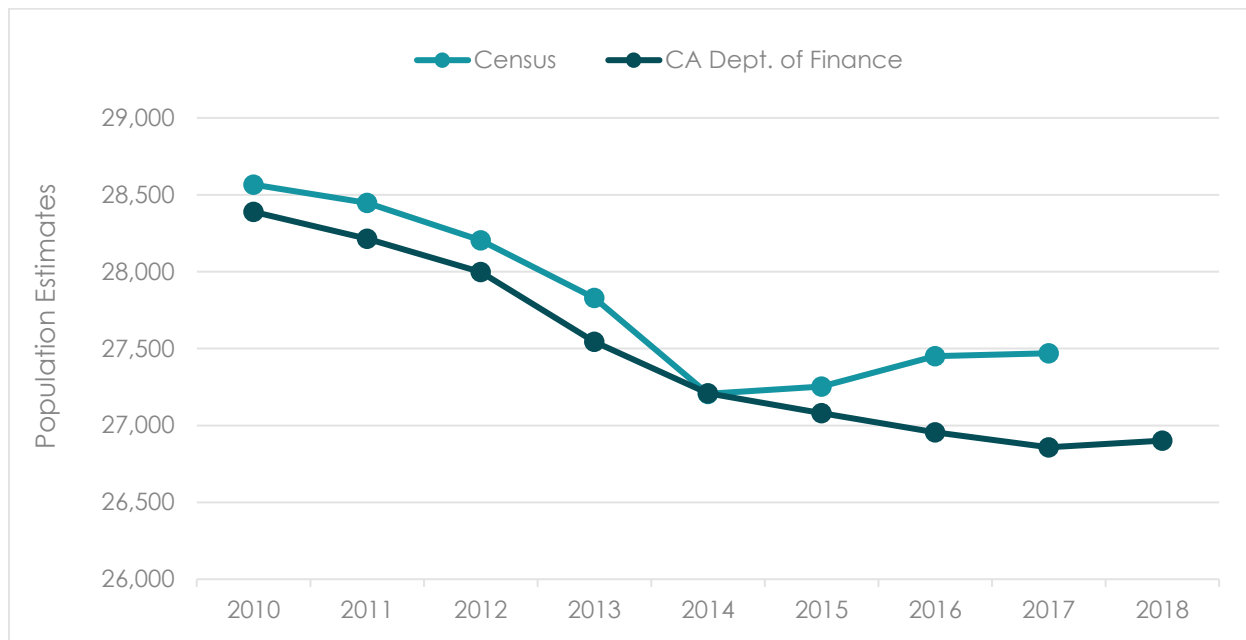
The California Department of Finance (CA DOF) population estimates are similar to the Census estimates and show a 6.7% decrease for Crescent City between January 1, 2017 and January 1, 2018 (Figure 3). Despite the falling population, the CA DOF estimates that the total County population will hold relatively steady over the next 10 years (Table 1).

**Table 1: County Population**

Del Norte County	
<b>U.S. Census</b>	
Estimated Population July 1, 2017	27,470
Estimated Population July 1, 2010	28,566
Percent change 2010 to 2017	-4%
<b>CA Department of Finance<sup>1</sup></b>	
Population Estimate 2017	27,060
Population Estimate 2018	27,221
Percent change 2017 to 2018	0.6%
Population Estimate 2028	27,450

<sup>1</sup> Source: Demographic Research Unit, California Department of Finance, January 2018

**Figure 3: County Historic Population Change**



Source: U.S. Census Bureau, Population Division. Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2017.  
 Source: Demographic Research Unit, California Department of Finance, January 2018

The population of Crescent City, the only incorporated city in the County, includes the institutionalized population at Pelican Bay State Prison. According to the American Community Survey 2013-2017 5-year estimates, the group quarters population in Crescent City is approximately 2,865 (+/- 235).<sup>2</sup> The California Department of Corrections and Rehabilitation (CDCR) reports that in March of 2018 there were 2,682 inmates.<sup>3</sup>

Table 2 shows the description and population of the seven census tracts within the County. Figure 4 shows a map of the total population and population density of each census tract. Downtown/historic Crescent City and adjacent tract to the north contain the highest densities of residents in the County.

The Crescent City County Subdivision (Crescent City CCD) consists of the greater Crescent City area, as defined by the U.S. Census. The Crescent City CCD includes census tracts 1.01, 1.02, 1.04, 1.05, and 2.01, and the communities of Crescent City, Fort Dick, Bertsch-Oceanview (eastern Crescent City), and Elk

<sup>2</sup> American Community Survey 2013-2017 5-year Estimates

<sup>3</sup> [https://www.cdcr.ca.gov/Facilities\\_Locator/docs/SB601/PBSP-SB601-Quarterly-Statistical-Report.pdf](https://www.cdcr.ca.gov/Facilities_Locator/docs/SB601/PBSP-SB601-Quarterly-Statistical-Report.pdf)



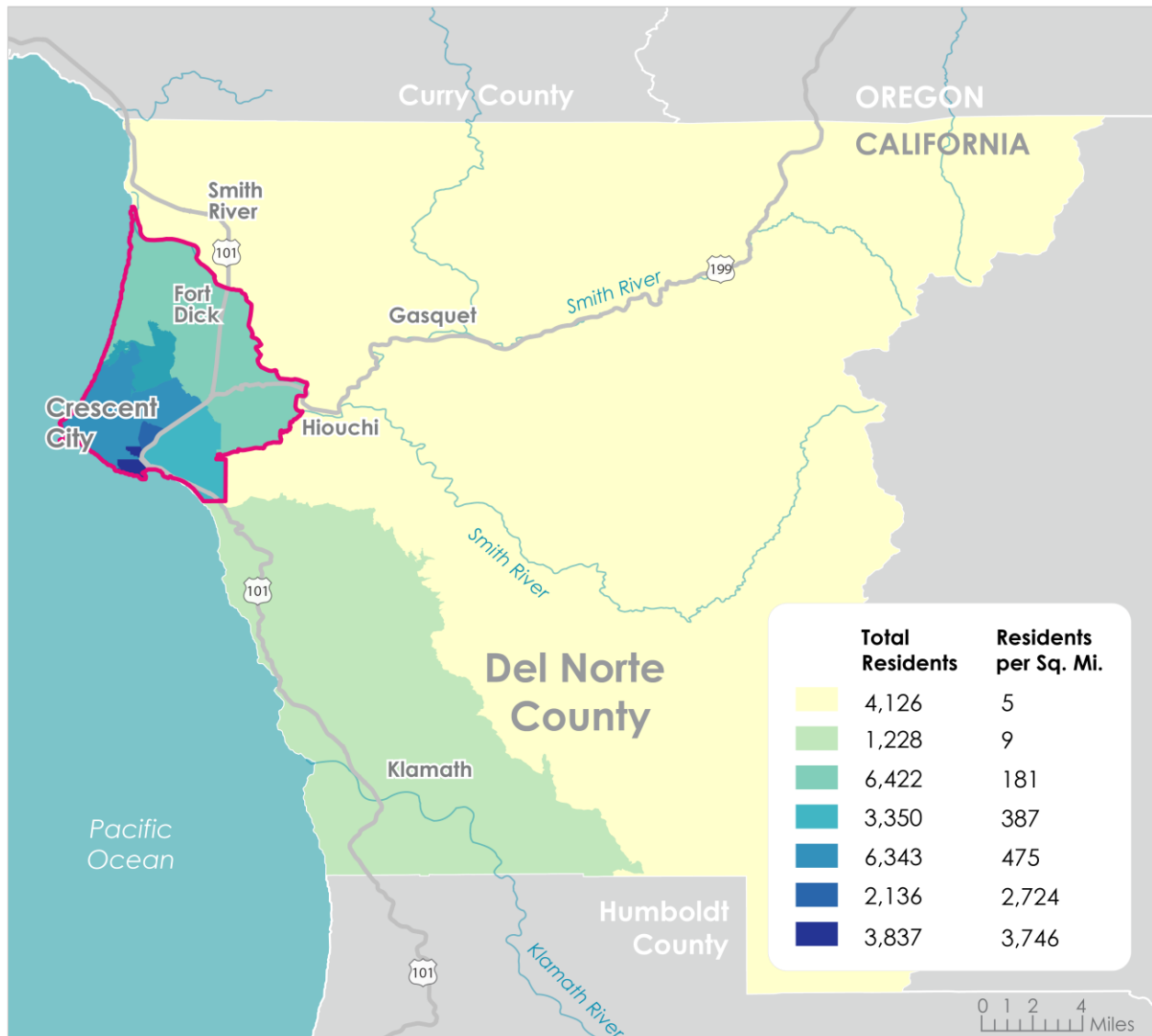
Valley. The land area of 59 square miles is 6% of the County land area, yet contains 80% of the residents (22,088). The average population per square mile of the Crescent City CCD is 372. The rest of the County has a very low population density.

**Table 2: Census Tract Description and Population**

Census Tract	Description	Area Sq. Miles	Pop.	Pop. per Sq. Mile
1.01	Downtown/Historic Crescent City	1.0	3,837	3,746
1.02	Eastern Crescent City, Elk Valley	8.7	3,350	387
1.04	North of Crescent City, Sutter Coast Hospital Area	0.8	2,136	2,724
1.05	Northwest Crescent City	13.4	6,343	475
2.01	Fort Dick, Crescent City, Pelican Bay State Prison, Lake Earl	35.5	6,422*	181
<b>Crescent City County Subdivision</b>		<b>59.3</b>	<b>22,088</b>	<b>372</b>
2.02	Eastern County, includes Smith River, Gasquet, Hiouchi	804.5	4,126	5
2.03	Southwest County, includes Klamath	142.4	1,228	9
<b>Del Norte County</b>		<b>1006.2</b>	<b>27,442</b>	<b>27</b>

\* Contains approximately 2,865 residents living in group quarters, presumably Pelican Bay State Prison.

**Figure 4: Map - Population**



## Del Norte County Residents Population



— Highway    — Major Rivers     Crescent City County Subdivision

Data Sources: Population - U.S. Census American Community Survey 2013-2017 Estimates.  
 Rivers - USGS National Hydrography Dataset. All others - U.S. Census TIGER/Line® Shapefiles, 2017.

## Housing

**Table 3: Housing**

	Crescent City	Del Norte County
Total Housing Units	1,869	11,326
Occupied Housing Units	1,627	9,443
Owner Occupied	501 (31%)	5,748 (61%)
Renter Occupied	1,126 (69%)	3,695 (39%)
Avg. Household Size - Owner	2.33	2.51
Avg. Household Size - Renter	2.19	2.61

Housing units in Crescent City are more likely to be renter-occupied. There are approximately 1,627 occupied housing units in Crescent City, 69% of which are renter-occupied. The County overall contains 9,443 occupied housing units, 39% of which are renter-occupied. The average household sizes of owner- and renter-occupied units in Crescent City are 2.33 and 2.19, respectively.<sup>4</sup>

<sup>4</sup> U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates.

## Age, Gender, & Ethnicity

**Table 4: Age, Gender, & Ethnicity**

	Crescent City	Del Norte County	CA
<b>Age</b>			
Persons under 5 years, percent	3%	6%	6%
Persons under 18 years, percent	10%	22%	23%
Persons 65 years and over	8%	18%	14%
<b>Gender</b>			
Female persons	26%	46%	50%
<b>Ethnicity</b>			
White alone	78%	79%	72%
Black or African American alone	8%	3%	7%
American Indian & Alaska Native	3%	9%	2%
Asian alone	4%	3%	15%
Native Hawaiian and Other Pacific Islander alone	0.2%	0.2%	0.5%
Two or More Races	4%	5%	4%
Hispanic or Latino	36%	19%	39%

The percentage of the Crescent City population under the age of 18 (10%) and the percentage that is female (26%) is much lower than the County overall. This is likely due to the relatively large incarcerated population at Pelican Bay State Prison. Eight percent of Crescent City and 18% of the overall County population are over the age of 65. Comparatively, 14% of the State population is over the age of 65.<sup>5</sup>

A large majority of both the Crescent City and County population identify as White and the percentages are slightly higher than the State (72%). Crescent City has an above average percentage of people who identify as African American compared to the County. The County has an above average percentage of people who identify as Native American than both Crescent City

<sup>5</sup> U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates.

and the State, likely due to the three Native American Tribes that reside in the unincorporated areas of the County.<sup>6</sup>

### Native American Tribes

There are four federally recognized Native American tribes with their tribal headquarters or Rancherias in Del Norte County, including the Yurok Tribe, Elk Valley Rancheria, Tolowa Tribe of the Smith River Rancheria, and Resighini Rancheria. Members of these tribes contribute greatly to the culture and economy and are essential stakeholders in transportation planning and programming in the Del Norte region.

Figure 2 shows where the tribal areas are located. Table 5 shows the estimated population for the tribal areas, although it should be noted that not all residents of the areas are members of the tribe and not all tribal members live within the federally recognized tribal area. Due to the small population, the high margin of error is shown.<sup>7</sup>

**Table 5: Native American Tribal Area Populations**

	Population	Margin of Error
Yurok Tribe	856	+/-139
Elk Valley Rancheria	101	+/-37
Tolowa Tribe of the Smith River Rancheria	133	+/-62
Resighini Rancheria	13	+/-10

### Transit Dependent Populations

Certain demographics are more likely to be dependent on public transportation for some or all of their trips, dependent on factors such as access to a vehicle and ability to drive safely. This section describes the typical transit dependent populations in Del Norte County based on information from the U.S. Census. Census data is derived from the American Community Survey 5-year estimates from 2012-2016, unless otherwise noted.

<sup>6</sup> U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates.

<sup>7</sup> 2013-2017 American Community Survey 5-Year Estimates

## Older Adults & People with Disabilities

Compared to the State, Del Norte County has a high proportion of older adults (13% vs 17%). Table 6 below compares age and disability status statistics for the noninstitutionalized<sup>8</sup> population in Crescent City, the larger Crescent City area<sup>9</sup>, Del Norte County, and California. Older adults are more likely to be transit dependent because of physical, psychological, and socioeconomic factors related to aging that limit their mobility.

**Table 6: Older Adults & People with Disabilities**

	Crescent City	Crescent City CCD*	Del Norte County	CA
Total Noninstitutionalized population	3,645	19,252	24,148	38,151,997
<b>Older Adults</b>				
Age 65-74	8%	10%	10%	7%
Age 75 and older	6%	7%	7%	5%
<b>Total over 65</b>	<b>14%</b>	<b>16%</b>	<b>17%</b>	<b>13%</b>
<b>Percent with a disability</b>				
Total population	30%**	22%	23%	11%
Age 65-74	--	45%	40%	24%
Age 75 and older	--	65%	65%	52%

\* The US Census Crescent City County Subdivision. Includes the communities of Fort Dick, Bertsch-Oceanview, and the Elk Valley Rancheria.

\*\* Margin of error is relatively high at +/-6%

-- Margins of error are too high to determine

People with disabilities are another demographic that have a high propensity of transit dependence for similar reasons to older adults. The U.S. Census American Community Survey asks six questions to determine disability status and type and defines disabilities status by whether an individual has limitations that hinder participation at school, work, home, or in the community.

The population of Del Norte County is twice as likely to have a disability compared to the statewide average (23% County vs. 11% CA). The noninstitutionalized population within the City of Crescent City has an

<sup>8</sup> Excludes the incarcerated ("group quarters") population at Pelican Bay State Prison

<sup>9</sup> Includes the communities of Fort Dick, Bertsch-Oceanview, and the Elk Valley Rancheria.

exceptionally high rate of disability (30%), although it should be noted that the margin of error is relatively high (+-6%) because of the small population.

In general, older adults are much more likely to have a disability and the older adult populations in Del Norte County are especially so. Statewide, 24% of people aged 65 to 74 identify as having a disability. Comparatively, 40% of people in Del Norte County and 45% of people in the Crescent City area of the same age group reported a disability. Similar disparities exist for the population aged 75 and older.

## Income & Poverty

People with low incomes and those living in poverty are more likely to be dependent on transit for getting around. The onboard survey (described on page 47) showed that approximately 72% of RCT passengers have an annual household income under \$20,000, which is less than half of the median household income for Del Norte County.

The County overall has a relatively high incidence of poverty with 23.2% of residents with annual incomes below the poverty level, compared to 15.1% statewide. Figure 5 shows the percentage of the resident population living in poverty for each census tract. The Crescent City and Klamath areas have especially high poverty rates of 33% and over.<sup>10</sup>

**Table 7: Poverty Status**

	Crescent City	Crescent City CCD*	Del Norte County	CA
Population for whom poverty status is determined**	3,697	18,786	23,970	38,242,946
% below poverty level	31.0%	23.6%	23.2%	15.1%

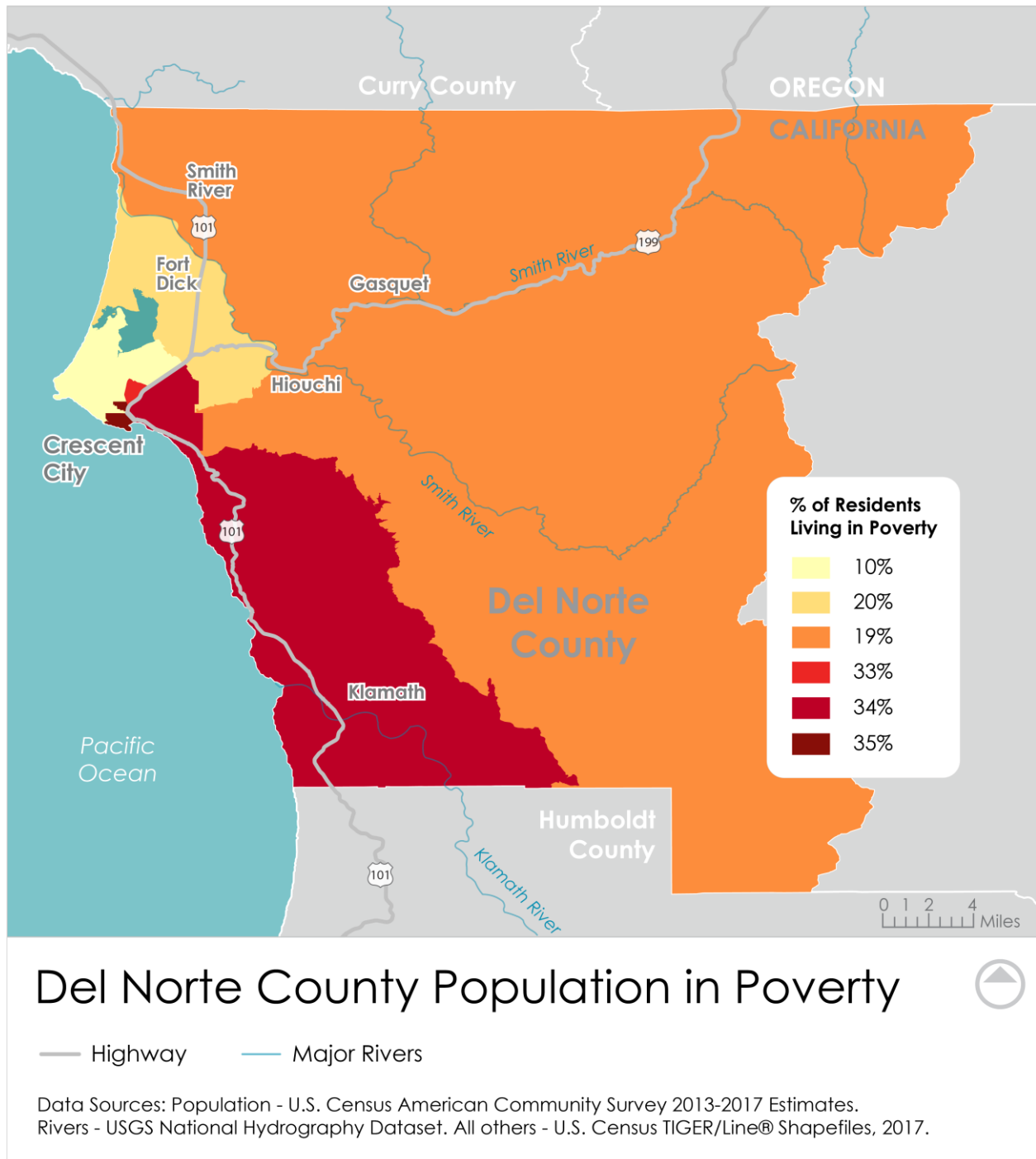
\* The US Census Crescent City County Subdivision. Includes the communities of Fort Dick, Bertsch-Oceanview, and the Elk Valley Rancheria.

\*\* Does not include group quarters population, including Pelican Bay State Prison

\*\* Margin of error is relatively high at +- 7%

<sup>10</sup> 2013-2017 American Community Survey 5-Year Estimates. Poverty status, as defined by the U.S. Census, is dependent on family size and composition and the combined annual pre-tax income. The U.S. Census does not determine poverty status for persons living in group quarters.

Figure 5: Map - Poverty



## Youth

Middle and high school aged children are another demographic that is likely to be transit dependent due to lack of a driver’s license or access to a vehicle.



There are approximately 2,625 youth aged 10 to 17 living in Del Norte County, 2010 in the Crescent City area,<sup>11</sup> and 320 in the City of Crescent City.<sup>12</sup>

There is a robust school transportation program operated by the Del Norte County Unified School District (DNUSD), which includes eight elementary schools, one middle school, and two high schools. Approximately 2,200 students (60% of total enrollment) ride the school bus to and from school, including those coming from areas outside of Crescent City, such as Gasquet, Smith River, and Klamath. School bus passes are free for all students, 72% of which qualify for the free or reduced lunch program.

The DNUSD school bus program does a great job of transporting students to their schools, but there may be opportunities for RCTA to serve students as well. The DNUSD currently has grant funding to transport students in after school programs living in the Crescent City area. However, they are unable to accommodate students in after school programs that need to travel home to Gasquet, Smith River, and Klamath. There may be an opportunity for RCTA to serve these students. Additionally, the DNUSD restricts bus service to the high school to students residing farther away than two miles from the high school and 1.5 miles for middle school students. There may also be an opportunity for RCTA to serve students that live too close to the schools to receive yellow bus service, but too far to comfortably walk or bike, especially during inclement weather. Another potential youth market is students attending charter schools<sup>[RK1]</sup>.

## Commute Behavior and Vehicle Availability

There are approximately 8,200 workers aged 16 and older in Del Norte County.<sup>13</sup> Approximately 74% of workers drove alone to work, which is similar to the percentage for all of California. Workers in the County carpooled at a slightly higher rate of 14.5% than the State (Table 4). A very low percentage of County residents commute via public transportation (0.6%, +/-1% margin of error).

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<sup>11</sup> Crescent City County Subdivision. Includes the communities of Fort Dick, Bertsch-Oceanview, and the Elk Valley Rancheria.

<sup>12</sup> High margin of error

<sup>13</sup> This section on Commute Behavior and Vehicle Availability uses data from the 2013-2017 American Community Survey 5-Year Estimates.

**Table 8: Commute Mode**

	Del Norte County	CA
Drove alone	73.7%	73.6%
Carpooled	14.5%	10.4%
Public transportation	0.6%	5.2%
Walked	3.6%	2.7%
Bicycle	1.1%	1.1%
Taxicab, motorcycle, or other means	0.8%	1.5%
Worked at home	5.6%	5.6%

Nearly all workers (92.5%) who reside in Del Norte County also work in the County and 5.6% work out of the state, presumably in neighboring Oregon.

Approximately 2.4% do not have a vehicle available (+/-1.3% margin of error).

About a fifth of workers leave home for work between 7:30 am and 7:59 am.

Nearly a third of workers leave between 9 am and 11:59 am (Table 9).

**Table 9: Time Leaving for Work**

	Del Norte County
12:00 a.m. to 4:59 a.m.	3.6%
5:00 a.m. to 5:29 a.m.	2.4%
5:30 a.m. to 5:59 a.m.	4.0%
6:00 a.m. to 6:29 a.m.	3.9%
6:30 a.m. to 6:59 a.m.	8.1%
7:00 a.m. to 7:29 a.m.	11.6%
7:30 a.m. to 7:59 a.m.	20.8%
8:00 a.m. to 8:29 a.m.	7.6%
8:30 a.m. to 8:59 a.m.	5.8%
9:00 a.m. to 11:59 p.m.	32.1%

Workers in the County who do not work at home have relatively short one-way commutes. Sixty-two percent have a one-way commute length of less than 15 minutes and 85% have a commute under 25 minutes (Table 10). Statewide, only 22.3% of workers have a commute under 15 minutes and 51.6% of workers have

a commute under 25 minutes. The average travel time to work for County workers is 14.4 minutes, which is half of the statewide average (28.8 minutes).

**Table 10: Travel Time to Work**

	Del Norte County	CA
Less than 10 minutes	34.6%	9.7%
10 to 14 minutes	27.4%	12.6%
15 to 19 minutes	16.4%	14.9%
20 to 24 minutes	7.7%	14.4%
25 to 29 minutes	3.3%	6.0%
30 to 34 minutes	6.5%	15.0%
35 to 44 minutes	1.1%	6.9%
45 to 59 minutes	1.5%	8.7%
60 or more minutes	1.5%	11.8%
Mean travel time to work (minutes)	14.4	28.8

## Employment & Labor Force

Between 2011 and 2016 the number of people in the labor force in Del Norte County decreased steadily, totaling a 10% drop.<sup>14</sup> This decline in labor force precedes the drop in total population in the County, which began in 2014. One factor contributing to the decline in labor force may be the aging of the population into retirement age.

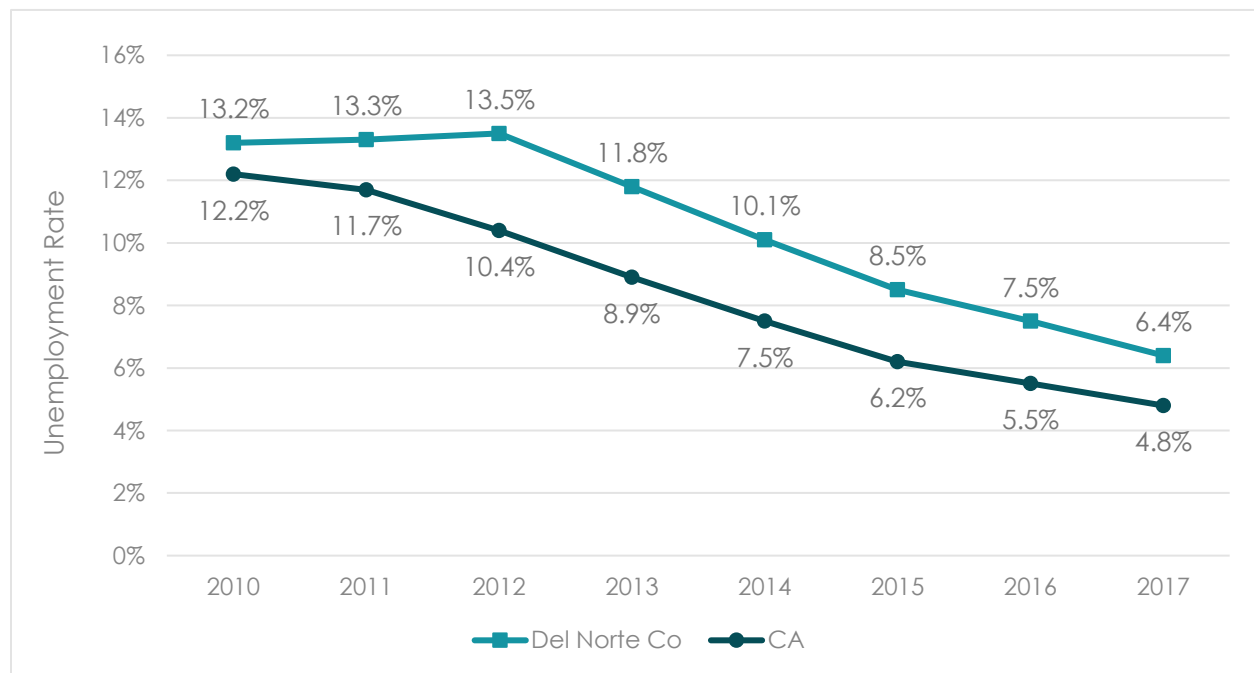
The unemployment rate in Del Norte County is 6.4%, which is higher than the statewide average of 4.8% and neighboring Humboldt County (4.2%).<sup>15</sup> The unemployment rate has steadily dropped since 2010, in parallel with the State's rate (Figure 6).

<sup>14</sup> Includes all individuals over the age of 16, not in the military, and not institutionalized, both employed and unemployed. California Employment Development Department.

<sup>15</sup> Employment Development Department. EDD - Labor Market Information Division. Updated June 26, 2018. Comprises all civilians 16 years and over who did not work during the survey week, who made specific efforts to find a job within the past four weeks, and who were available for work (except for temporary illness) during the survey week.

In 2017, the top three industries that provide the most jobs in the County are local government (18% of jobs), state government (14%), retail (11%), and Accommodation and food services (9%).<sup>16</sup> Additionally, if Native American organizations are considered as one industry, they account for 7% of jobs in the County.<sup>17</sup>

**Figure 6: Unemployment Rate**



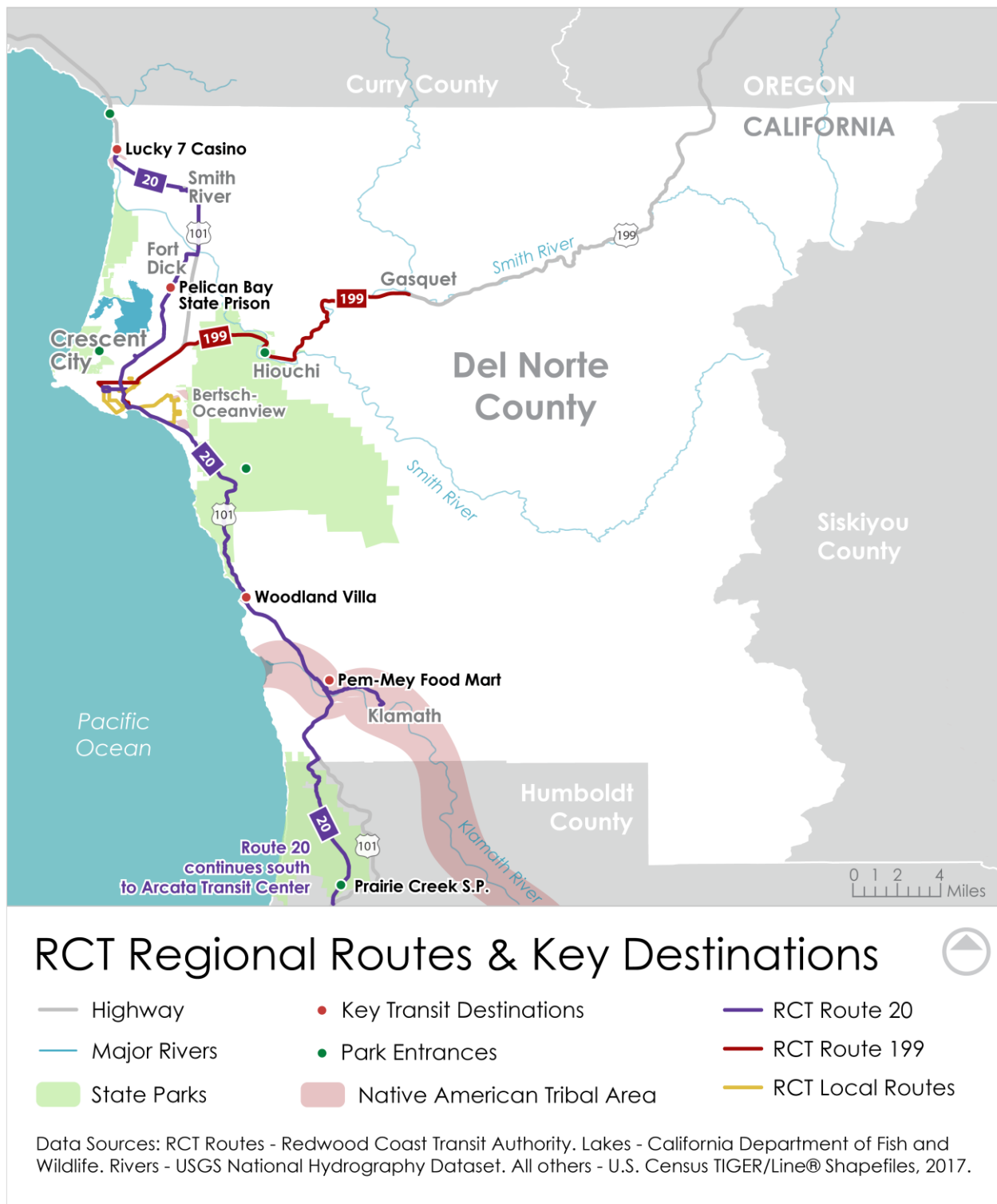
## Key Destinations

The maps on the following two pages (Figure 7 and Figure 8) show Redwood Coast Transit fixed-routes and key destinations for transit trips. These include vital services, such as medical and grocery destinations, schools, employers, and connections to neighboring transit services. The RCT routes are described in detail in the next subsection.

<sup>16</sup> U.S. Bureau of Economic Analysis, "CAEMP25N Total Full-Time and Part-Time Employment by NAICS Industry 1," 2017.

<sup>17</sup> Dunn and Bradstreet's Business Database, CED, February 2018.

Figure 7: Map - Key Transit Destinations - County Level



**Figure 8: Map - Key Transit Destinations - Crescent City Area**



## Crescent City Area - Key Transit Destinations

- Redwood Coast Transit Fixed-Routes
- Streets
- Key Transit Destinations

**Note: RCT routes current as of July 2018. Includes all local routes: 1, 2, 3, 4 and partial regional routes 20 and 199**

Data Sources: RCTA Fixed-Routes - Redwood Coast Transit Authority. Key Destinations - USGS & Google. All others - U.S. Census TIGER/Line@ Shapefiles, 2017.

## TRANSIT SERVICES

### Redwood Coast Transit

#### Organization & Management

Redwood Coast Transit Authority (RCTA) was formed in June 2004 to provide public transit services in Del Norte County. RCTA is a joint powers authority entered into by the County of Del Norte and the City of Crescent City. Each entity appoints two members of their governing boards to the RCTA Board of Directors. These members appoint one additional at-large member of the general public. The Board of Directors makes all policy decisions regarding the transit system. RCTA has hired a private contractor, First Transit, Inc., to manage and conduct day-to-day operations and maintenance. Since 2016, Herron Consultants & TMTP Consulting (Dan Herron and Joe Rye) have partnered to manage RCTA under a contract with the Board of Directors.

Redwood Coast Transit Authority (RCTA) is governed by a five-member Board of Directors, comprised of two members of the County Board of Supervisors and two City of Crescent City Councilmembers, plus one at large appointed position. The RCTA is managed by a part-time contract (currently performed by two persons) and all operations, and maintenance are contracted out (First Transit is the current contractor and has held the contract for many years). The Del Norte Local Transportation Commission (DNLTC) is the Regional Transportation Planning Agency (RTPA) for the Del Norte County region and the funding agency providing funding for this SRTP/TDP Update.

The Herron/TMTP General Manager contract is a part-time position (less than half time, including travel), and neither party resides in Crescent City. This<sup>[JR2]</sup><sup>[MOU3]</sup> remote, part-time managerial model is fiscally effective but features challenges implementing capital projects, managing daily operations, and implementing a full array of marketing strategies. In the next phase of the project, in Task 9 we will be evaluating management models with sufficient staffing to provide guidance to the RCTA Board on future management staffing levels



First Transit is the operations and maintenance contractor for Redwood Coast Transit Authority and provides almost all the system's personnel and features a full-time local General Manager who is a key manager on-site in Crescent City.

### Local Fixed Routes

Redwood Coast Transit operates four local fixed-routes in the Crescent City area on hourly headways Monday through Saturday. All routes start and end at the Cultural Center, which serves as the Transit Center, at 1001 Front Street. A complete trip on each route takes 25 minutes.

#### Route 1 (Blue) Parkway - El Dorado

operates in a counter-clockwise loop traveling north along US 101 to Washington Boulevard, Washington, El Dorado, and H St. Stops include Safeway, Walmart, and Del Norte High School. Service operates 7:30 am to 6:55 pm Monday through Friday and 8:30 to 6:55 on Saturday.

Figure 9: RCTA Local Routes



#### Route 2 (Red) Inyo –

**Washington** operates in a clockwise loop heading north on A St and Inyo, east on Washington, and then south on 101. Stops include

Del Norte High School, College of the Redwoods, and Walmart. Service operates 7:00 am to 6:25 pm Monday through Friday and 9:00 am to 6:25 pm on Saturday.

**Route 3 (Green) Northcrest** heads north and south along Northcrest Ave to the senior center, with bi-directional service to the senior apartments on Oregon. Destinations north of the senior center up to Standard Veneer Rd can be accommodated with a reservation made over the phone one day in advance.



Service operates 7:00 am to 6:24 pm Monday through Friday and 8:00 am to 6:24 pm on Saturday.

**Route 4 (Orange) Bertsch - Howland Hill Rd** operates in a counter-clockwise loop serving the unincorporated area southeast of the City, including hotels along 101 and the Elk Valley Casino. Service operates 7:30 am to 6:55 pm Monday through Friday and 8:30 am to 6:55 pm on Saturday.

In recent years, on-time performance problems led to retiming and minor alignment changes to Crescent City Local routes. In 2017, in order to reduce RCTA's budget and avoid digging into reserves, a half hour of service was cut on the Crescent City Locals in the early AM and late PM.

## Regional Flex Routes

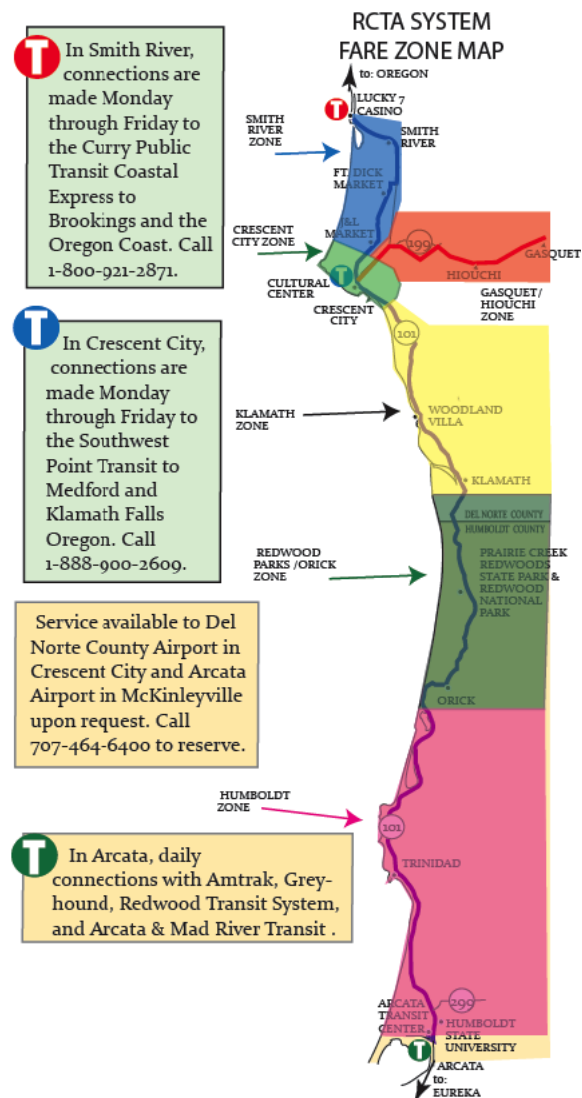
RCTA operates two regional flex route services that connect riders in Crescent City with destinations to the north, east, and south. For these two routes, RCTA will make flag stops on request at any safe location as determined by the driver, in addition to the stops shown on the schedule. There are several parks and beaches along Routes 20 and 199, including Jedediah Smith Redwood and Prairie Creek Redwoods State Park.

Passengers who are ADA-eligible can request that the bus veer up to ¾ of a mile off the regular route within Del Norte County to pick them up and drop them off. Riders must call at least one day in advance to request this service.

**Route 20** is a regional route that runs along the coast from Smith River to the north, Crescent City and Klamath in the middle, and to Arcata (Humboldt County) in the south (Figure 10). In Smith River, Route 20 connects riders with Curry Public Transit Coastal Express which travels to Brookings and the Oregon Coast. In Arcata, Route 20 connects riders with Amtrak, Greyhound, Redwood Transit System, and Arcata & Mad River Transit. Service is available to Del Norte County Airport and Arcata Airport upon request via deviations, although, service to Del Norte County Airport is usually performed by a Dial-a-Ride vehicle to avoid negative impacts on Route 20's on time performance.

Route 20 operates Monday through Saturday. The first run leaves Crescent City heading north to Smith River at 6:05 am. Five runs go between Crescent City

Figure 10: Route 20 Map



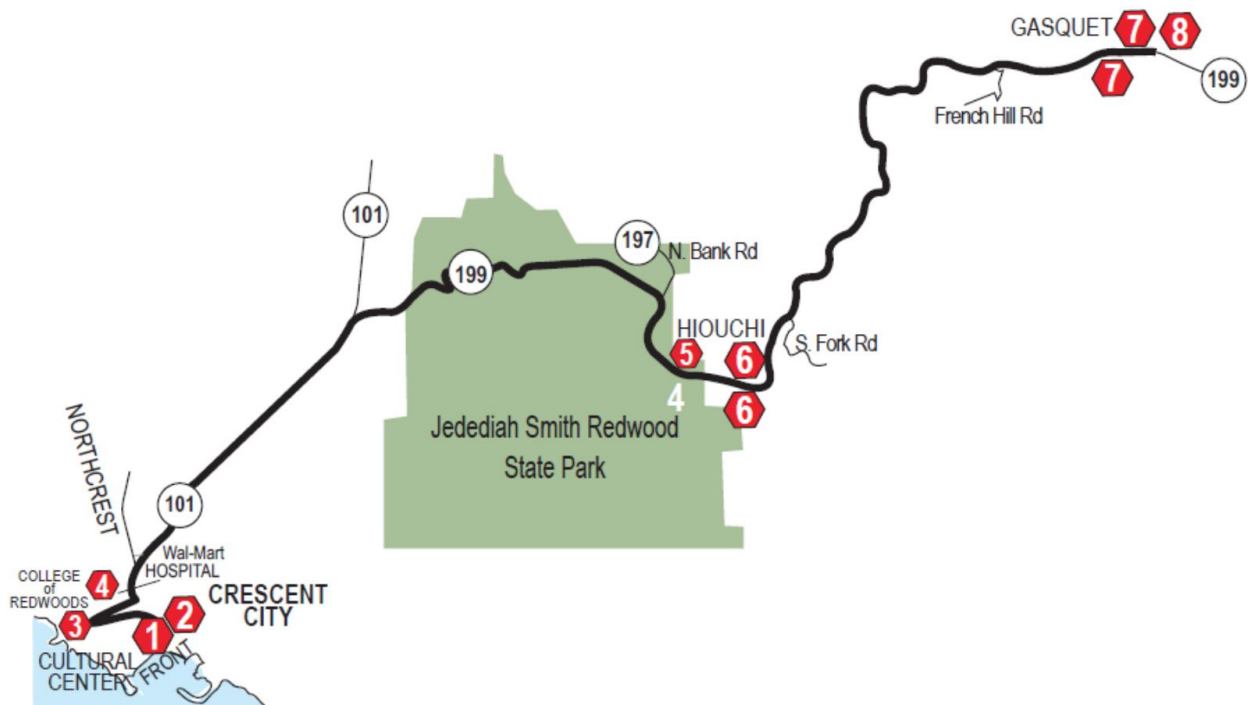
and Smith River, with the last run arriving back to Crescent City at 8:45 pm. Three trips bring riders from Crescent City to Arcata with the last trip arriving to Arcata at 5:10 pm. The segment of the trip between Crescent City and Smith River is approximately 30 minutes. The segment of the trip between Crescent City and Arcata is approximately an hour and 50 minutes.

In 2017, Route 10, which also operated along Highway 101 between Crescent City and Klamath, was eliminated and Route 20 was modified to cover some of the loss in service due to FTA Section 5311(f) funding reductions. A modification, effective July 1, 2018, realigned Route 20 in Crescent City to serve the College of the Redwoods campus for four of the five runs, thus no longer serving stops along Northcrest between 101 and Washington for all but the earliest run heading north and latest run heading south. Changes to Route 20 are discussed further in the following section regarding Greyhound Interlined Services.

**Route 199** was implemented in July 2009 to provide service between Crescent City and the small unincorporated communities of Hiouchi and Gasquet to the northeast along U.S. Route 199 (Figure 11). For the last few years three round trips are operated in each direction in the morning, midday, and late afternoon Monday through Saturday.

Stops include destinations in Crescent City, the Jedediah Smith Redwoods State Park in Hiouchi, and the Smith River National Recreation Area in Gasquet. A one-way trip in either direction is approximately 40 minutes. In 2017, Route 199 was modified to begin serving local bus stops in Crescent City (along Northcrest and Washington, including Wal-Mart) in both directions. On July 1<sup>st</sup>, 2018, Route 199 was rerouted to serve the College of the Redwoods for all trips.

Figure 11: Route 199 Map



## Greyhound Interlined Service

RCTA and Greyhound became interline partners in December 2015 and offer reciprocal ticketing for passengers wishing to travel south beyond Arcata and vice versa. Customers wanting to travel to or from Crescent City, or other Route 20 Del Norte County destinations, are able to plan their travel and purchase tickets online at Greyhound.com. Monthly fare reconciliation occurs between RCTA and Greyhound. Under terms of the partnership, RCTA receives its regular fare, less booking fees of about 10% when a Greyhound ticket is used. RCTA, through its contractor, First Transit, also sells tickets from the RCTA office at 140 Williams Drive in Crescent City. When a passenger purchases a Greyhound ticket, they are assured of having a seat for both the RCT and Greyhound portions of the trip. RCTA receives a 10% commission on Greyhound tickets sold. Neither Redwood Coast Transit nor Greyhound have a physical presence at the Cultural Center. The monthly Greyhound reconciliation process adds to the workload of both First Transit and RCTA part-time managers.

Route 20 began operating in 2005 to replace the loss of Greyhound bus service to the Del Norte region. In February 2011, Night Service was added to Route 20

between Arcata and Crescent City which eventually morphed into RCTA's Greyhound Interline partnership. Providing bus service that meets Greyhounds late night and early AM schedules in Arcata resulted in RCTA Route 20 services being spread over a very long span each day, with a particularly unproductive night run. Route 20 has received FTA 5311(f) funding for many years, but the fund source has deteriorated in the last year or two resulting in lost funding to RCTA. As a result, effective July 1, 2018, RCTA moved the unproductive late night Route 20 run that was interlined with Greyhound Service to a midday trip that leaves Crescent City at 10 am and arrives in Arcata at 11:52. The bus then leaves Arcata at 12:40 pm and arrives in Crescent City at 2:30. Coordination with Greyhound bus schedules is hindered by the early morning and late evening arrivals in Arcata.

### **Dial-a-Ride**

RCTA operates wheelchair accessible curb to curb transportation service (Dial-a-Ride) service throughout the Crescent City area 7:00 a.m. to 7:00 p.m. Monday-Friday and 8:30 a.m. to 7:00 p.m. on Saturday. Rides are booked one to seven days in advance over the phone. Dial-a-Ride is open to the general public, but older adults and people with disabilities pay a reduced fare. Most of the users of DAR are ADA-eligible, although a thorough ADA eligibility determination process has never been developed (see CTSA discussions later).

The dial-a-ride system implemented scheduling software in 2017, including mobile data tablets in each vehicle.

### **Fares**

Effective September 1, 2017, the one-way cash fare for trips on the four local routes (1-4) within Crescent City is \$1.25 for adults, \$1 for youth, and \$.75 for older adults and people with disabilities.

Route 20 fares are based on five distance zones ranging from \$2 to \$10. Older adults (over age 65) and people with disabilities pay half of the fare. Youth pay \$1.50 for trips within Del Norte County and the regular adult fare for trips beyond. The cash fare for crossing only one zone on Route 199 or 20 is \$2 for adults, \$1.50 for youth, and \$1 for the older adults and people with disabilities.

Transfers are free of charge in one direction to any other equal or lower priced bus route. If transferring to a higher priced route the rider pays the difference in fare. Up to two children under 6 may ride for free accompanied by an adult.

**Table 11: RCTA Fares – September 1, 2017**

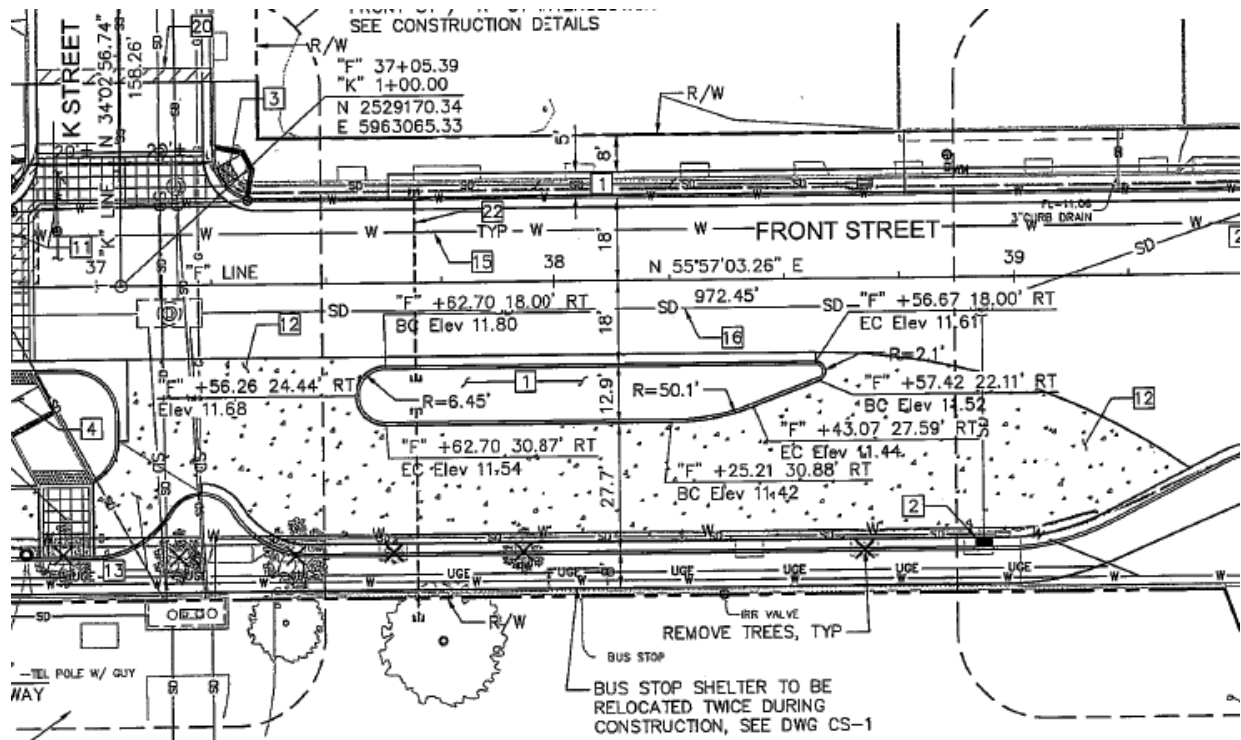
	Adult	Youth	Elderly/Disabled
<b>Local</b>			
Cash	\$1.25	\$1	\$.75
Monthly Pass	\$30	\$20	\$15
<b>Dial-a-Ride</b>			
Cash	\$5	\$5	\$1.75
Punch Pass	\$12	\$12	\$12
<b>County</b>			
Routes 199 & 20 crossing one zone only - Cash	\$2	\$1.50	\$1
Monthly	\$50	\$35	\$25
<b>Regional</b>			
One-way	Varies	Varies	Varies
Monthly	\$90	\$60	\$45

## Transit Center

The Cultural Center at 1001 Front Street in Crescent City serves as the RCTA transit center and all bus routes begin and end service at this location. The City of Crescent City has unfunded streetscape plans to improve access to the Cultural Center bus stop and the adjacent Beach Front Park. Planned improvements include upgraded sidewalks, ADA curb ramps, higher visibility crosswalks, and storm drain upgrades. The plan also includes narrowing front street from four lanes with a turning lane to two lanes for the purpose of adding parking in front of the Cultural Center and a physical barrier protecting the bus bay pullout (Figure 12). However, RCTA staff have noted concerns that the City's current design plans for this area do not address the needs of transit and transit passengers, such as ability to exit the facility going west, and space and

infrastructure for a daily human presence, such as a ticket sale/info booth or kiosk.

**Figure 12: Bus Bay from Planned Front St Improvement Designs**



## Interregional Services

### Amtrak

Amtrak operates rail passenger service and throughway bus throughout the U.S. and into Canada. Del Norte County residents can board Amtrak throughway buses heading east towards Klamath Falls and the Coast Starlight train route in Crescent City (SouthWest Point - at the Cultural Center) and Smith River (Shell Station Lucky 7 Casino Store). Residents can also connect with Amtrak to the south by riding RCTA Route 20 to Arcata where an Amtrak throughway bus picks up passengers heading to the Bay Area.

### Curry Public Transit Coastal Express

RCTA riders can connect to Curry Public Transit via Route 20 in Smith River Monday through Friday. The Curry Public Transit Coast Express route travels to Brookings, Oregon and north along the coast to North Bend, Oregon.

The<sup>[RK4]</sup> Coastal Express morning schedule, which is determined by Curry Public Transit, will get commuters from Del Norte County into the Brookings area either very early or very late in the morning. In the morning, there are two connecting trips between Crescent City and Brookings. The first Route 20 trip leaves the Cultural Center at 6:05 am, connects with the Coastal Express route at 6:35 am in Smith River, and arrives in Brookings at 7:20 am. The second trip leaves Crescent City at 8:30 am, connects with the Coastal Express at 9:05 am, and arrives in Brookings Harbor at 9:35 am, which is just short of Brookings. Neither of these trips are convenient for standard 8 am to 5 pm or 9 am to 6 pm job schedules. As stated in a previous section, about a fifth of workers in Del Norte County leave home for work between 7:30 am and 8 am and another third leave for work between 9 am and noon.

Furthermore, there is only one southbound Coastal Express evening route that connects with Redwood Coast Transit. The commuter leaves Brookings at 6:05 pm, connects with Route 20 at 6:30 pm in Smith River, and arrives in Crescent City at 7:05 pm.

### **SouthWest POINT**

The SouthWest POINT is an intercity bus service operated by the Klamath Shuttle. The route provides daily bus service between Klamath Falls and Brookings, including Gasquet, Hiouchi, Crescent City, and Smith River in Del Norte County. There is one trip per day in each direction. The service connects riders with Amtrak train service in Klamath Falls, the Greyhound bus service in Medford and Grants Pass, Medford (Rogue Valley) Airport, and local transit service in Oregon.

### **Arcata Mad River Transit System (AMRTS)**

The AMRTS is a local bus service in Arcata, California. RCTA passengers can transfer from Route 20 to AMRTS to access various destinations such as 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 RCTA to maximize connections with the Route 20 service between Smith River and Arcata.



## Redwood Transit System (RTS)

Redwood Transit System offers service between Scotia, Fortuna, Loleta, Fields Landing, Eureka, Arcata, McKinleyville, Westhaven, and Trinidad seven days per week. RCTA Route 20 riders can transfer to RTS at the Arcata Transit Center.

## Tribal Transit Services

### Yurok Tribal Transit Service

Yurok Tribal Transit Service (YTTS) provides dial-a-ride service in and around Klamath, Crescent City, Weitchpec, Wautec, and Tulley Creek areas. The service is open to the general public and the fare is \$1 per trip, lower than RCTA.

Dial-a-ride services between Crescent City and Klamath are from 8:30 a.m.-5:00 p.m., Monday-Friday. Additional services to Crescent City are available with a minimum of three passengers, dependent upon availability.

The scheduled pickups to and from Crescent City to Klamath are as follows:

AM (Monday—Friday)

- Pem-Mey in Klamath @ 7:10 am
- Home Depot in Crescent City @ 7:45 am
- Elk Valley Community Center in Crescent City @ 7:50 am
- Yurok Tribal Office in Klamath @ 8:23 am

PM (Monday—Friday)

- Yurok Tribal Office in Klamath @ 5:05 pm
- Elk Valley Community Center in Crescent City @ 5:38 pm
- Home Depot in Crescent City @ 5:45 pm
- Yurok Tribal Office in Klamath @ 6:15 pm

Services in Weitchpec, Wautec, and Tulley Creek areas, are provided Monday to Friday based upon community needs.

The fleet consists of two 14-passenger buses, two 9-passenger vans, and an 8-passenger van. All YTTS vehicles are ADA compliant with lifts for wheelchairs. YTTS is currently funded through grants from the Federal Transit Administration.

The preferred service plan from the 2015 Yurok Transit Development Plan includes three phases and nine planned services.

## **Social Service Transportation**

The Del Norte Senior Center operates a volunteer driver program for older adults who need to go to medical appointments or grocery shopping in Crescent City. The service started in Summer 2017. As of August 2018, they had 3 to 4 volunteer drivers, which are reimbursed based on mileage. The service is funded by a Community Services Block Grant.

Coastline Enterprises provides transportation to McKinleyville for dialysis patients three days per week. Their van has capacity for eight clients and two wheelchairs. The trips take around 14 hours. Clients who are not on MediCAL pay \$50 per round trip.

Coastline Enterprises previously adopted a travel training program to teach people to use fixed-route transit, but it was limited to regional center clients because of the funding source. The program was discontinued in early 2018 because the limited service hours and service area of Redwood Coast Transit service made it very difficult for existing regional center clients to use the service. They would have liked to expand the program to older adults living in nearby senior living communities but were limited by the funding source.

The Social Service Transportation Advisory Council (SSTAC) is a council appointed by Del Norte Local Transportation Commission (LTC) to represent seniors, the disabled, and persons of limited means regarding transit matters. The members include representatives of various aspects of social service transportation. The SSTAC has held a public forum annually the last three years to identify and prioritize a list of unmet transit needs.

## **Private Services**

Coastal Cab Company operates taxi service in Crescent City. Ridehailing companies Lyft and Uber also operate in Crescent City but are currently limited to a very small number of drivers.

## EXISTING FACILITIES

There are three types of facilities operated and maintained by RCTA:

- Operations and Maintenance Facility
- Bus Fleet
- Bus stop and amenities

The following is a preliminary assessment of the operations and maintenance facility and existing vehicles.

### Operations and Maintenance Facility

The operations and maintenance headquarters for RCTA is the Redwood Coast Transit Operations and Maintenance Facility located at 140 Williams Drive in Crescent City, a 1.23 acre location in the northern corner of the Del Norte County Fairgrounds property. The Transit Operations and Maintenance Facility is where customers can buy tickets and passes but is a 20-minute walk from the Cultural Center where every route begins and ends service. The facility can be accessed from Routes 1, 2, and 3 but is not located in a “transit-friendly” location.

RCTA is the legal owner of the facility and provides the use of the facility to the operations and maintenance contractor through an Operations and Maintenance Facility Use Agreement. RCTA is 15 years into a 20 year land lease with the Fairgrounds, who owns the land. A 20 year extension option exists in the current land lease allowing RCTA to stay at this location through 2044. The facility includes a parking area for buses and visitors, office areas, meeting room, maintenance bay and shop.

RCTA's contractor provides the facility with normal office furnishing, four hutches, work bench, refrigerator, employee lockers, and a microwave.

In 2017, the Federal Transit Administration conducted a facility inspection rating facility components on a scale from 1=poor condition to 4= satisfactory condition. Table 12 and Table 13 on the following two pages shows the results.

Areas of deficiency (ratings of 1 or 2) included:

- The shell of the barn/wash bay: sidings and I-beams are rusted

- Garage doors of barn/wash bay are missing and inoperative
- No heat in the shop/maintenance and shop restroom area
- Maintenance lift had non-safety repair items
- Fire sprinkler system not present

**Table 12: FTA 2017 Maintenance and Operation Facility Inspection**

<b>Element</b>	<b>Rating*</b>	<b>Notes</b>
<b>ADMINISTRATIVE OFFICES</b>		
SHELL (EXTERIOR)	3	SIDING WEATHER DAMAGED SOUTH WALL/ENTRANCE DOOR LATCH MECHANISM DAMAGED
LIGHTING	4	NO NOTABLE ISSUES FOUND
HVAC	4	NO NOTABLE ISSUES FOUND
FLOORING	3	EVIDENCE OF WEAR AND DEGRIDATION
SHELL (INTERIOR)	4	SHOWING SIGNS OF AGE AND DISCOLORATION, CORNER BEAD SHOWING IN SPOTS
<b>RESTROOM - ADMINISTRATIVE OFFICES</b>		
SHELL (INTERIOR)	4	PAINT SHOWING SIGNS OF AGE
LIGHTING	4	NO NOTABLE ISSUES FOUND
HVAC	4	NO NOTABLE ISSUES FOUND
FLOORING	4	NO NOTABLE ISSUES FOUND
FIXTURES	4	NO NOTABLE ISSUES FOUND
<b>BARN/WASH BAY</b>		
SHELL	1	NW CORNER OF WASH BAY-METAL SIDING RUSTED THRU,I- BEAMS RUSTED
LIGHTING	3	MULTIPLE LIGHTS INOP,HANGING,WEATHER DAMAGED/LIGHTING SWINGS IN THE WIND
GARAGE DOORS	2	DOORS MISSING, INOPERATIVE, AND DAMGED DUE TO HIGH WINDS AND MOISTURE
FLOORING	4	NO NOTABLE ISSUES FOUND

\*Scale from 1= Poor condition to 4 = Satisfactory Condition

**Table 13: FTA 2017 Maintenance and Operation Facility Inspection (cont.)**

<b>Element</b>	<b>Rating*</b>	<b>Notes</b>
<b>SHOP/MAINTENANCE AREA</b>		
SHELL	3	MISSING WALL SEGMENT AT CEILING NW CORNER/INTERIOR PAINT SHOWING ITS AGE AND DISCOLORATION
LIGHTING	4	FUNCTIONAL BUT NOT AT REQUIRED 10' HEIGHT AND SWINGS IN THE WIND
HVAC	1	NO HVAC (HEAT) PRESENT IN WORK AREA
EQUIPMENT (LIFT)	2	UNKNOWN AGE OF LIFT INSPECTED 4-8-17 NON-SAFETY REPAIRS WERE IDENTIFIED
GARAGE DOORS	3	RUSTED, BINDING
<b>RESTROOM - SHOP</b>		
SHELL	4	PAINT SHOWING SIGNS OF AGE
LIGHTING	4	NO NOTABLE ISSUES FOUND
HVAC	1	NO HVAC (HEAT) PRESENT
FLOORING	4	NO NOTABLE ISSUES FOUND
FIXTURES	3	COMMODOE NOT SECURELY FASTENED TO THE FLOOR
<b>FACILITY/GROUNDS</b>		
ROOF	3	GUTTER ON NORTH SIDE DAMAGED, ROOF LEAK NORTH SIDE ABOVE WATER HEATER
FIRE PROTECTION	1	SECURITY LIGHTING NOT PRESENT/SPRINKLER SYSTEM NOT PRESENT (CHECK BUILDING CODE)
SECURITY	4	SHOP ALARM SYSTEM NOT OPERATIONAL
PARKING LOT	4	GRAVEL/DIRT
<b>Aggregate Overall Rating 3.18</b>		

\*Scale from 1= Poor condition to 4 = Satisfactory Condition

In addition, the 2013 SRTP identified “drainage problems from a poorly constructed parking lot.” The 2013 SRTP recommended that \$5,000 annually be budgeted for operations and maintenance facility repairs. The current RCTA management has made significant “one-off” investments in facility improvements, including construction of a paved access road to Cooper (signalized intersection) fencing repair/upgrades, parking lot drainage support, electric access gates, and landscape improvements<sup>[JR5]</sup><sup>[MOU6]</sup>. Drainage remains an issue, as does the lack of paved bus and employee parking.

## RCTA Bus Fleet

RCTA has an active fleet of 13 vehicles and an additional six buses in the inactive fleet.

The current peak pullout of buses is seven vehicles, providing six active buses as spares. This is a very high spare ratio and there is current discussion on whether the total fleet might be reduced to 11 or 12 vehicles.

The current fleet has the following fleet mix:

- One four-passenger sedan (Class M)
- Seven medium size cutaway buses with 12-17 fixed seating capacity (Class B)
- Five large cutaway buses with 19-26 fixed seating capacity (Class E)

One of the large cutaways is in poor condition and two of the medium sized buses are in fair condition. The rest are in good or excellent condition.

The large cutaway in poor condition was supposed to be replaced in 2013/14 and is past due for replacement. Two of the medium sized vehicles are due for replacement this fiscal year and three of the medium sized cutaways are due for replacement in FY 2018/19.



**Table 14: Redwood Coast Transit Fleet as of June 1, 2018**

Fleet No.	Year	Chassis Make	Body Make	Fuel	Fixed Seats	Folding Seats	Wheelchair Positions	Length	Mileage	Condition	Replacement Schedule
210	2017	MV-1	MV-1	gas	4	0	1	15'	21,261	E	2023/24
220	2017	Ford	Eldorado	gas	12	4	2	22'	21,802	E	2023/24
221	2015	Ford	Eldorado	gas	18	8	3	24'	79,810	G	2021/22
285	2010	GMC 5500	Glaval	Diesel	19	6	2	31'	274,611	P	2013/14
286	2011	Ford	Glaval	Gas	14	4	2	25'	227,535	G	2017/18
288	2011	Ford	Glaval	Gas	10	6	2	22'	223,086	G	2017/18
289	2012	Chev	ARBOC	Gas	17	6	3	26'	167,386	F	2018/19
290	2012	Chev	ARBOC	Gas	17	6	3	26'	174,030	F	2018/19
291	2012	Chev	ARBOC	Gas	17	6	3	26'	136,663	F	2018/19
292	2013	Freightliner	Glaval	Diesel	26	4	2	37'	266,290	G	2019/20
293	2013	Freightliner	Glaval	Diesel	26	4	2	37'	280,841	G	2019/20
294	2017	Ford	Eldorado	Diesel	20	6	2	32'	25,796	E	2023/24
295	2017	Ford	Eldorado	Diesel	20	6	2	32'	25,880	E	2023/24

Due to the harsh operating environment in Del Norte County, all revenue vehicles in the medium to large cutaway class are expected to have a useful life of six years. This is one full year less than comparable vehicle types in less challenging operating environments. All buses will need to be replaced by FY 2023/14, the end of the SRTP planning horizon. To maintain a 12-bus fleet going forward, RCTA will need to obtain funding and replace 2 buses per year every year.

## REVIEW OF PREVIOUS PLANS & STUDIES

### 2016 Regional Transportation Plan

The Del Norte Local Transportation Commission (DNLTC) is the designated Regional Transportation Planning Agency (RTPA) for Del Norte County. The DNLTC, along with Caltrans District 1, fulfills the transportation planning responsibilities for Del Norte County. One of the main responsibilities of the DNLTC is the preparation and approval of the Regional Transportation Plan. The Regional Transportation Plan (RTP) serves as the guide to the development of a coordinated and balanced multi-modal regional transportation system that is financially constrained to the local, State, and Federal revenues anticipated over the twenty-year life of the plan. The RTP is updated every four years.

The RTP contains a thorough examination of existing conditions, including all modes of transportation service and infrastructure in the County. The Policy Element identifies the following goal, objectives, and policies for public transit service:

3.4.2 Goal 3: Provide for the mobility needs of County residents, visitors and employees through transit services within the financial constraints of state and federal transit funding.

- 3.4.2.1 Objective: Tailor public transportation and transit service provisions to the area's population characteristics.
  - 3.4.2.1.1 Policy: Implement recommendations from the Short Range Transit Development Plan for the Redwood Coast Transit Authority. Update the plan as necessary.

- 3.4.2.1.2 Policy: Implement strategies and recommendations outlined in the Coordinated Public Transit-Human Services Transportation Plan (2015) to address the unmet transit needs of the public. Update the plan as necessary.
- 3.4.2.1.3 Policy: Consider transit services first in areas where the greatest operational efficiencies exist (i.e., dependent needs, recreational areas).
- 3.4.2.1.4 Policy: Include the Yurok Tribe, Elk Valley Rancheria, Resighini Rancheria and Tolowa-Dee-ni' Nation in the planning process.
- 3.4.2.2 Objective: Provide life-line transportation for transit-dependent people.
  - 3.4.2.2.1 Policy: The DNLTC will conduct a minimum of one public hearing annually to consider and take testimony on unmet transit needs prior to expending LTF funds.
  - 3.4.2.2.2 Policy: Ensure that public transit services are compliant with the Americans with Disabilities Act.
- 3.4.2.3 Objective: As funding permits, develop transit service as an effective alternative transportation mode choice.
  - 3.4.2.3.1 Policy: Support transit projects that serve visitors and residents for commute and recreation trip purposes and that enhance economic development.
  - 3.4.2.3.2 Policy: Encourage coordination of inter- and intra-county transit service.

## **Del Norte County Coordinated Public Transit - Human Services Transportation Plan (2015)**

The Coordinated Public Transit – Human Service Transportation Plan for Del Norte County (Coordinated Plan) was developed by the Del Norte Local Transportation Commission and is an update to the 2008 Coordinated Plan. Development of the plan is required to be eligible for certain Federal Transit Administration funding sources. The purpose of the plan is to create a unified, comprehensive strategy for public transportation service delivery that identifies

the transportation needs of older adults, people with disabilities, and low-income populations.

The plan includes a profile of demographics and existing transportation services where key public and private transit providers, as well as health and social service transit and interregional transportation providers are identified. The Coordinated Plan includes an assessment of progress since the 2008 plan with regard to coordination of services and the priority strategies.

The Coordinated Plan identifies and prioritizes service gaps and unmet transit needs through an inclusive stakeholder input process. Finally, the Coordinated Plan includes an implementation for the following high priority strategies:

- Strategy 1: Maintain, evaluate, and strengthen transportation service(s)
- Strategy 2: Multi-organizational approach to solutions
- Strategy 3: Increase outreach and education about transit services/marketing of transit services
- Strategy 4: Establish a Mobility Management staff position
- Strategy 5: Service expansion and modifications

## **2013 Redwood Coast Transit Short-Range Transit Development Plan**

The previous Short Range Transit Development Plan assessed transit and related transportation issues in the region and provided a “road map” for improvements to public transit programs from 2013 to 2018. The study evaluated the specific needs for transit services and developed plans for improvements and service revisions. This was accomplished through the review of existing transit conditions and evaluation of operations, as well as through public outreach via onboard surveys and community-based meetings. The study identified stable funding sources for operations and capital improvements of transit services. The resulting Plan provided a comprehensive strategy of short-range service, capital, and institutional improvements, with a supporting financial and implementation plan. The document provided a review of the existing demographic conditions in the study area, an analysis of current transit conditions including survey results, detailed service alternatives analysis, a review of management and marketing strategies, a capital improvement program, and a detailed financial plan.

## **Del Norte County Intercity and Regional Bus Service Development Plan (2008)**

An intercity bus study was conducted prior to the 2009 Del Norte County Transit Development Plan Update to examine the existing intercity and regional connections within and to/from the region. The study examined services provided by RCTA, services provided in northern California and southern Oregon by other providers, and the potential to enhance existing services. A goal of the study was to determine if services could be developed which would take advantage of FTA Section 5311(f) grant funding for intercity services, which require only a 50 percent local match. The findings in the study showed that the Route 20 connection to Arcata is the best and most appropriate intercity connection and should further be enhanced should funding be available. The study also showed good potential for developing service from Gasquet and Hiouchi to Crescent City, though this service would not likely qualify for intercity funding due to Amtrak and Greyhound being further east in Grants Pass, Oregon.

## **Active Transportation Plan (2017)**

The Active Transportation Plan (ATP) was developed by the Del Norte Local Transportation Commission to provide a vision and strategy for the future active transportation network in the Del Norte region. The ATP built on the findings of from previous that incorporated complete streets principles and evaluated them holistically in an effort to prioritize active transportation improvements and programs that will have the biggest benefit. The results of the ATP are intended to guide future updates to the circulation elements of both the Del Norte County and Crescent City General Plans.

The ATP explores current land use, programs and policies, bicycle facilities, pedestrian facilities, safe routes to schools activities, and transit services. The also prioritizes projects based on five criteria and provides an implementation plan for the priority projects. Given fiscal constraints, the ATP identified the following focus projects:

- Highway 101 Gateway Projects
- Front Street
- El Dorado Street
- Hiouchi Flat Trail
- Sunset Circle

In relation to RCTA transit service, the ATP recommends additional passenger facilities and active transportation amenities at the Cultural Center to encourage greater use of the stop and improve access to transit for pedestrians and bicyclists. There are community perceptions that the Cultural Center is unsafe. There is no operations personnel or security onsite. The plan also noted that high ridership stops, including the Crescent City Safeway and Lucky 7 Casino, should be examined for similar passenger facility and active transportation amenity improvements. RCTA installed new sheltered bus stops at the Safeway location.

### **Transit Passenger Facilities Development Plan (2007)**

The Transit Passenger Facilities Development Plan (Facilities Plan) provides passenger facility improvement standards specific to the service area. The study inventoried all existing passenger facilities for RCTA, both locally in Crescent City and regionally from Smith River to the Humboldt County line. Recommendations were made for developing future passenger facilities.

## Section 2: Public Involvement, Market Research, & Transit Needs

### OVERVIEW

The public involvement and market research effort includes the work from both Dr. Jon Shapiro's market research and the Ronny Kraft Consulting team's public involvement and needs analysis tasks for the Short Range Transit Plan.

Dr. Jon Shapiro prepared a May 2018 market research report, "How Redwood Coast Transit Authority Can Improve Its Service Offering and Increase Ridership: An Examination of Student, Tourist/Hospitality and Other Existing & Emergent Ridership Groups." (hereinafter referred to as the Dr. Shapiro Report). This work was meant to be a "Research-Based Component" of the Short Range Transit Plan.

Between November 13 and November 20, 2017, the Dr. Shapiro team conducted a series of five focus group and five in-depth interviews with the aim of improving RCTA's ability to provide, "Outstanding service and forge meaningful relationships with key constituents. The focal markets included tourism, student, and transit dependent groups." The RCTA General Manager participated actively with the Dr. Shapiro team during the market research effort.

The Dr. Shapiro market research efforts included an on-board survey from September 27 to September 29, 2018 by a four-person crew on all routes. There were 149 completed questionnaires. The results of the on-board survey are being utilized in the Short Range Transit Plan to profile existing riders and to present the most important service improvements that riders would like to see.

Ronny Kraft Consulting was hired to prepare the Short Range Transit Plan, with the contract commencing on May 23, 2018. The work scope included a site visit to the RCTA service area from August 13-15. The on-site visit included discussions with passengers on all routes, stakeholder interviews, focus groups, two community SRTP forums, comment cards from passengers, a meeting with drivers and dispatchers, and a workshop with the RCTA Board.

This section of Technical Memorandum #2 focuses first on key results of the onboard survey, and then discusses the key themes of the stakeholder interviews and focus groups conducted by both the Ronny Kraft Consulting team and Dr. Jon Shapiro.

## ONBOARD SURVEY

### Methodology

A survey was conducted on board RCTA buses to gather information about passengers to inform this SRTP.<sup>18</sup> The survey was distributed on all routes from September 27 to 29, 2017 and a total of 149 were received. The survey was two-sided with English on one side and Spanish on the other. The questionnaire included some multiple-choice questions and also asked passengers to respond to various statements on a scale from 1 to 7. The target was to collect survey from each route relatively equal to each route's percentage of overall ridership, but Route 4 and Dial-A-Ride were under sampled.

This section includes comments and impressions of passengers interviewed by the Ronny Kraft consulting team, input by passengers from the two community forums, and U.S. Census American Community Survey data.

### Demographics

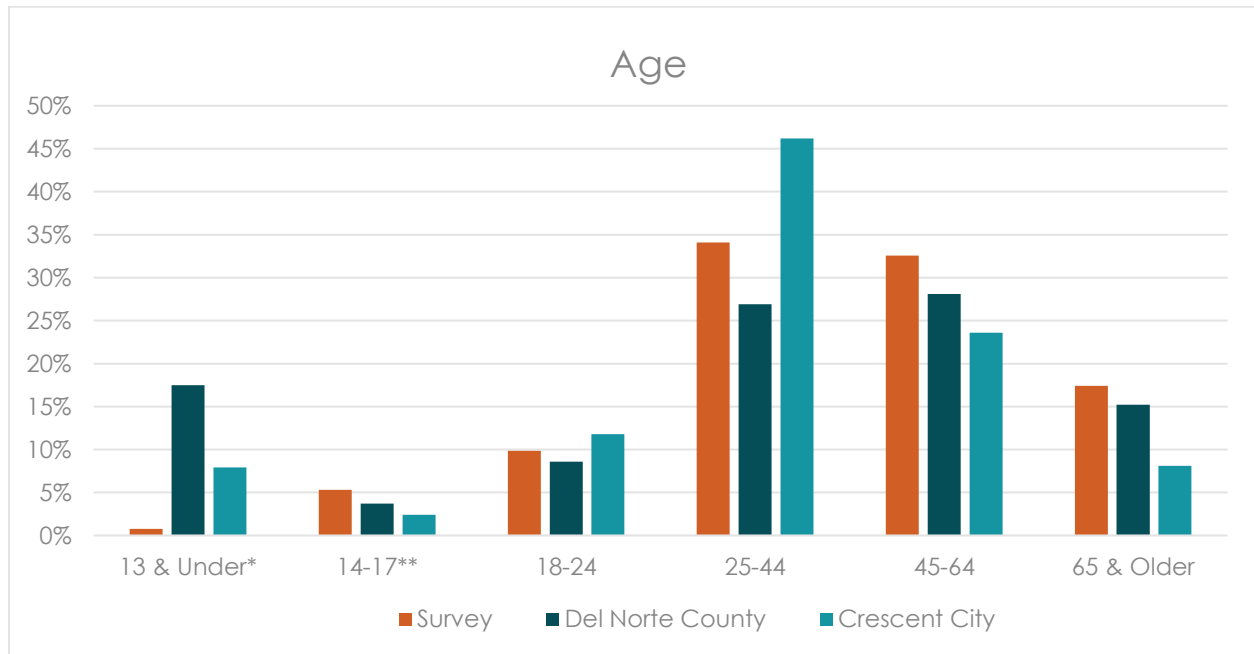
The survey shows that the ridership is older than most rural transit systems with only 6% respondents of high school age or younger. Most rural and suburban transit systems have a much higher proportion of youth ridership. In addition, a higher proportion of riders are in the 45-64 and 65+ older cohorts, compared to both the County and City of Crescent City overall populations (Figure 13). The age cohorts with the most ridership are aged 25-44 at 34% and 45-64 with 33% respondents.

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<sup>18</sup> The onboard survey was conducted by a separate consultant



**Figure 13: Age of Survey Respondents Compared to Population**



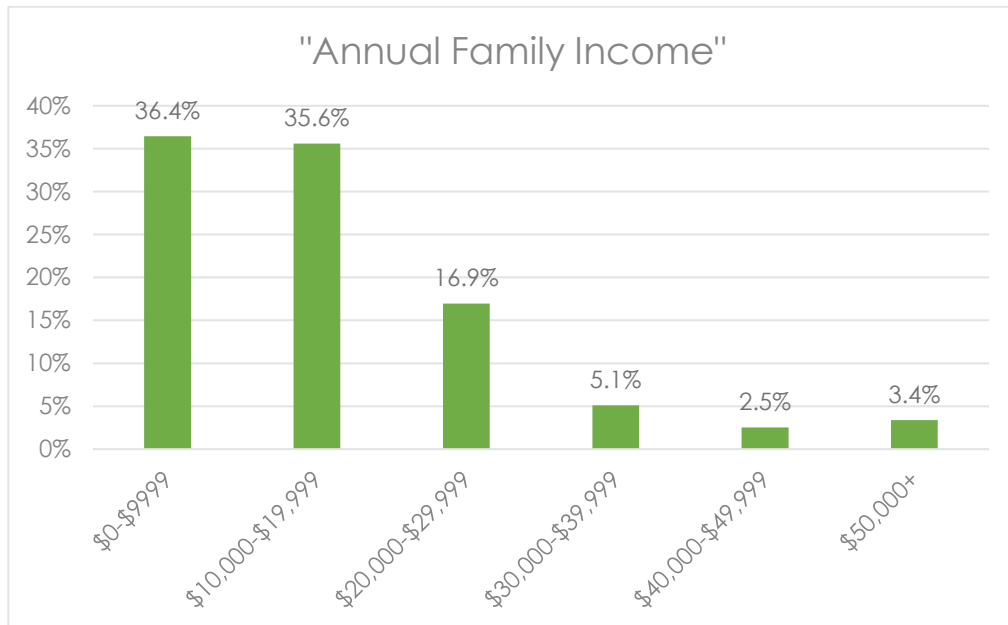
\* Includes persons 14 and under for Del Norte County and Crescent City

\*\* Includes persons 15 to 17 for Del Norte County and Crescent City

Current passengers are very low income with 36% of respondents reporting a family income below \$10,000 and another 36% below \$20,000 (Figure 14). For comparison, the median household income in 2016 was \$42,363 in the County and \$27,569 in Crescent City.<sup>19</sup>

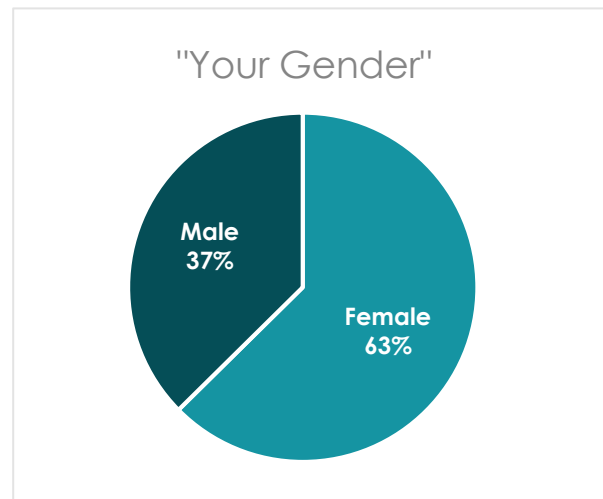
<sup>19</sup> Source: 2012-2016 American Community Survey 5-Year Estimates

**Figure 14: Onboard Survey - Annual Family Income**



Around two-thirds of the passengers surveyed were female and one third were male (**Error! Reference source not found.**).

**Figure 15: Onboard Survey - Gender**



## Passenger Perceptions

Passengers were asked to respond to various statements on a scale of 1 to 7, with 1 indicating “Strongly Disagree,” 4 at “Neither Agree or Disagree,” and 7 indicating “Strongly Agree.” Passengers were in moderate agreement with the statement “Redwood Coast Transit meets my transit needs” with an average rating of 5.5. This is validated with discussion with passengers who were generally quite satisfied with Redwood Coast Transit meeting their mobility needs on weekdays. In general, responses to the question, “What can be improved within Redwood Coast Transit?” and discussion with passengers and input from the public forum identified the cutbacks on Saturday and service from Klamath to Crescent City as particularly problematic.

There is a community perception that the Cultural Center Transit Center is “unsavory.” This is somewhat contradicted by the onboard survey results where passengers rated the statement, “RCTA Cultural Center Transfer Center is adequate,” at an average of 5.5 out of 7. Female respondents rated the Cultural Center as safer than their male counterparts at 5.58 vs. 5.12.

Buses come to the bus stop at the same time each hour, commonly called “clock face” scheduling. Passengers were very satisfied with the reliability and on-time performance of the system. Like most rural transit systems, the first few days of the month when many passengers receive government assistance checks, buses can experience more delays during this time, but overall passengers were quite happy with the operation of the system, and expressed much appreciation for the drivers.

## Improvements Needed

Improvements to bus stops, including more shelters, was a top improvement cited as a response to the question, “What can be improved within Redwood Coast Transit?” and in the discussion with passengers onboard the bus. This also had a rating of 5.5 out of 7 on the onboard survey. Discussions with passengers and drivers identified specific stops that could use a bus shelter, and this has helped to prioritize a potential list of improvements.

The survey asked passengers to select the most important improvement if Redwood Coast Transit could make only one from a list of five options (Figure 16). The most passengers (32%) chose Sunday service as their most desired improvement, followed by later service in the PM (28%) and better Saturday service (22%). Unfortunately, in most rural transit systems, Saturday ridership is about 60-75% and Sunday ridership is typically 40%-50% of average weekday ridership.

**Figure 16: Onboard Survey - Most Desired Improvement**



Three passengers who live in Klamath came to the community forum to say that the cutbacks of morning service from Klamath to Crescent City is creating significant hardships in their lives. This need is corroborated by the onboard survey and drivers.

## KEY THEMES FROM STAKEHOLDER INTERVIEWS AND BOARD WORKSHOP

***1. While significant progress has been made to improve bus stop amenities, including bus shelters over the past several years, there is a need to increase the number of bus shelters, continually maintain existing bus stops, provide route***

**and schedule information at key stops, and add designated stops and shelters at key stops on Routes 20 and 199.**

There are 13 bus shelters installed at active RCTA bus stops in the Crescent City Area. First Transit has replaced glass with Plexiglass in twelve bus shelters in the last eight months. Bus shelter maintenance is now part of the First Transit operations contract. Based on the August 2018 site visit, the existing bus shelters appear to be in good shape for the most part and are being maintained.



Both coach operators and passengers identified the need for adding new bus shelters. There is an identified need for new bus shelters along the Crescent City local routes and at key bus stops along the intercity routes.

The top priorities from both the passengers and coach operators within Crescent City include:

- Old Shop Mart Stop Green Route Pizza Hut
- Pacific and A - *In progress. Installation will occur early 2019.*
- Urgent Care

A second tier of priority locations for new bus shelters include:

- Harding at Oregon
- Suburban Propane/RCTA Facility
- Shangri La
- Inyo & Murphy
- Dollar Tree
- Mail Room
- Wellness Center - *In progress*

As pointed out in the Dr. Shapiro report, there are few stops at local hotels and some hotels expressed interest in both having a bus stop and providing information to their patrons. The potential for improved tourism routes and services will be addressed under service and marketing alternatives in the next phase of the SRTP.

There are no designated bus stops and no bus shelters along Route 20 and Routes 199, except when the routes operate on existing local route alignments in Crescent City and along Lake Earl Road. The exception to this is the designated bus stop at the Jedidiah Smith Redwood State Park Visitor Center on Route 199. Criteria for new safe bus stop signs and shelters need to be identified and prioritized. There are several tourist locations that could utilize a bus stop sign, shelter, and RCTA service information. This would help to build tourism ridership. This was identified as an important first step to attract additional tourist riders in the Dr. Shapiro report.

Improved bus stops are a Tier One Priority for the RCTA Board. Based on Board input, the installation of two bus shelters per year should be a minimum and up to five per year could be a target depending on funding availability.

In order to streamline the local project management of bus stop sign and shelter installations the possibility of a Memorandum of Understanding (MOU) among RCTA, Del Norte County, and City of Crescent City was explored, but deemed infeasible at this time. Alternative solutions will be explored in Phase 2 of the SRTP.

RCTA is currently utilizing SB I monies for bus stop improvements. This will provide an important funding source for bus stop improvements over the next five years. There are five bus shelter installations programed for the next two years.

***2. Redwood Coast Transit should implement technological solutions that improve management reporting, enhance passenger information, and provide easy fare payments.***

The new operating and maintenance contract, effective January 1, 2017, requires that First Transit provide a number of technological enhancements as part their renewed contract with RCTA. The following are commitments from First Transit in their proposal for technology enhancements:

- A. Office@Hand Premium Edition from AT&T, a cloud-based IP business communications service that will improve customer call handling, customer service, and technical support.**

Status: This has not been implemented due to the fact that implementation would require RCTA to change their phone numbers. First Transit and RCTA management are working on a suitable alternative for Office@Hand communications for implementation in 2019. This improvement is lower priority than implementation of DoubleMap (see below).

**B. Installation of GeoTabs Automated Vehicle Location System (AVL) on all fixed route revenue vehicles that will enable tracking of vehicles in service as well as determine ongoing on-time performance.**

Status: All but two vehicles have been active on GeoTabs since Fall 2017. However, there has not been sufficient training for either operations management or RCTA management to effectively utilize GeoTabs to track vehicles on a dashboard for determining on-going on-time performance. There is a need for additional training to make GeoTabs fully functional.

**C. Implementation of First Transit's Buseeta software system that will enable the utilization of real time tracking by the AVL system to effectively manage on-time performance.** The software provides on-time performance reports.

Status: Buseeta is no longer available and a replacement software system, DoubleMap, is being deployed in the first half of 2019.

**D. Implementation and utilization of the Buseeta customizable mobile application for fixed route transit operations.** The software would allow passengers to track all vehicles in real-time, provide up-to-date system information such as new schedules being introduced, and passenger feedback. Complaint feedback could also be handled by the software.

Status: As stated above, First Transit is trying to replace Buseeta with Bishop Peak. Significantly more work is needed to provide passengers with real-time information on the location of the bus they want to take.

**E. Kayako Customer Tracking Technology.** This is a customer comment tracking system that combines customer communications from multiple channels, including comments made by phone, email, web forum, social media, into one interface. With Kayako, a ticket is created to manage each customer interaction.

Status: This also has not been implemented. However, both First Transit and RCTA recognize the importance of this customer tracking technology and have begun to work on plan of action for full implementation. Currently, RCTA management requires First Transit to compile monthly excel forms to track customer complaints.

Independent from the First Transit technology enhancements, there is a significant need for better transit management software that would enable a database system to track costs, revenues, and key performance indicators. The current RCTA management system inherited the clumsy Excel spreadsheet format of tracking performance from the previous management team. The annual report process, for example, is very time consuming and requires the RCTA general manager to extract information from the First Transit monthly report and enter and compile in Excel report tables. T<sub>[DH9]</sub>[MOU10]he extensive time for data input was noted during a Board member stakeholder interview<sub>[JR11]</sub>[MOU12].

The transit industry has several transit performance database systems that provide a user-friendly management information dashboard that RCTA management and the RCTA Board can have access to. It is important that the system be able to extract information from the First Transit system, such as on-time performance, farebox revenue, customer complaints, etc. but also be able to track budget to actuals for all system expenditures. The purchase or development of an affordable management database system that is compatible with output of performance data by First Transit will be recommended as a high priority procurement in the Capital Plan.

RCTA provides a GTFS to Google Transit feed so that passengers can use Google Maps to plan a trip on Redwood Coast Transit and receive schedule and fare



information. This functionality is a vital for passengers, especially visitors to the region. There is significant opportunity to market the availability RCTA route and schedule information in Google Map to current riders, students, visitors, and the general public. This topic will be explored further in the next phase of the SRTP.

Many transit agencies, including rural systems, are moving toward the Google real-time data platform and with the AVL system that First Transit is installing, this may be a future[DH13][RK14][RK15] technology platform that RCTA can implement. This would enable passengers to receive real-time transit information on the bus location and projected actual arrival time.

RCTA management is in the process of implementing Token Transit that will enable passengers to pay their fare with a smartphone app. Planned implementation will occur in early 2019.

The Dr. Shapiro Report has some very good material on how technology can be utilized to attract more tourist riders, especially with upgrades to RCTA's website. This will be addressed in the marketing actions in the next phase of the SRTP.

There are other potential technology enhancements that were reviewed by the RCTA Board at its October 17, 2018 meeting. Section 4 of this working paper identifies the technology procurement actions that will need to be prioritized in the next phase of the SRTP.

**3. There needs to be more concerted effort at marketing RCTA transit services. There is insufficient attention and effort on promoting existing services to potential riders.**

Marketing of RCTA transit services is currently limited to upkeep of the RCTA website and annual updating of the schedules and passenger guide.

The contract between RCTA, Herron Consultants and TMTP has in the scope of work the following provision:

*“Coordinate the development and implementation of marketing plans, fare structures, promotional campaigns, public presentations and other activities. Prepare press releases, flyers and other materials.”*

During the Ronny Kraft consulting team site visit in August, the following was observed:

- In discussing the changes to improve the College of the Redwoods services, even though the changes had been made, there were College of the Redwood students riding the bus who were quite unaware of the schedule changes and the ability to utilize their Student ID for travel on all RCTA buses.
- There is no passenger information on RCTA routes and schedules at the large majority of bus shelters, including the downtown transit center.<sup>20</sup>
- Google Maps contains information about RCTA routes, schedules, and fares. However, the awareness level of the trip planning service is low. When Google maps was discussed at the RCTA Board meeting, Board members were not aware that RCTA service was included in Google Maps, nor that you could plan trips on RCTA using the app or web interface. There is a need to educate existing and potential bus riders on the functionality of Google maps for RCTA information.
- Most passengers on board the buses got information about the bus service from the coach operators and other passengers. The coach operators are very helpful and courteous to passengers.
- Discussion with College of the Redwoods staff indicated that the schedule improvements to the regional routes could improve ridership, but frequency remains an issue. They recognize, however, that the challenge is getting the word out to students who currently don't utilize the service, especially from outlying areas. When changes to the schedules of Routes 20 and 199 were made, coupled with the fact that College of Redwood students only need to show their college ID to board the bus, RCTA staff worked collaboratively with the College of Redwood staff to create a flier, post on social media, and send out an email blast to all students. Operations staff also staffed a table at the beginning of Fall 2018 classes passing out fliers on the service changes.

The RCTA management team is able to perform the basics of keeping public information on the RCTA website up to date and publishing revisions of the rider guide when service or fare changes are made.

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<sup>20</sup> [Previous efforts to deploy information at bus stops fell short due to lack of sufficient staff to keep the information maintained and up to date.](#)

The management contract does not specify the required time for ongoing marketing and special promotions that are needed on an annual basis. In consultation with RCTA management, it is estimated that 120 annual hours, or 10 hours a month, is needed to be spent on marketing and public information by the marketing team.

There has been direction from the RCTA Board that advertising revenues from entities that place ads upon the RTCTA buses can be re-invested into additional marketing and promotional campaigns by the management team. As of January 2019, two advertising contracts have been secured by RCTA management, which will bring in over \$10,000 in revenue fiscal year 2018/19. effort.

***4. Current Redwood Coast Transit riders depend on the service to conduct their daily lives, and existing service levels need to be retained.***

The onboard survey results, Interviews with passengers, interviews with stakeholders, and interviews with Board members all reveal that Redwood Coast Transit has a very good reputation. Redwood Coast Transit is acknowledged for providing lifeline transportation services for those who do not own an automobile or do not have a driver's license.

Importantly, while the discussions with passengers on board buses consisted of a small sample, every passenger was asked about their ability to utilize Redwood Coast Transit to conduct their daily lives. While some service gaps were identified based on recent service reductions, in general, passengers responded that from Monday to Friday they are able to conduct their daily lives by utilizing Redwood Coast Transit. Passengers feel that the service levels and fares are reasonable, and the schedules and required transfers work well. As was discussed in the onboard survey above, passengers rated the question "Does RCTA Meet My Transit Needs?" a 5.5 on a scale of 1 to 7 with seven being meeting all of their needs.

Passengers are appreciative of the existing services and hope that existing service levels can be retained. They pointed to two service cutbacks that have created significant problems for existing passengers. Several passengers told the consulting team that the reduced Saturday schedule makes utilizing Redwood

Coast for typical Saturday errands very difficult and time consuming and one passenger confided that she has stopped utilizing Saturday service. Due to service cutbacks, Routes 1 and 3 no longer operate on Saturdays. Based on interviews with several passengers on board the bus, the Saturday route and schedule do not allow these passengers to get to and from the destinations they need to make trips to or cause longer on-board travel times due to the one-way loop configuration of the routes.

The Ronny Kraft Consulting team met three RCTA passengers who live in Klamath at the public open house who complained about the reduction of the morning run that used to be provided from Klamath to Crescent City. It was originally the understanding that the Yurok Tribe was going to provide a morning run from Klamath to Crescent City. According to the three residents of Klamath, they need to make advanced reservations, and they never know if the trip is going to run on the day and time they have made the reservation.

Discussions with the Yurok Tribe Transportation Manager have confirmed the following facts. The service that runs is a Dial-A-Ride service that operates five days a week. The current service is often at capacity, and there is generally more demand than seat supply. As a Dial-A-Ride service, the vehicle origin and destination does depend on the passengers making reservations. There is typically a regular stop at Pey Mey. The fare is \$1.50.

Discussions with the Yurok Tribe Transportation Manager found that there is openness for better communication and coordination between Yurok Tribe Transit Service (YTTS) and Redwood Coast Transit. YTTS is planning to expand service and will be utilizing 12-passenger vans. There could potentially be a fixed route service in the mornings, but the details need to be worked out. The potential for a fixed route morning run from Klamath to Crescent City will be explored in the next phase of the SRTP.

Human service agencies pointed to the lack of later evening services that would enable employment for some low income residents. Later evening service ranked second as a service improvement after Sunday service.

***5. Efforts should be made to increase school ridership on Redwood Coast Transit.***

Observations on the bus and the onboard survey found a noticeable lack of student ridership on Redwood Coast Transit. In the onboard survey, there were only seven riders of 149 surveyed 17 and under, and another thirteen between 18 and 24 years old. Most rural transit systems have a higher share of younger riders.

As discussed previously above, efforts have now been initiated at the College of the Redwoods to increase ridership for students. Low Carbon Transit Operations Program (LCTOP) monies are being utilized to fund a free fare program for College of the Redwoods students.<sup>21</sup> College of the Redwoods students only need to show their student ID to board a Redwood Coast Transit bus. Schedules and routing of Routes 20 and 199 now provide direct service to the College of the Redwoods.

For service to Del Norte High School and Crescent Elk Middle School, RCTA has made efforts to coordinate local route services with school bell times. Drivers do state there is very limited high school and middle school ridership. Drivers indicated that most student ridership is after school.

A stakeholder interview with the Del Norte Unified School District indicated that they have an excellent network of school bus routes that serve 2,200 students daily throughout Del Norte County. However, they do not serve high school students who live within 2 miles of the high school or 1.5 miles from the middle school.

In many rural and small urbanized transit systems, there are special “school tripper” services that are open to the general public, but provide a transit option from neighborhood areas beyond typical walking distance to both middle and high schools. If properly coordinated with bell times and adjustments for planned minimum days, other transit agencies operate full buses on their school tripper runs. This will be provided as a service alternative in the next phase of the SRTP process.

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<sup>21</sup> The Low Carbon Transit Operations Program (LCTOP) is one of several programs that are part of the Transit, Affordable Housing, and Sustainable Communities Program established by the California Legislature in 2014 by Senate Bill 862.

**6. There is an opportunity to reach the significant foreign traveler market with existing services with some new dedicated bus stop signage, revisions to the RCTA website, promotion of Google transit information, and a new system map that highlights three or four natural spots currently served by Redwood Coast Transit.**

A key focus of the Dr. Shapiro Report was how to reach out effectively to tourists from out-of-state and out-of-country. According to Dr. Shapiro, a “Significant number of Crescent City’s visitors are international.” These visitors are typically characterized as foreign independent travelers (FIT). These travelers typically visit Crescent City for one to two days on their way along the coast and visit attractions within 50 miles of town. FIT travelers have high expectations in terms of product quality given that their home countries tend to provide clean, reliable, safe, and frequent public transportation services.

On Routes 20 and 199, RCTA currently serves many tourist locations, but there is very little infrastructure in terms of dedicated bus stops at these locations, as well as little information on the routes and schedules that serve those stops. The RCTA website does not have section(s) that would enable the FIT tourist to easily find information on how and when RCTA buses provide services to these locations. Many of the hotels that tourists stay at are not well served by RCTA. The Dr. Shapiro report has important messaging that could be utilized to provide better communication between RCTA and potential tourist riders.

The Dr. Shapiro Report recommends that, “As a first step towards developing the tourist market with both sectors, RCTA should develop service to three or four locations that are synergistic with its current routing...RCTA should put these astounding natural spots onto a new system map pictorially and create narrative that reaches both local and global tourists.” This will be addressed both in the next phase of the Short Range Transit Plan.

**7. Non-emergency medical transportation (NEMT) is the most significant unmet transit need identified by human service agencies in Del Norte County.**

During several interviews with human service agencies, they identified regional trips for NEMT as their #1 transit need. Del Norte County is isolated medically. Those without cars or driver’s licenses do not have access to important medical

services. According to human service agencies, the main medical destinations are Mad River Hospital in Eureka, Asante Hospital Grants Pass, and a medical clinic in Eureka. However, there is also a need for very long trips to UC San Francisco, UC Davis, and Stanford Hospital.

Historically, Coastline Enterprises had previously provided NEMT two days a week to Humboldt county from Safeway. It was a 12-hour day for both the passengers and the driver. Service was funded with about \$24,000 through their CTSA designation. However, the funding was not sufficient and providing the service on an ongoing basis became infeasible for them. The NEMT program was not financially sustainable and ended operation in 2011/12.

While there is not sufficient funding for a robust NEMT program, it is an important need that could be provided on a limited basis. Alternatives for providing some level of NEMT service through RCTA will be provided in the review of alternatives in the next phase of the Short Range Transit Plan.

## **Section 3: Mission Statement, Goals, and Performance Standards**

This section provides recommendations for the RCTA mission statement, goals, and performance standards.

### **MISSION STATEMENT**

At the August 15, 2018 RCTA Board meeting, the consulting team presented candidate mission statements that have been utilized by similar rural transit agencies. The majority of the RCTA Board preferred a broader mission statement that is designed to serve multiple potential market segments. The recommended mission statement is:

“To provide safe and cost-effective local and regional public transportation services to provide a mobility option for Del Norte County residents, students, employees, and visitors to the area.”

### **GOALS AND PERFORMANCE STANDARDS**

At the August 15, 2018 Board workshop, the consulting team presented sample goals. The consulting team also provided a recommended framework for future performance standards that include 1) a minimum performance standard that RCTA services should not drop below and 2) an aspirational performance standard that RCTA should work towards. The RCTA Board deferred to the expertise of the RCTA management team in working with the consulting team to draft such goals and performance standards.



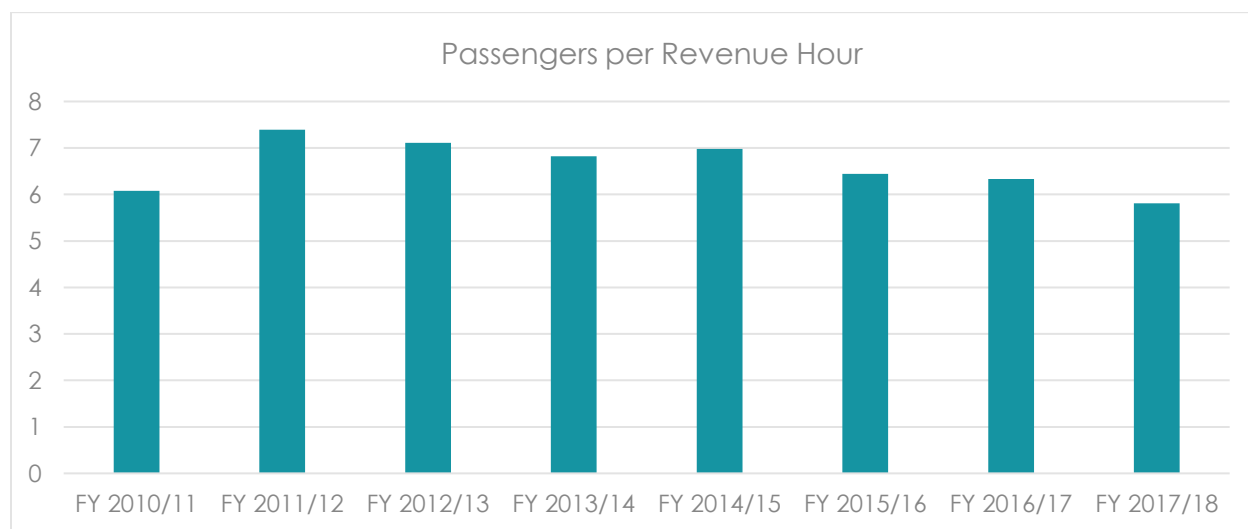
## Goal #1: Provide an effective level of service in response to demonstrated community market needs (Service Effectiveness Goal)

### Performance Standard 1.1: Service Productivity: Passengers per Vehicle Service Hour

**Recent History:**

Figure 17 shows a steady decline in productivity as measured by passengers per vehicle hour between FY 2011/12 and FY 2017/18. Systemwide productivity was 7.39 passengers per revenue hour in FY 2011/12 and has declined to 5.8 passengers per revenue hour in FY 2017/18. The most pronounced decline in productivity occurred between FY FY2016/17 and FY 2017/18 when systemwide productivity declined by 8.2%.

**Figure 17: RCTA Systemwide Annual Productivity**



In FY 2017/18, due to budget cutbacks, there was a 12.1% reduction of vehicle revenue hours through the elimination of Route 10 and the cutting of Saturday Crescent City local service by half. However, ridership fell by 19.2% between FY 2016/17 and FY 2017/18. This resulted in an overall decline of passenger productivity systemwide.

It should be noted that nationwide and even globally, the drop in gas prices, an improved economy since the Great Recession that resulted in not only more jobs but also increase auto ownership have been restraining forces to transit

ridership. RCTA is not alone in drops of 20% to 30% in ridership over the past several years.

Table 15 shows a breakdown of passengers per revenue hour by type of service between FY 2015/16 and 2017/18.

**Table 15: Passengers Per Revenue Hour by Service Type**

Service Type	FY 2015/16	FY 2016/17	FY 2017/18	Change 15/16 to FY 2017/8
Crescent City Local Routes	11.07	10.75	9.28	-16.2%
Route 10	4.00	3.00	N.A.	N.A.
Route 20	3.23	3.07	2.70	-16.4%
Route 199	2.40	2.10	2.68	11.7%
Dial-A-Ride	4.16	4.50	3.30	-20.7%

#### Comment:

It should be noted that the overall decline of 16% to 20% for all service types except for Route 199 is very significant and steps need to be taken to reverse these trends. Strategic actions will be evaluated in the next phase of the SRTP.

Over time, improved marketing to the general public, foreign independent travelers, and to College of the Redwoods students should help to boost overall ridership, increasing passengers per revenue hour.

The recent service cutbacks due to budget shortfalls including the elimination of Route 10 and reductions in Saturday service have had an impact on overall service productivity. The service cuts on Route 10 were on low productivity trips. The reduction in Saturday service levels was to more accurately mirror industry standard weekend service levels. Funding fluctuations are a fact of life for all transit systems. It is important to note that RCTA management has taken proactive steps to increase the operating reserves to a more robust level that could eliminate the need for service cutbacks in the future, increasing reserves from \$141,000 to \$349,000 in FY 2017/18. Having the reserve should enable RCTA to keep service levels the same if there is short-term recession that reduces sales tax revenue that help fund public transportation services. The current reserves

may or may not be sufficient. A specific policy for operating funding reserves will be developed as part of the financial plan in an upcoming phase of the SRTIP [JR16][MOU17].

### Recommendation:

Table 16 shows the recommended performance standards for passenger per revenue hour by service type. The minimum systemwide performance standard is 5.8 passenger per revenue hour and the target performance standard is 7.0 passengers per hour.

**Table 16: Minimum and Target Performance Standards: Passengers Per Vehicle Revenue Hour by Service Type**

Service Type	Minimum	Target
Crescent City Local Routes	9.0	12.0
Route 10	2.5	4.0
Route 199	2.5	4.0
Dial-A-Ride	3.0	4.5
Systemwide	5.8	7.0

## Goal #2 Provide public transportation services that are financially sustainable within existing local, state, and federal funding programs in a cost-efficient manner (Cost Efficiency Goal)

### Performance Standard 2.1: Operating cost per vehicle revenue hour

Operating cost per vehicle revenue hour is the basic operating cost efficiency performance measure. The measure provides the average operating cost for having a bus in revenue service for one hour.

### Context:

RCTA has historically been extremely cost efficient compared to similar rural transit systems in California. In FY 2016/17, the operating cost per vehicle revenue hour was \$63.21, the lowest of all publicly operated rural and small

transit systems in Northern California. Table 17 provides a comparison of neighboring Northern California rural transit systems from readily available data. The closest to Redwood Coast Transit Authority is Lake Transit, which also contracts for both management and operations/maintenance. The highest cost per vehicle revenue hour are in Trinity, Siskiyou, and Nevada Counties, agencies that directly operate and manage transit services with (full-time) County employees as part of County [government](#) [\[JR18\]](#) [\[MOU19\]](#).

**Table 17: Rural and Small Urbanized Transit Agencies Comparison of Cost Per Vehicle Revenue**

	Revenue Hour	Year
Redwood Coast Transit Authority	63.21	FY 2016/17
Humboldt Transit Authority	77.89	FFY 2017*
Trinity Transit	116.89	FFY 2017*
Modoc Transit	76.38	FFY 2017*
Siskiyou Transit	105.79	FFY 2017*
Lake Transit	66.26	FFY 2017*
Redding Area Bus Authority	93.20	FFY 2017*
Gold County Stage (Nevada	108.17	FFY 2017*

\* National Transit Database 2017 Annual Agency Profile

Operating cost per vehicle revenue is driven by three important factors, including changes to the:

- Contractor fixed route operating rate in operations and maintenance contract
- Contractor monthly cost fee in operations and maintenance contract
- Management costs in management contract

Redwood Coast Transit Authority has an operations and maintenance contract that includes annual increases in the hourly rate of operating the bus at approximately 3.7% per year through FY 2020/21 with two additional option years through FY 2022/23.

The operations and maintenance contract also has a monthly fee component that increases, for example, by 7.3% between calendar 2019 and calendar year 2020. These contract escalation factors will mean that the cost per revenue

hour will continue to rise faster than the rate of inflation during the term of the First Transit contract.

The management contract is only valid through FY 2018/19. An extension will be needed to be negotiated or the contract will need to be rebid in early 2019. In order to achieve the overall goals of the Short Range Transit Plan, there could be a need to substantially increase the management contract. This would include the need for more investment in:

- Marketing of RCTA services
- Project management time for capital improvements
- Increase in overall management oversight

If the RCTA Board decides to add additional investment in the next management contract to address the above staffing deficiencies, this will also increase the cost per vehicle revenue hour, but it will still be at the low end of the industry peers shown above.

### Recent History

In FY 2015/16, the operating cost per revenue hour was \$57.82. In FY 2016/17 it increased slightly to \$58.48 per revenue hour. With a reduction in revenue hours from 19,577 in FY 2016/17 to 17,212 in FY 2017/18, the cost per vehicle revenue hour increased by 21% to \$70.72.

### Recommendation

The minimum standard should be a cost per revenue hour of \$77 per revenue hour, adjusted by 5% per annum after FY 2018/19. The target standard should be \$70 per revenue hour, adjusted by 4% per annum after FY 2018/19.

## Performance Standard 2.2: Farebox Recovery Ratio

### Context

The farebox recovery ratio is the fares collected in the farebox plus additional local contribution revenues divided by the operating costs of the service minus allowable deductions.

The Transportation Development Act requires a systemwide farebox recovery ratio of 10%.

In its annual reports, RCTA makes estimates of farebox recovery ratios based on systemwide estimates and not on the actual fare revenues collected on an individual route or Dial-a-Ride. At present, the operations and maintenance contractor provides fare revenue by service type and route in its monthly report, but this information has not been tabulated and utilized in annual reports to date. Therefore, there has been no attempt to compare farebox recovery by service type in historical context, as is done in other sections of this chapter.

In the annual fiscal audit prepared by an outside CPA firm, the systemwide farebox recovery ratio is calculated according to the definitions of the Transportation Development Act and its implementing regulations.

### Recent History

There has been a dramatic decline in the systemwide farebox recovery ratio in the recent history of RCTA as shown in Table 18. The farebox recovery ratio was 18.2% in FY 2014/15 and declined to 11.4% in FY 2017/18. This is largely due to declining fare revenue as a result of declining ridership combined with rising operating costs. However, because fare revenues are not reported by service type or route, it is not known definitively why there was such a significant drop in the systemwide farebox recovery ratio from 16.6% in FY 2016/17 to 11.4% in FY 2017/18.

**Table 18: Systemwide Farebox Recovery Ratio - FY 2014/15 to FY 2017/18**

Fiscal Year	Ratio
FY 2014/15	18.2%
FY 2015/16	17.1%
FY 2016/17	16.6%
FY 2017/18	11.4%

However, the significant decline in ridership [DH20][MOU21] coupled with the significant lowering of zonal fares on the regional routes likely combined to have a very detrimental impact on the farebox recovery ratio.

### Recommendation:

The minimum performance standard for farebox recovery ratio is 10%. The target performance is recommended at 14%

### Comment:

The significant decline in the farebox recovery ratio raises concerns if the trend continues that the farebox recovery ratio will decline below 10% in FY 2018/19.

There are a number of strategies that would help to enhance the farebox recovery ratio. These will be evaluated in the next phase of the SRTP.

1. Fare adjustments for regional routes that evaluate the potential for fare revenue per mile. Zone based fares are commonly utilized for long intercity routes similar to what RCTA already has in place.

2. Increasing ridership and revenue through implementation of a robust marketing and public information campaign.
3. Taking advantage of local contributions that can be included in farebox recovery calculations. Bus advertising revenue, for example, can be included as local contributions.
4. Public Utilities Code 99268.17 allows for an array of eligible exclusions for operating costs. RCTA needs to make sure that all eligible exclusions are deducted in farebox recovery calculations.
5. Public Utilizes Code 99268.19 allows the use of local funds as revenue in the farebox calculations: "If fare revenues are insufficient to meet the applicable ratio of fare revenues to operating cost required by this article, an operator may satisfy that requirement by supplementing its fare revenues with local funds. As used in this section, 'local funds' means any nonfederal or nonstate grant funds or other revenues generated by, earned by, or distributed to an operator."

This can include local funds generated by local bus advertising, financial participation by the College of the Redwoods in the free transit pass program, and general fund contributions by local jurisdictions.

There are complex consequences for not meeting a minimum farebox recovery requirement that will be detailed in the SRTP financial plan. However, it will be important to implement strategies itemized above to avoid potential future penalties.

### **Performance Standard 2.3: Cost per passenger trip**

#### **Context:**

The cost per passenger trip is a metric utilized to measure the cost efficiencies of different service delivery modes. The measure takes the operating costs for a particular service divided by the number of passengers that are served.

The measure is correlated to passenger per revenue hour of service. As productivity improves, the cost per passenger declines.



## Recent History

Table 19 shows, with the exception of Route 199, a significant increase in the cost per passenger trip for all route types has occurred between FY 2015/16 and FY 2017/18. Route 20 has had the most significant increase in the cost per passenger trip with a 46% increase between FY 2015/16 and FY 2017/18.

**Table 19: Cost per Passenger Trip Recent Performance**

Service Type	FY 2015/16	FY 2016/17	FY 2017/18	Change 15/16 to 17/18
Crescent City Local Routes	\$5.18	\$5.89	\$6.90	33.2%
Route 10	\$14.64	\$21.39	N.A.	N.A.
Route 20	\$17.88	\$20.62	\$26.10	46.0%
Route 199	\$24.18	\$30.05	\$26.36	9.0%
Dial-A-Ride	\$17.70	\$14.17	\$21.42	21.0%
Systemwide	\$8.98	\$9.25	\$12.16	35.4%

## Recommendation

Table 20 shows the recommended minimum and target standards. The standards should be adjusted by 3% annually to account for cost inflation.

**Table 20: Recommended Cost Per Passenger Trip Performance Standards**

Service Type	Minimum	Target
Crescent City local Routes	\$7.50	\$6.00
Route 20	\$30.00	\$20.00
Route 199	\$30.00	\$20.00
Dial-A-Ride	\$30.00	\$20.00
Systemwide	\$13.00	\$10.00

\* Figures adjusted by 3% per annum

## Comment

Achieving the target performance standards will require significant movement toward achieving the target standards for passengers per revenue hour.

## **Goal 3: Ensure that all transit program can be provided at high quality of service (Service Quality Goal)**

### **Performance Standard 3.1: On-Time performance**

#### **Context:**

On-time performance is an important measure of service reliability, an important element of service quality for any transit system.

At present, schedule adherence data is not collected by RCTA so on-time performance cannot be currently calculated. However, when First Transit does implement an Automatic Vehicle Locator System (AVL) on-board each of the RCTA buses with tracking software, this will provide the means of regularly collecting the necessary data to determine on-time performance.

#### **Recommendation:**

For local fixed routes, minimum standard is no early departures and 90% timepoints are on-time, defined as one minute early to five minutes late. Target standard is 95% of all timepoints are on time.

For regional routes, the minimum standard is no early departures and 80% of all runs are on-time at scheduled timepoints, defined as one minute early to five minutes late. Target standard is 90% of timepoints

#### **Comment**

Consistent reliability is key to building ridership; this includes regularly monitoring and reporting on-time performance.

For long regional routes, it is recognized that on-time performance can have variance due to seasonal traffic patterns and other circumstances. Establishing a few timepoints at the beginning and end of the route with one to two interim timepoints for the purpose of measuring on-time performance would be desirable. Designating timepoint stops where transmission of AVL data is feasible would be the best course of action.

## **Performance 3.2: Vehicle Miles Between Mechanical Roadcalls**

### **Context:**

Vehicle miles between mechanical roadcalls is an important performance measure that provides an indicator of the operating condition of the fleet and transit system reliability. It is normally correlated to maintenance practices. A mechanical roadcall is when a bus has a mechanical issue when the bus is in revenue service and the driver needs to have a mechanic or other maintenance personnel respond to the bus. Officially, a mechanical roadcall is when a bus needs to be taken out of service due to a mechanical roadcall.

A review of the First Transit monthly reports indicates that First Transit records “mechanical missed trips” but does not record mechanical roadcalls.

### **Recommendation:**

The recommended target standard is 30,000 miles between mechanical roadcalls and a minimum standard is 20,000 miles between mechanical roadcalls.

### **Comment**

Based on stakeholder interviews with the maintenance staff of First Transit, there is not a problem with mechanical roadcalls. However, there is no available data to support this claim, and it is recommended that RCTA require First Transit to track this performance measure in its monthly reports.

## **Goal #4: Provide safe and convenient transportation services to the residents and visitors of Del Norte County.**

### **Performance Standard 4.1: Span of Service**

#### **Context**

The span of service is when Redwood Coast first starts service in the morning and when the last bus ends service in the evening. In general, the longer the span of service, the more convenient the service is to meet the diverse needs of passengers.

## Recent History

Redwood Coast Transit has had different span of service for the Crescent City local route and the regional routes.

For the local Crescent City routes, the current span of service is 7:00 am to 7 pm on weekdays and from 8:30 am to 6:30 pm on Saturdays on Route 2 and 4. Routes 1 and 3 Saturday service was eliminated on July 1, 2017.

For the Regional Routes, Route 20 currently has a span of service from 6:05 am to 8:45 pm, with different times for northbound and southbound trips. The span of service varies by location. Late evening service to Arcata was eliminated in July 2018.

On Route 199, the span of service is from 6:53 am to 5:26 pm Monday to Saturday.

RCTA installed video cameras on all buses in 2017 to improve passenger and driver safety. In 2018, RCTA secured the transit facility with fencing, a security gate, and additional lighting.

## Recommendations

Crescent City Local Routes:

- Minimum Standard is service from 7:00 am to 6:30 pm on weekdays and 8:00 am to 6:30 pm on Saturdays.
- Target Standard is service from 6:30 am to 7:30 pm on weekdays and from 7:30 am to 7:30 pm on Saturdays on all routes.

Route 20:

- Minimum standard is service from 6:00 am to 9:00 pm six days a week.
- Target standard is minimum standard and extending the 7:40 pm southbound run from Klamath to Arcata during the tourist season. Sunday service would be available from 9:00 am to 9:00 pm during the tourist season.

Route 199:

- Minimum standard is from 7:00 am to 5:30 pm Monday to Saturday.

- Target standard is to extend span of service during tourist season, from 6:00 am to 9:00 pm from Monday to Saturday. Sunday service would be available from 9:00 am to 9:00 pm during the tourist season.

### **Performance Standard 4.2: Miles between preventable accidents**

#### **Context:**

This performance standard is the vehicle service miles between an accident that was preventable by a Redwood Coast Transit driver. This is an important asset management standard and normally correlated to driver training and contractor management. This information is typically reported in contractor monthly reports by the service contractors. However, in reviewing a sample of

#### **Recommendation:**

On a systemwide basis, the minimum standard should be 100,000 miles between preventable accidents with the target standard of 250,000 miles between preventable accidents.

### **Goal #5: Within available financial resources, develop supplemental mobility options and services that both encourage better utilization of existing fixed route and demand response service (Mobility Management Goal)**

### **Performance Standard 5.1 Annual number of potential passengers travel trained**

The minimum number of potential passengers travel trained annually is 20. The target standard of potential passengers travel trained is 50 per year.<sup>22</sup>

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<sup>22</sup> Performance Standards will be updated once the CTSA chapter of the SRTP is completed.

## Section 4: Candidate Service and Capital Improvements

### OVERVIEW

This section of Technical Memorandum #2 provides both the service and capital alternatives that will be evaluated in Tasks 5 and 6 of the Short Range Transit Plan. It must be stressed that these are candidate actions to improve Redwood Coast Transit service delivery and no recommendations are being made yet.

The methodologies that will be utilized to evaluate both the candidate service and capital alternatives are provided in order to give the opportunity for review and discussion before the evaluation process commences.

In addition, candidate marketing actions are provided with the rationale for including the potential actions. The methodology for evaluating and prioritizing marketing actions is provided.

### CANDIDATE SERVICE DELIVERY ACTIONS & PROPOSED EVALUATION METHODOLOGY

#### Candidate Service Improvements and Rationale

There are seven candidate service improvements that are proposed for detailed evaluation in Task 5. They are presented without prioritization.

##### **1. Restore Saturday service on all routes**

This action would restore Saturday service on Routes 1 and 3 to the 2017 service levels, with two buses operating on Saturdays. The rationale for considering this action included:

- Onboard survey input from the Dr. Shapiro Report.
- Discussions with passengers on board the buses during the August 2018 site visit.

- Based on passenger observations, ridership has dropped significantly on Saturday, and this would be confirmed with monthly First Transit ridership reports.
- Public forum input comments made by existing passengers.

## **2. Implement Sunday service**

Since the Crescent City economy is a seven-day-a-week economy, workers who need public transit are not able to work on Sundays, and this limits the job market for individuals who do not own or a car or do not have a driver's license. In other rural transit systems, shopping and going to church are often the primary reasons that Sunday service is needed.

Running a fixed route service similar to Saturday service is one option for providing Sunday service. But providing a subsidized taxi voucher program, providing general public dial-a-ride, or utilizing technology for a general public dial-a-ride with an app, are all viable service delivery alternatives.

The rationale for evaluating a Sunday service alternative includes:

- Top improvement listed by passengers in the Dr. Shapiro on-board survey.
- Discussions with passenger onboard the buses.

## **3. Provide later evening service**

The rationale for adding later evening service is very similar to implementing Sunday service. If a rider works in a restaurant, for example, and lives in Crescent City, it is not possible to get home after work because the service ends about 7:00 pm. The service delivery alternatives are also the same as Sunday service and are not repeated here.

The rationale for considering later evening service includes:

- Second top improvement of passengers.
- Important priority of human service agencies working with clients for training and employment.

#### **4. Pilot school tripper service**

A school tripper service is normally one or two bus runs in the morning and afternoon that connect neighborhood areas and Del Norte High School and Crescent Elk Middle school bell times. The most successful school tripper services are a collaboration between the transit agency and the schools themselves. The rationale for considering a pilot school tripper service includes:

- Low high school and middle school student existing ridership based on observations onboard the bus and the Dr. Shapiro onboard survey results.
- RCTA Board interest in building student ridership.

#### **5. Improve morning service from Klamath**

As discussed above, both RCTA and the Yurok Tribe YTTS service are interested in increased collaboration and coordination with transit services. YTTS is expanding and increasing the vehicles to 12-passenger vans. Exploration of a fixed route morning run from Klamath to Crescent City will be evaluated in more detail as part of Task 5. The rationale for this service alternative is:

- Input from three RCTA passengers at a public forum input.
- Discussions between the Ronny Kraft Consulting team and the YTTS Transportation manager.
- A desire by the RCTA board to have a successful collaboration between RCTA and YTTS.

#### **6. Consider tourist season schedule enhancement to encourage increased tourism ridership**

This alternative would have two parts. Part A would be existing routes, but adding to the Regional Route schedules with longer hours during the tourist season on Routes 20 and 199. An increased marketing budget would be devoted to promoting tourist use of RCTA.

Part B would add to the extension of the schedules during the tourist season, but would modify Routes 20 and Route 199 to provide direct service to and from Crescent City motels and hotels with booking of trip fares through the local hotel industry.



## **7. Consider Non-Emergency Medical Transportation Service Delivery Alternatives**

The funding levels for the service to operate with Article 4.5 monies from the Local Transportation Funds were not successful for providing NEMT, as the 5% allowable under the Transportation Development Act is not sufficient. This task would explore service alternatives that are utilized by other transit agencies. These are typically “Medical Express” services that are operated one to three days a week that connect the rural population to medical facilities utilizing normal funding sources as part of the array of transit services provided.

The rationale for this alternative includes:

- Interviews with several human service agencies have identified non-emergency medical transportation as the top unmet transit need in Del Norte County.
- The Social Services Transportation Advisory Council (SSTAC) identified NEMT as the top priority unmet need in the County.

### **Methodology to Evaluate Service Improvements**

The first step in the evaluation process will be to develop at least two financial scenarios of projected revenues for Redwood Coast Transit. This will provide a range of the potential funding resources for operations over the next five years. This range will help to determine if the alternative is affordable or whether reductions in some services would need to be made as a trade-off for providing the service.

Based on the FY 2016/17 audited cost data, an operational cost model will be developed that provides the fixed costs (such as transit management contract), variable cost based on hours provided (such as coach operator wages and benefits), and variable costs based on miles of service provided (such as fuel and maintenance). This will allow the determination of the marginal cost of providing an additional hour and mile of service as well as the cost savings from reducing or eliminating an hour or mile of service.

Based on performance of existing services, the next step would be to identify services that currently operate that could be considered for reduction or elimination. As an example, Route 199 operates six days a week year-round. In

other rural transit systems, such services often operate two or three days a week. Such an alternative would enable the resources to be shifted to a need that might serve more residents of Del Norte County.

Based on the alternative being evaluated, the proceeding steps will be able to identify the marginal costs of providing or reducing services, and determining under what circumstances the alternative is or is not affordable over the next five years.

For services that are deemed feasible based on the marginal cost analysis and “what-if” affordability analysis, efforts will be made to determine the range of potential ridership and what the potential performance might be. In some cases, such as Sunday service, peer analysis will be utilized to compare the range of ridership response in other areas.

Finally, each of the potential seven alternatives would be ranked in terms of cost per passenger trip and the potential farebox recovery ratio. It is recognized that longer trips such as a medical express service for NEMT will have a higher costs per trip but potentially a higher farebox recovery ratio. It will be up to the RCTA Board to determine how to prioritize implementation of potential improvements based on the analysis provided.

## **CANDIDATE CAPITAL IMPROVEMENTS AND METHODOLOGY FOR PRIORITIZATION**

### **Candidate Capital Improvements**

Most of the capital improvements identified below have been identified as important capital needs. Many of the capital expenditures have been deferred due to the lack of current capital funding. It's important to prioritize capital needs and funding because California has a history of approving legislation that has helped transit agencies fund capital improvements. Regardless, it's prudent planning to have a prioritized list of needed capital expenditures for when and if eligible funding becomes available.

### **1. Install 2-5 new bus shelters per year**

The need for new bus shelters, signs, and information was discussed previously. A target of two bus shelters a year has been established as the minimum, and if funding and staff capacity is available, then five shelters per year is the target goal. The rationale for this capital improvement included:

- Stakeholder input
- Passenger input
- RCTA Board input

It should be noted that current RCTA management staffing levels are only sufficient for managing one and perhaps two at the maximum bus shelters improvements a year. If more bus shelters per year are desired by RCTA management, it will require more investment in RCTA management staffing levels. [DH22][MOU23]

### **2. Purchase second MV-1 van**

RCTA has a MV-1 wheelchair accessible sedan that it currently utilizes for its Dial-Ride service. Mobility Ventures (MV) has developed these wheelchair accessible vehicles, built by its parent company AM General that is known for making jeeps.

All passengers, and wheelchair passengers in particular, enjoy the comfortable ride the MV-1 offers. From a transit agency

perspective, when passenger volumes are low, the MV-1 has significantly better fuel economy than the traditional cutaway bus.

There is a need for second MV-1 in the RCTA fleet to better serve Dial-A-Ride trips.

### **3. Replacement of Bay Doors**

According to the First Transit maintenance manager, and based on personal observations by the consulting team, several of the bay doors in the

**Figure 18: MV-1 Van**



maintenance facility are broken or have rotted from sea salt decay. There is a need to replace all of the bay doors in the maintenance facility.

#### **4. Improve lighting**

A site visit to the maintenance facility has shown that the lighting inside the shop area is substandard and needs to be significantly upgraded. It is particularly problematic during the winter months when natural light is not available.

#### **5. Dedicated Bay space**

The open floor plan of the maintenance facility does not allow sufficient heating during the winter months. There is a need for a dedicated bay space with insulated walls that would enable adequate heating when mechanics are working on a vehicle.

#### **6. Building maintenance**

There is significant rust and decay at the northwest corner of building. Overall, there needs to be an overhaul and upgrading of maintenance shop external walls over the next five years to ensure ongoing integrity and safety of the maintenance facility.

#### **7. Bus Rehabilitations and Replacements**

RCTA has applied for \$242,000 in FTA 5339 (b) grants to rehabilitate two of the existing diesel Freightliner buses and the purchase of one gas-powered bus. This would extend the useful life of the Freightliner buses and replacement of a Crescent City bus that has exceeded its useful life. At this writing, it is not known if the federal funding of the grant application will be approved.

Over the five years of the Short Range Transit Plan between FY 2019/20 to FY 2024/25, there will be a need to rehabilitate or replace the entire RCTA fleet. A major portion of the Financial Plan will need to identify the revenue sources necessary for replacement purposes.

#### **8. Technology Enhancements**

At the October 17, 2018 RCTA meeting, several technology enhancements were reviewed and will be further evaluated and prioritized as part of the capital

plan. These include items beyond what First Transit has contractually promised to provide RCTA in the near future. The items below are not prioritized.

- Mobile ticketing through an app. RCTA management has followed through on this improvement and is in the process of implementing Token Transit. This will enable passengers to pay their fare with a smartphone app.
- Wi-fi on board buses. Route 20 would be the most useful, but cellular coverage could be problematic.
- Administrative database system for performance, budget tracking, and reporting. In discussions with vendors at a recent industry conference, the leading transit database systems are prohibitively expensive for the size of RCTA. It may be more cost effective to hire a local graduate student to develop a tailored database system that will serve the same purpose or explore other less expensive alternatives.
- Bus stop passenger information holders and electronic signage possible at a few bus stop locations with real time bus information.
- Vehicle health monitoring
- Electronic fareboxes

## Methodology for prioritizing Capital Investments

There is a significant need for capital investment in RCTA assets. Unfortunately, some of the past funding sources for transit capital improvements, such as ARRA (stimulus funding) and PTMISEA (Proposition 1B), are no longer available. RCTA receives operating assistance from FTA 5311(f) for Route 20. 5311(f) funding in California used to also provide funding for vehicle replacement, but with funding reductions, the only grant awards by Caltrans in FY 2018/19 were for operating assistance. RCTA management participated in the Caltrans UOP Update of the Statewide Intercity Bus Plan. It is highly likely that only operating funds will be available from 5311F into the foreseeable future.

There are limited funding sources for capital improvements. Formula funding for SB 1 provides a limited amount of funding for capital improvements, which is approximately \$35,000 per year. State Transit Assistance is also utilized for capital improvements by many rural transit agencies. Competitive grants for rural FTA 5339 funding for capital improvements are theoretically possible, but have not

been a reliable source of funding for rural transit agencies. However, RCTA has been funded for two replacement buses in the last two years from FTA 5339.

The first task will be to develop at least two financial scenarios for potential capital revenue sources. This will be done in consultation with RCTA management.

The second task is to make reasonable estimates of the total capital cost needs based on the above list to determine how much of capital fund shortfall there is.

The third step will be prioritizing capital funding based on the following criteria with the most important criterion at the top:

1. Safety of transit operations: passengers and coach operators
2. Safety of facilities: transit management and maintenance personnel
3. Viability of basic transit operations
4. Comfort and convenience of passengers
5. Improvements to passenger information