FUTURE TRANSIT NEEDS AND OPPORTUNITIES MEMORANDUM

Date:	October 14, 2020 Project #: 23514.0
To:	David Hope, Coos County Area Transit Jennifer Boardman and Virginia Elandt, Oregon Department of Transportation
From:	Susan Wright, PE and Nick Gross, Bincy Koshy, Paul Ryus, Kittelson & Associates, Inc.
Project:	Coos County Transit Master Plan
Subject:	Memorandum #5: Future Transit Needs and Opportunities (Subtask 3.1)

TABLE OF CONTENTS

Introduction 1
Background 2
Service Opportunities 4
Recommendation 35
Next Steps 35

INTRODUCTION

This memorandum describes and identifies potential service opportunities developed to address the service gaps and needs documented in *Memo #4: Unmet Transportation Needs*. It serves as a starting point for identifying potential changes to the CCAT system. The public and CCAT stakeholders will have the ability to review and comment on the service opportunities presented in this memo; this feedback will be used in developing a preferred alternative that will be included in the draft Transit Master Plan. Stop locations and route alignments presented in this memorandum are conceptual, representing locations that would be desirable to serve. Although an effort has been made to identify feasible stop locations, final locations would be developed as the plan is being implemented, with CCAT working with local road authorities (cities, Coos County, ODOT), along with property owners when on-site stops are proposed.

This memo's content includes:

- Background – This section summarizes the assumed future conditions documented in previous memos, along with key service needs identified from CCAT goals and policies and through stakeholder and public input.
- Service Opportunities – This section starts with a description of deviated-route service and its potential applications, given that CCAT plans to implement this service type in fall 2020. The section then continues by presenting service alternatives specific to local routes in the Bay Area communities (Charleston, Coos Bay, and North Bend), intracounty fixed-route service, intercity service, and dial-a-ride

service, including the alternatives' cost and ridership implications. The section concludes with a discussion of capital alternatives and potential facility improvements which will be further refined after the planned service network is finalized.

BACKGROUND

This section summarizes findings from *Memorandum #4: Unmet Transportation Needs* that affect the development of future service alternatives.

POPULATION, EMPLOYMENT AND LAND USE GROWTH

Key transit market population, employment and land use growth characteristics of Coos County include:

- Coos County's population is expected to remain stable through 2043 (62,747). Small population increases in most incorporated communities are expected to be offset by slight decline in population in unincorporated areas of the county and in the city of Coquille.
- The greatest future growth is expected in northwestern North Bend and adjacent portions of Coos Bay, along the Cape Arago Highway between Coos Bay and Charleston, and in areas west, south, and east of downtown Coos Bay. With the exception of the Cape Arago Highway, most of these areas are more than ¼ mile from the closest existing transit service. Future household density in downtown North Bend and along Highway 101 is also expected to increase.
- Coos County has a relatively high proportion of potentially transit-dependent populations, including seniors, youth, low-income households, and persons with disabilities. In 2018, persons 65 years and older represented 26 percent (approximately 16,787 people) of the county's population. By 2043, the senior-age population is expected to grow by approximately 2,500 persons and would constitute 31% of the county's population.
- Approximately 18% of Coos County's population lives in households with incomes below the federal poverty level.
- Regional employment in Coos County is forecast to increase by 3,445 jobs between 2013 and 2035, an annual growth rate of 1.0 percent. It is expected that the largest employment increases will occur in construction, private education, and health services.

NEEDS RELATED TO CCAT GOALS AND POLICIES

The following high-level needs were identified related to CCAT goals and policies:

- Improve service utilization, safety and security and resource utilization.
- Improve connectivity and service levels for frequent destinations and transit-dependent populations.
- Increase ridership with strategies related to communication, connectivity and accessibility.
- Improve route and service efficiency.
- Increase the service span to accommodate more work and school schedules.
- Service improvements specifically focused on serving Title VI populations will need to focus on key destinations rather than particular housing locations.

STAKEHOLDER AND PUBLIC INPUT

STAKEHOLDER INTERVIEWS

- Frequency and availability of Dial-A-Ride service need to be increased due to high demand and high number of people with disabilities and people in wheelchairs using the service.
- Connections need to be provided to and from Lakeside.
- Transit connectivity needs to be improved between Star of Hope and The Mill Casino.
- Training on basic transit travel that includes fare payment process and technology information needs to be provided to the public.
- Connections need to be provided to and from Florence and Eugene to meet transit needs of the tribes, community members and employees in the area.
- Stop needs to be provided near Tribal Housing in North Bend near Airport Heights as a fair share of the community members do not drive.
- Transit services should be improved to and from casinos to serve employees and colleges to serve students.
- Transit schedules need to be conducive to work schedules of employees in the region.
- Weekend service needs to be provided and made more frequent to run daily errands and visit key destinations (shopping, going to places of worship).
- Online transit bookings access and vanpool coordination from transfer spots needs to be provided.
- Marketing and advertising of new online services need to be commenced once online tools are in place.
- Veterans have a need to travel to the VA hospital in Roseburg.
- The system's long one-way loops and long waits between buses discourage people from riding.

DRIVER SURVEY

- Improving transit vehicles was ranked as the number one improvement if additional funding were to become available followed up improvements to existing transit service and transit stations/stops.
- New service and staffing needs were also noted as improvements for consideration, such as additional dispatch support.
- The majority of additional recommendations voiced by operators included improvements to stop amenities, including signage, maps, seating and posted schedules to help increase visibility, awareness, and service knowledge.
- One operator identified the need for a transit station for transfers and another recommended coordinating with the state/county to issue senior/disability service cards for transit access.

ONBOARD RIDER SURVEY

- When asked about service improvements, riders identified increased frequency of service, extended service hours and weekend service as key improvements.

ONLINE SURVEY

Key findings related to needs from the online survey conducted during the summer of 2019 include the following:

- When asked what type of limitations prevented participants from making a trip due to lack of transportation, participants noted that CCAT doesn't run when they need to travel, CCAT doesn't go where they need to go, or they do not have a working motor vehicle.

- Riders indicated that real-time vehicle arrival information and online/mobile trip planning tools as the highest-interest tools for rider convenience.
- In ranking six options from low priority to high priority, "Increase Frequency" received the highest number of #1(high priority) ratings. "New Service" had the highest average ranking.

IN-PERSON EVENTS

- Key themes voiced by community members at the Coos Bay Farmers Market included a desire for enhanced weekend service and extended hours of existing service.
- Key themes voiced by community members at the Bandon Farmers Market include:
    - Provide weekend service from Coos Bay/North Bend to Bandon
    - Provide a daily shuttle from Bandon to the Southwest Oregon Regional Airport
    - Provide connections between Bandon and Roseburg
- Greatest community support for transit improvements identified at the Coos County Fair & Rodeo was for increased frequency followed closely by weekend service, service to underserved populations, and technology.

SHORT-TERM SERVICE OPPORTUNITIES

This section discusses potential changes to CCAT's transit service to address the needs identified in the previous section. These changes include modifications to existing routes (e.g., changes in routing or service span), new routes, bus stop and facility improvements, and improvements to the technology that supports transit operation. Each proposed change is accompanied by a description of what would change and why, along with estimates of operating and capital costs. For comparison purposes, Table 1 summarizes key characteristics of the existing system. Throughout this memo, "existing" refers to operations immediately prior to the Covid-19 pandemic.

Table 1. Existing Service Summary

Route	Service Span		Headways (minutes)	Buses Required	Annual Revenue Hours	Annual Vehicle Hours	Annual Operating Cost	Annual Boardings
	Weekdays	Saturdays						
Cranberry Express	10:00 – 11:56; 13:10 – 15:56	—	40	0.6	713	975	$43,900	2,597
Timber Express	07:15 – 13:15	—	360	0.5	885	917	$41,300	4,874
Crab Express	09:15 – 15:15	—	360	0.5	759	791	$35,600	NA
Pirate Express	08:30 – 11:30; 12:35 – 18:06	—	60–68	1	2,150	2,150	$96,800	32,840
Bulldog Express	08:38 – 11:38; 12:38 – 18:10	—	60–72	1	2,150	2,150	$96,800	
Weekend Express	—	10:00 – 12:25; 13:30 – 15:20	35	0.2	234	247	$12,900	NA
Powers Stage	Thursday + 2nd Tuesday	—	1 round trip	0.2	240	384	$17,300	316
Dial-a-Ride (Bay Area)	08:30 – 18:10	10:00 – 15:20	—	2	4,534	4,547	$204,600	11,078
Dial-a-Ride (Bandon)	10:00 – 11:56; 13:10 – 15:56	—	—	1	713	975	$43,900	2,000
Dial-a-Ride (Other)	various	—	—	2	4,300	4,300	$193,500	2,265

Total				9	16,678	17,436	$784,600	55,970

Notes: Rides based on CCAT FY2017-18 data, some service has changed since then. Bandon dial-a-ride estimated from May 2019 data for the most-requested boarding locations. Revenue hours based on the current schedule. Costs based on the current $45/vehicle hour operating cost, including deadheading time (vehicle travel time while not in service).

NA = not available.

DEVIATED-ROUTE SERVICE

DESCRIPTION

Because of budget shortfalls, CCAT is proposing to change the three local routes serving Charleston, Coos Bay, and North Bend from fixed-route to deviate-route service in fall 2020. In a traditional transit system, buses operate along fixed routes and do not go off-route to pick up or drop off passengers. When local (i.e., not intercity) fixed-route service is provided, the Americans with Disabilities Act (ADA) requires that transit providers provide origin-to-destination "complimentary paratransit" (i.e., dial-a-ride) service within ¾ mile of the fixed-route to serve passengers with disabilities that prevent them from accessing or using the fixed-route system. Complimentary paratransit must be offered during the same days and times that the fixed-route service operates.

Although complimentary paratransit service provides vital mobility for its users, it is also much more expensive to operate because far fewer people can be served per hour due to the need to serve origin–destination trips throughout the transit service area. According to CCAT's ridership data for 2018, CCAT's complimentary paratransit served 20.5% of total ridership, but required 27.2% of CCAT's total revenue hours.

To help lower costs, while still meeting their legal and social responsibilities, some smaller transit agencies use a "deviated-route" model. In this model, a bus generally follows its fixed route, but is allowed to deviate off-route to pick up and drop off passengers. There are two primary ways that deviated-route service can be provided:

- **Comingled service.** In this model, the bus is used at the same time to provide both fixed-route service for the general public and ADA complimentary paratransit service for eligible riders. The bus deviates up to ¾ mile from the fixed route to pick up an ADA passenger and then returns to the fixed route to serve the next stop. All of the requirements that normally apply to complimentary paratransit—in particular, the ¾ mile distance from the fixed route and providing sufficient capacity to avoid denying trip requests—also apply to comingled service. Under the right conditions, comingled service avoids the need to provide two separate transit operations, one for the general public and one for ADA passengers. However, if there are too many requests for deviations, or the deviations tend to be very long, the reliability of the fixed route will suffer. In that case, either the route would need to be shortened to provide more time for deviations, or the frequency of service would need to be reduced, to allow more time for each trip to be completed.
- **Demand response.** In this model, the bus follows a fixed route, but anyone is allowed to request a deviation. As long as all passengers are treated equally, the transit operator has considerable flexibility in setting the service parameters—for example, charging a premium fare to serve deviations, the maximum deviation distance, and the maximum number of deviations allowed per trip. Complimentary paratransit service is not required under this model and the operator is allowed to deny deviation requests once the available capacity has been reached.

Section 7.5.4 of Federal Transit Administration (FTA) Circular 4710.1, *Americans with Disabilities Act Guidance*, emphasizes that route deviation services cannot be "in name only" and that transit agencies must ensure the

implementation of such services do not discriminate against persons with disabilities. In particular, agencies must advertise the existence of the route deviation service in schedules and other public information.

Table 7-2 in the circular identifies seven areas in which service to persons with persons with disabilities must be monitored to ensure the service is equivalent to that provided to all other passengers:

- Same response time (e.g., how far in advance passengers must request a deviation)
- Same fares (agencies are allowed to charge a reasonable premium fare for deviations)
- Same geographic area of service
- Same hours and days of service
- Same restrictions or priorities based on trip purpose (agencies are allowed to prioritize certain types of trips for deviations, but the same restrictions or priorities must apply to all passengers)
- Same availability of information and reservations capability.
- Same constraints on capacity or service availability.

Even when agency policies are applied equally to all passengers, it is still possible to inadvertently discriminate against persons with disabilities. For example, persons with disabilities might request types of trips that result in a greater rate of denials. Examples could include:

- More riders wishing to travel to events such as a weekly senior lunch than be accommodated on a given trip, resulting in persons with disabilities being denied at a greater rate than the general public that does not experience similar surges in demand.
- Nursing homes being located farther from the fixed route and thus using more of the time available per transit vehicle trip to deviate, compared to requests from the general public.
- Passengers using wheelchairs require significantly more time to board and de-board than passengers not using mobility devices. A deviation policy based on a time budget for deviations per trip (rather than a maximum number of deviations per trip) could discriminate against passengers that require more time to get on and off the bus.

USAGE

Deviated-route service works best when the typical number of deviation requests is relatively low (e.g., one or two per one-way trip), such that the schedule has time built in to accommodate deviations, but neither provides too much slack time that goes unused on most trips, nor experiences so many requests that buses cannot start their next trip on time. In 2018, CCAT served an average of 2.1 trips per revenue hour with its complimentary paratransit service, corresponding to 4.2 trips per clock hour with two paratransit vehicles in operation. This number of hourly trips falls into the range that feasibly be could served by deviated-route service on the three existing local routes serving Bay Area communities. However, since that time, the number of passengers that CCAT has certified as being eligible for ADA complimentary paratransit has increased, and the resulting increased demand has required CCAT to operate up to four paratransit vehicles at a time in the Bay Area communities during the most recent fiscal year.

Other desirable conditions for deviated-route service include the following:

Streamlined route patterns. Straightening out the fixed route provides extra time in the schedule that can be used to accommodate deviations, without necessarily requiring changes to the route headway or endpoints. Stops that have passenger activity on most trips continue to be served by the fixed route. At the same time, little-used stops that require out-of-direction travel can be eliminated. These former stops can continue to be served on an as-needed basis via a request for a route deviation, as well as by walking a little farther from the next-closest stop, when adequate pedestrian facilities exist (This approach will be followed for Pirate Express and Bulldog Express). As shown in figure 1 below, Pirate

Express passengers may request deviated pick-ups or drop-offs for stops 7 and 8 (highlighted). Bulldog Express deviated stops include stops 9, 10, and 11 (highlighted). All other portions of the routes may include deviations too.

Figure 1. Pirate Express and Bulldog Express Schedules

Pirate Recommended			M-F								
1 - Coos Health & Wellness	2 - Wal-Mart	3-NBMC	4 - Bay Hospital	5 - Library	6 - Bi Mart	7- DMV (request deviation)	8 -SCBEC (request Deviation)	9 -4th & Elrod	10 - Mingus Park	11 -CCAT Star of Hope (xfer to Charleston)	12 - Coos Health & Wellness
8:00 AM	8:02 AM	8:07 AM	8:09 AM	8:18 AM	8:20 AM	8:20 AM	8:28 AM	8:30 AM	8:34 AM	**8:40 AM**	9:00 AM
9:00 AM	9:02 AM	9:07 AM	9:09 AM	9:18 AM	9:20 AM	9:20 AM	9:28 AM	9:30 AM	9:34 AM	**9:40 AM**	10:00 AM
10:00 AM	10:02 AM	10:07 AM	10:09 AM	10:18 AM	10:20 AM	10:20 AM	10:28 AM	10:30 AM	10:34 AM	**10:40 AM**	11:00 AM
11:00 AM	11:02 AM	11:07 AM	11:09 AM	11:18 AM	11:20 AM	11:20 AM	11:28 AM	11:30 AM	11:34 AM	**11:40 AM**	12:00 PM
12:00 PM	12:02 PM	12:07 PM	12:09 PM	12:18 PM	12:20 PM	12:20 PM	12:28 PM	12:30 PM	12:34 PM	**12:40 PM**	1:00 PM
1:00 PM	1:02 PM	1:07 PM	1:09 PM	1:18 PM	1:20 PM	1:20 PM	1:28 PM	1:30 PM	1:34 PM	**1:40 PM**	2:00 PM
2:00 PM	2:02 PM	2:07 PM	2:09 PM	2:18 PM	2:20 PM	2:20 PM	2:28 PM	2:30 PM	2:34 PM	**2:40 PM**	3:00 PM
3:00 PM	3:02 PM	3:07 PM	3:09 PM	3:18 PM	3:20 PM	3:20 PM	3:28 PM	3:30 PM	3:34 PM	**3:40 PM**	4:00 PM
4:00 PM	4:02 PM	4:07 PM	4:09 PM	4:18 PM	4:20 PM	4:20 PM	4:28 PM	4:30 PM	4:34 PM	**4:40 PM**	5:00 PM

Bulldog Recommended			M-F					*Deviated request*			
1- Superstop	2 -Airport Market	3 - DHS	4- Washington & 101	5-Bungalow Market	6- THE House	7 - SCBEC (Transfer to Pirate)	8-Mill Casino	*9- Harbor Ave Boardwalk*	*10- McPherson*	*11- Hamilton Apts*	12 - Superstop
8:00 AM	8:03 AM	8:05 AM	8:11 AM	8:12 AM	8:17 AM	8:28 AM	8:36 AM	8:36 AM	8:36 AM	8:36 AM	9:00 AM
9:00 AM	9:03 AM	9:05 AM	9:11 AM	9:12 AM	9:17 AM	9:28 AM	9:36 AM	*9:36 AM*	*9:36 AM*	*9:36 AM*	10:00 AM
10:00 AM	10:03 AM	10:05 AM	10:11 AM	10:12 AM	10:17 AM	10:28 AM	10:36 AM	*10:36 AM*	*10:36 AM*	*10:36 AM*	11:00 AM
11:00 AM	11:03 AM	11:05 AM	11:11 AM	11:12 AM	11:17 AM	11:28 AM	11:36 AM	*11:36 AM*	*11:36 AM*	*11:36 AM*	12:00 PM
12:00 PM	12:03 PM	12:05 PM	12:11 PM	12:12 PM	12:17 PM	12:28 PM	12:36 PM	*12:36 PM*	*12:36 PM*	*12:36 PM*	1:00 PM
1:00 PM	1:03 PM	1:05 PM	1:11 PM	1:12 PM	1:17 PM	1:28 PM	1:36 PM	*1:36 PM*	*1:36 PM*	*1:36 PM*	2:00 PM
2:00 PM	2:03 PM	2:05 PM	2:11 PM	2:12 PM	2:17 PM	2:28 PM	2:36 PM	*2:36 PM*	*2:36 PM*	*2:36 PM*	3:00 PM
3:00 PM	3:03 PM	3:05 PM	3:11 PM	3:12 PM	3:17 PM	3:28 PM	3:36 PM	*3:36 PM*	*3:36 PM*	*3:36 PM*	4:00 PM
4:00 PM	4:03 PM	4:05 PM	4:11 PM	4:12 PM	4:17 PM	4:28 PM	4:36 PM	*4:36 PM*	*4:36 PM*	*4:36 PM*	5:00 PM

- **Longer distances between stops.** Stops are desirably close enough to each other so as not shrink the area within walking distance of the route by too much, but far enough apart to minimize the amount of out-of-direction travel required when making a deviation. Outside specific areas with a large number of destinations (e.g., downtown Coos Bay), an average ¼-mile spacing provides a reasonable compromise.
- **Reduced/eliminated use of flag stops.** Small-city transit agencies with relatively low ridership demand often allow passengers to board or alight the bus at any safe location along the fixed route as a convenience to shorten walking distances. However, this policy is more difficult to maintain with deviated-route service, as the bus is only required to serve the fixed stops along the route, and may deviate from the fixed route between those stops as needed. As a result, a potential passenger waiting along the route between two designated stops may be bypassed if a deviation occurs along that section of the route. It is possible to avoid this issue by requiring the bus to turn around after deviating to rejoin the fixed route at the point it left it, but this approach is less-efficient time-wise and tends to reduce the number of deviations that can be made per trip. In addition, flag stops eventually become unsustainable as ridership increases, as the extra stops made along the route slow buses down too much. Flag stops will be available until additional bus stops are installed on the revised CCAT routes. Buses will also go around the block so to not miss flag stop pick-ups.
- **Prioritizing ADA passengers for deviations.** The ADA requires that requests for complimentary paratransit be allowed until the end of the business day (5 pm) before the trip. Under a comingled demand-response model, requiring other passengers to wait until the day of their trip to confirm a deviation request maximizes the capacity of deviated-route service to serve ADA passengers and thus minimizes the need for supplemental dial-a-ride service to avoid service denials to ADA passengers. When

general passengers are allowed to request deviations, the agency may set a deadline for when the request can be made (e.g., no later than one hour in advance for pick-ups). Drivers may be allowed to make drop-offs on request, if the schedule permits. ADA complimentary paratransit services specifically will not be provided by CCAT upon implementation of the deviated fixed-route service model.

- **Fare structure.** The ADA allows complimentary paratransit to charge up to twice the regular adult fare of fixed-route service, and this policy extends to requests for deviations by ADA passengers in a comingled model. FTA Circular 4710.1 also gives twice the regular adult fixed-route fare as an example of a demand-response route-deviation fare that would not be considered discriminatory, as long as the same premium fare was charged to all passengers. However, passenger fare for CCAT deviated service will be the same as the CCAT fixed-route service fare.

CCAT PROPOSAL

CCAT proposes to operate a demand response model of deviated-route service, with the following characteristics:

- Everyone would be eligible to request a deviation of the fixed-route service.
- Maximum deviation distance: ¼ mile from the fixed route. The local bus system in The Dalles uses the same maximum deviation distance.
- Trip purpose priorities for paratransit service, in descending order: medical, employment, education, nutrition, shopping, recreation, other, same-day medical, same-day non-medical.
- Maximum deviations per trip: To be determined. Each route's schedule will build in time to accommodate the identified maximum number of deviations without affecting schedule reliability.

SERVICE ALTERNATIVES

The following alternatives have been developed by CCAT and the consultant team, and present different ways that service could be reorganized to better address identified passenger needs while accommodating budget constraints.[1] Please note: **Route alternatives presented on pages 8 through 27 have evolved since this memo was drafted and the latest versions of the routes that were shared in the online survey are included in Attachment A.**

BAY AREA LOCAL ROUTE (PIRATE, BULLDOG, CRAB, WEEKEND) PACKAGE 1

This package of changes to the three local routes was being considered for implementation by CCAT prior to the Covid-19 pandemic. It uses the existing route structure as a starting point, but makes some changes to serve destinations and trip types that are not currently served or well-served, but had been popular in the past. This package did not anticipate the need for budget cuts and thus increases local service relative to existing conditions. It also did not anticipate a change to deviated-route service; therefore, the route lengths and schedule generally do not provide additional time to serve route deviations. This package is presented because it serves as the starting point for further adjusting local routes to allow route deviations, as described in "Package 2" below.

Pirate Express Changes

At present, this route operates on 60-minute headways in the morning (8:30 am to 11:30 am) and 68-minute headways in the afternoon (12:30 pm to 6:06 pm), separated by a one-hour lunch break between 11:30 am and 12:30 pm. Under this alternative, service would operate at consistent 60-minute headways throughout the day between 8:30 am and 5:30 pm. Connection opportunities to the Bulldog and Crab Express routes would be

[1] All service alternatives have been refined in July 2020. These newly proposed routes are shown in Appendix A

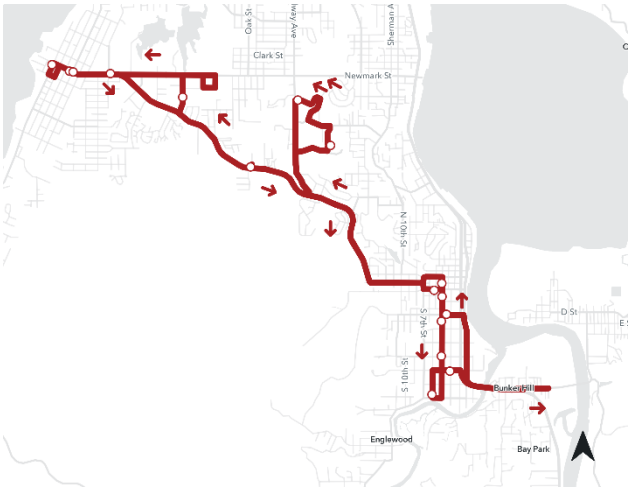
similar to the present. Connections to intercity routes to Roseburg and Curry County could be made in the vicinity of US 101 at Johnson Avenue in Coos Bay.

Changes to the route alignment would consist of:

- The route would be extended to the South Coast Business Employment Corporation.
- The route would no longer directly serve Southwest Oregon Community College (SWOCC). This change is due to CCAT's concerns about operating buses through the circular parking lot in front of the college and the potential for motorists to back into a passing bus without looking. SWOCC passengers would board at Walmart or along Newmark Avenue.
- The route would no longer serve the North Bay Medical Center's front door (but service would still be provided nearby on Woodland Drive and Hospital Way).
- The route would bypass Fred Meyer and Safeway in Coos Bay (but service would still be provided nearby on US 101/First Street). CCAT buses are not allowed into the Fred Meyer parking lot and the nearest existing bus stop is located two blocks away on Ingersoll Street; therefore, walking distances from new stops would be similar or shorter.

The route could be operated at 1-hour headways as a fixed route, but would not be able to accommodate route deviations while maintaining 1-hour headways.

Pirate Express – Current



Pirate Express – Package 1

Bulldog Express Changes

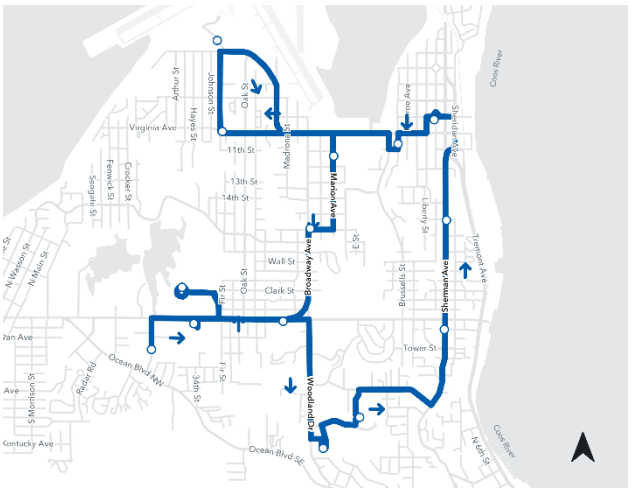
At present, this route operates on 60-minute headways between 8:38 am and 11:38 am and at 60–72 minute headways between 12:38 pm and 6:10 pm, separated by a one-hour lunch break between 11:38 am and 12:38 pm. Under this alternative, service would operate at consistent 60-minute headways throughout the day between 8:38 am and 5:38 pm. Connection opportunities to the Pirate and Crab Express routes would be similar to the present. Connections to intercity routes to Florence, Roseburg, and Curry County could be made at Pony Village Mall.

Changes to the route alignment would consist of:

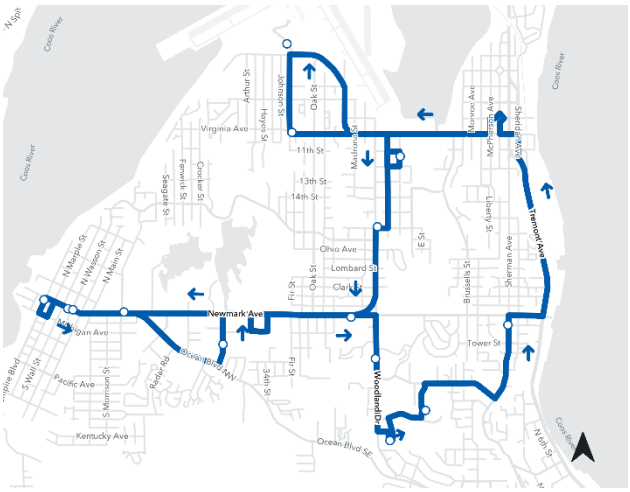
- The route would be extended to Empire. Connections to the Pirate Express and the Crab Express could be made in Empire, either at Star of Hope or along South Marple Street.
- The route would no longer directly serve Southwest Oregon Community College (SWOCC), as described for the Pirate Express.

- The route would be shifted from Sherman Ave to US 101, and would directly serve The Mill Casino.
- The route would bypass North Bend Lanes.

As with the Pirate Express, although the proposed route could be operated at 1-hour headways as a fixed route, it would not be able to accommodate route deviations while maintaining 1-hour headways.



Bulldog Express – Current



Bulldog Express – Package 1

Crab Express Changes

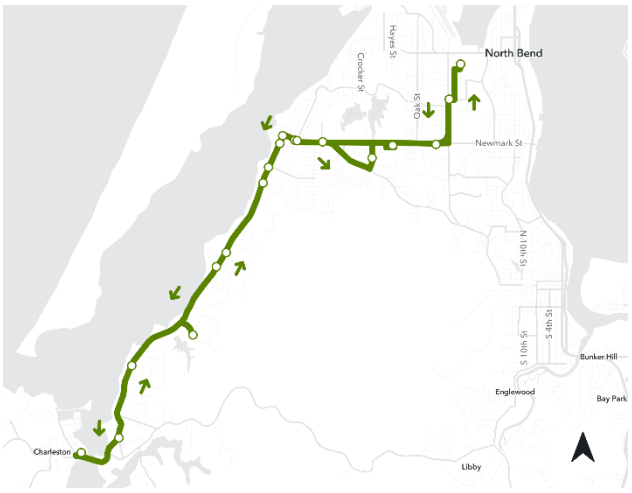
Service to Charleston is currently provided twice per day, once in mid-morning and again in mid-afternoon. Under this alternative, service would be offered at 1-hour headways between 7:00 am and 4:00 pm. The increased frequency would increase access to North Bend and Coos Bay for people living along the Cape Arago Highway for a variety of trip purposes (e.g., employment, education, shopping, social). and the schedule would be timed to allow connections to intercity bus routes serving Florence, Roseburg, and Curry County at Pony Village Mall. Connections to the Pirate route could be made in Empire, while connections to the Bulldog route could be made in Empire and at Pony Village Mall.

At present, the Crab Express is operated by the same bus that operates the Timber Express route to Coquille and Myrtle Point. Providing service throughout the day on the Crab Express would mean that this bus would no longer be available to serve Timber Express trips and those trips would need to be served in another way. Potential substitutes are described as part of the intracounty alternatives below.

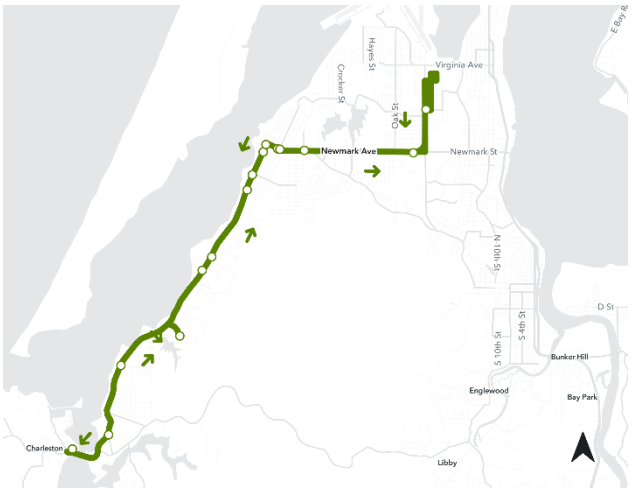
Changes to the route alignment would consist of:

- The inbound route to North Bend would bypass Advanced Health, Oregon Coast Community Action, and Coos Health and Wellness (but these locations would still be served by the Bulldog Express route).
- The route would no longer turn off Newmark Avenue into the Walmart parking lot (but service would be provided on Newmark Avenue).

The proposed route provides sufficient time to deviate once or twice per trip in each direction if operated using a deviated-route model.



Crab Express – Current

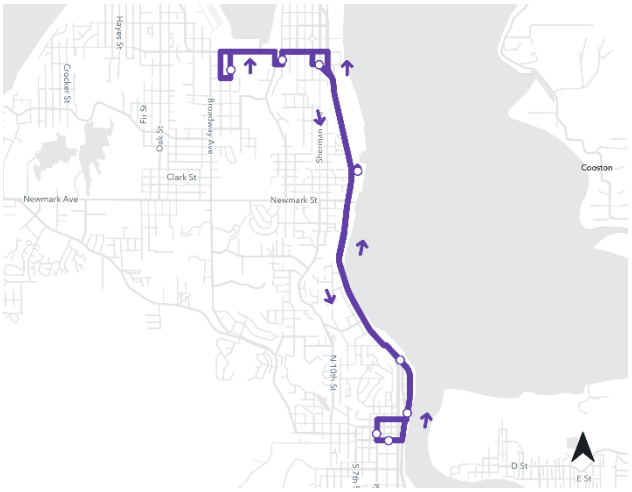


Crab Express – Package 1

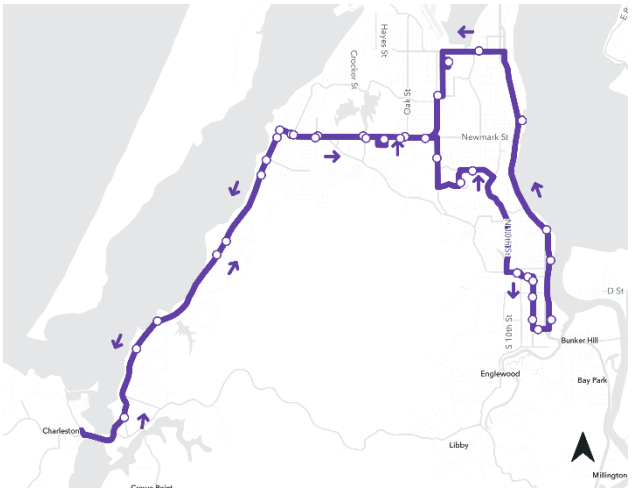
Weekend Express Changes

Saturday service is currently provided at 35–40 minute headways between 10:00 am and 3:52 pm, with a half-hour lunch break between 1:00 and 1:30 pm. The route currently connects Pony Village Mall to downtown Coos Bay via downtown North Bend and The Mill Casino. As part of Package 1, service would be extended to Charleston and the service span increased to 7:00 am to 5:30 pm, with the bus operating at 90-minute headways, with a 90-minute lunch break between 11:30 am and 1:00 pm. Starting in Charleston, the route would follow Cape Arago highway to the intersection of Newmark Avenue and Broadway, then loop counter-clockwise via Bay Area Hospital, Koos Bay Boulevard, downtown Coos Bay, The Mill Casino, downtown North Bend, and Pony Village Mall. Connections to intercity service operating on Saturday to Florence and Curry County would be available at Pony Village Mall.

The schedule would provide approximately 15–20 minutes of time per round trip to accommodate deviations. Although the route provides service to many portions of the CCAT local service area that currently lack Saturday service, it does not serve trips between North Bend and downtown Coos Bay well, because passengers must ride all the way to Charleston and back as part of their trip.



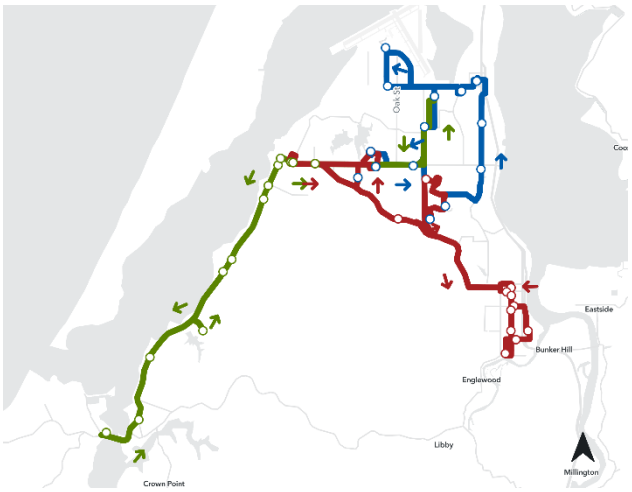
Weekend Express – Current



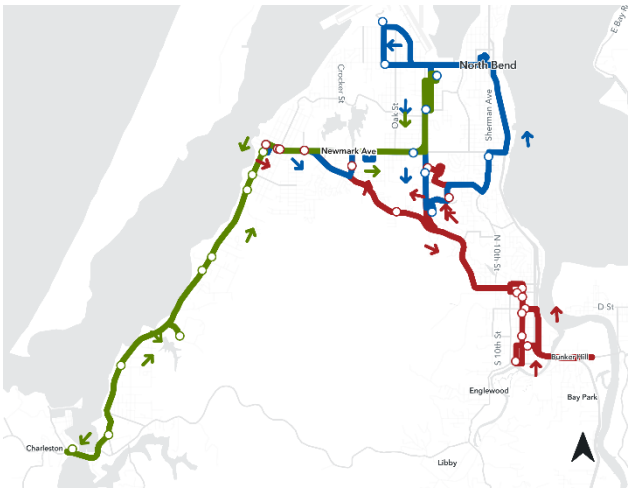
Weekend Express – Package 1

System Comparison

The following maps compare the current system's local weekday route structure with that provided under Package 1. Table 2 compares the current system and Package 1 in terms of population and jobs within ¼ mile of stops along each route, the percentage of the population that is low income and minority, and number of vehicle trips operated annually. To provide an apples-to-apples comparison of the coverage areas of the current system and the two packages, additional stops have been added along routes as needed to ensure each route segment along a given street assumes the same stop locations in each alternative.



Bay Area Weekday Local Routes – Current



Bay Area Weekday Local Routes – Package 1

Table 2. Weekday Local Service Comparison: Existing vs Package 1

Route	Population within ¼ Mile		Jobs within ¼ Mile		% Population Low Income		% Population Minority		Service Level (vehicle trips/year)	
	Existing	Pkg. 1	Existing	Pkg. 1	Existing	Pkg. 1	Existing	Pkg. 1	Existing	Pkg. 1
Bulldog	6,921	7,505	4,705	4,871	17.7%	20.8%	22.2%	20.0%	1,208	1,359
Pirate	5,875	6,297	5,177	5,246	22.8%	20.3%	21.5%	20.3%	1,208	1,359
Crab	4,518	4,324	2,182	2,018	21.4%	21.2%	20.0%	21.2%	302	1,359
Total*	11,812	11,493	7,767	7,679	19.1%	19.6%	20.4%	19.9%	2,718	4,077

*Totals do not equal the sum of the routes due to route coverage overlaps.

As can be seen from Table 2, Package 1 would increase the number of annual trips operated by 50%, compared to the current system, primarily due to the substantial increase in service that would occur on the Crab Express to Charleston. The number of people served within ¼ mile of stops in Package 1 drops by about 300 compared to the current system, primarily due to a loss of service to apartments adjacent to SWOCC and the shifting of service from Sherman Avenue to US 101. The number of jobs served within ¼ mile of stops in Package 1 drops by about 100 compared to the current system, with gains in job coverage southeast of downtown Coos Bay offset by losses at SWOCC.

Table 5 compares the current system's Saturday service to that under Package 1. It can be seen that although the number of daily trips is reduced by one-third, four times as much population would receive Saturday service.

Table 3. Saturday Local Service Comparison: Existing vs Package 1

Route	Population within ¼ Mile		Jobs within ¼ Mile		Service Level (vehicle trips/year)	
	Existing	Pkg. 1	Existing	Pkg. 1	Existing	Pkg. 1
Weekend	2,152	8,816	2,276	7,463	468	312

Table 4 presents the changes in travel time between six Bay Area locations under Package 1, compared to the current system. Of the 30 origin–destination pairs, 30% would have essentially unchanged travel times, 50% would experience reductions in travel times (with three pairs experiencing reductions of over 30 minutes), and 20% would experience longer travel times of 3–11 minutes. Overall, Package 1 improves travel times for many trips, particularly from Charleston and Empire.

Table 4. Weekday Travel Time Comparison: Package 1 vs. Existing

	North Bend City Hall	Coos Bay City Hall	Empire	Walmart	CCAT Office	Charleston
North Bend City Hall		50 (−13)	31 (−8)	26 (0)	39 (−7)	59 (−38)
Coos Bay City Hall	55 (+8)		29 (+3)	21 (0)	16 (0)	54 (−27)
Empire	29 (−16)	18 (−6)		8 (−47)	7 (0)	10 (−12)
Walmart	21 (0)	28 (−1)	5 (0)		12 (0)	38 (+11)
CCAT Office	39 (−34)	13 (−4)	13 (+8)	5 (0)		38 (−27)
Charleston	61 (−12)	53 (−23)	10 (−12)	17 (−12)	40 (−19)	

Note: ## (xx) = Package 1 travel time in minutes (change from current travel time).

BAY AREA LOCAL ROUTE (PIRATE, BULLDOG, CRAB, WEEKEND) PACKAGE 2

This package of changes to the three local routes uses Package 1 as a starting point, but streamlines the routes to provide sufficient time in the schedule to accommodate deviation requests. In addition, this package has been designed to address passenger concerns that the current route structure can require significant out-of-direction travel to make a trip. To address both of these needs, Package 2 introduces a new timed transfer point at Bay Area Hospital to facilitate travel between downtown Coos Bay and North Bend and replaces the large loop made by the Bulldog Express with an out-and-back line. Some portions of the Bulldog Express loop through North Bend would be served by the Crab Express instead. Finally, this package provides new service to several neighborhoods in western Coos Bay.

In developing these routes, 15% of the estimated running time per trip has been allocated to driver layover and schedule recovery time, with the remaining excess time available for use for schedule deviations.

Pirate Express Changes

Similar to Package 1, service in this alternative would operate at consistent 60-minute headways throughout the day between 8:30 am and 5:30 pm. The schedule would have Pirate and Bulldog buses meet at Bay Area Hospital to transfer passengers. Connections to the Crab Express could be made in Empire. Connections to intercity routes to Roseburg and Curry County could be made in the vicinity of US 101 at Johnson Avenue in Coos Bay.

Changes to the route alignment would consist of:

- The route would be extended to the South Coast Business Employment Corporation.
- In downtown Coos Bay, the route would travel on 4th Street in both directions, bypassing the DMV, Fred Meyer and Safeway (however, service would be available close to these destinations and could deviate on request).
- The route would no longer regularly serve the North Bay Medical Center's front door (but could still deviate there on request).
- The route would no longer regularly serve destinations along Kinney Road and Waite Street (but could still deviate there on request).
- The portion of the route along Ocean Boulevard west of Woodland Drive would be transferred to the Bulldog Express.
- From the hospital area, the route would travel north on Woodland Drive and west on Newmark Avenue and resume its existing route starting at Walmart.
- The inbound route from Empire would bypass Advanced Health, Oregon Coast Community Action, and Coos Health and Wellness (but service would still be provided nearby on both Newmark Avenue and Ocean Boulevard, and service could deviate on request).

The schedule provides about 9 minutes per hour to support deviations. If a solution can be found to address CCAT's concerns with operating buses through SWOCC's parking lot, this alternative preserves the ability to directly serve the SWOCC campus. Possible traffic delays making the left turn from Woodland Avenue onto Newmark Avenue would need to be monitored and might require coordination with ODOT to allow the traffic signal to better serve this movement.

Pirate Express – Current

Pirate Express – Package 2

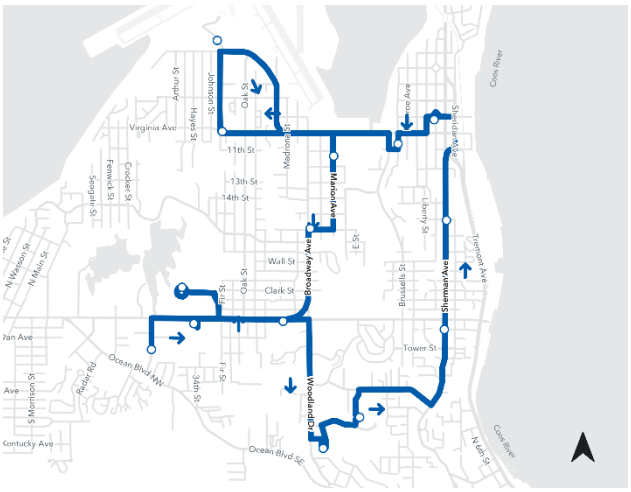
Bulldog Express Changes

Similar to Package 1, service in this alternative would operate at consistent 60-minute headways throughout the day, but with a service span of 8:00 am to 5:00 pm to facilitate connections with other routes. The schedule would have Pirate and Bulldog buses meet at Bay Area Hospital to transfer passengers. Connections to the Crab Express could be made in Empire and at Pony Village Mall. Connections to intercity routes could be made at Pony Village Mall.

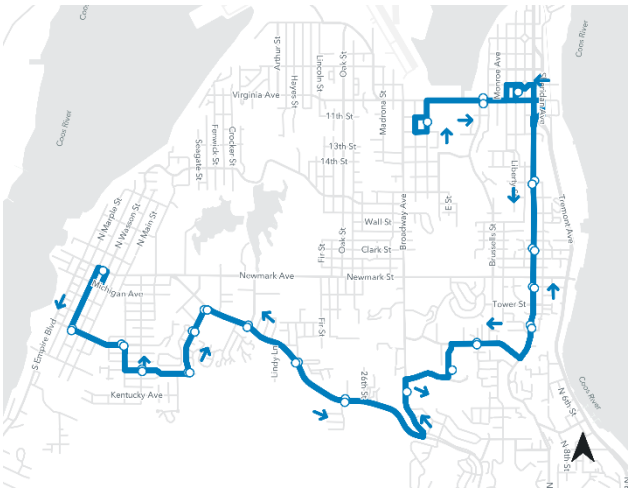
Changes to the route alignment would consist of:

- The route would operate out-and-back in both directions, reducing round-trip passenger travel time in many instances. The portion of the loop in northwestern North Bend would be taken over by the Crab Express, while service to Walmart and SWOCC would be provided by the Pirate and Crab Expresses.
- The route would take over the portion of Ocean Boulevard west of Woodland Drive currently operated by the Pirate Express and would provide new service to neighborhoods in western Coos Bay.
- The route would no longer regularly serve the North Bay Medical Center's front door (but could still deviate there on request).
- Compared to Package 1, the route would remain on Sherman Ave to serve adjacent residential areas, but a stop would be provided at Clark Street to serve passengers to and from The Mill Casino, which is located within a 5-minute walk downhill from the stop, with a traffic signal provided at Lewis Street to cross US 101. Specific trips (e.g., Star of Hope to the casino) could be deviated as needed. However, if CCAT determines that the casino is more likely to generate stops on every trip compared to the stops on Sherman Avenue, the route could also use US 101, similar to Package 1, without any significant schedule impact.
- The route would bypass North Bend Lanes.
- The route would bypass Advanced Health, Oregon Coast Community Action, and Coos Health and Wellness (but service would still be provided nearby on both Newmark Avenue and Ocean Boulevard, and service could deviate on request).

The schedule provides about 10 minutes per hour to support deviations.



Bulldog Express – Current



Bulldog Express – Package 2

Crab Express Changes

Similar to Package 1, service would be improved to 1-hour headways between 7:00 am and 4:00 pm. The schedule would be timed to allow connections to intercity bus routes serving Florence, Roseburg, and Curry County at Pony Village Mall. Connections to the Pirate route could be made in Empire, while connections to the Bulldog route could be made in Empire and at Pony Village Mall. Also similar to Package 1, providing service throughout the day on the Crab Express would mean that the bus would no longer be available to serve Timber Express trips and that those trips would need to be served in another way. Potential substitutes are described as part of the intracounty alternatives below.

Changes to the route alignment would consist of:

- The route would travel between Walmart and Pony Village Mall via Oak Street and Airport Heights, taking over a portion of the service currently operated by the Bulldog Express.
- The inbound route to North Bend would bypass Advanced Health, Oregon Coast Community Action, and Coos Health and Wellness (but service would still be provided nearby on Newmark Avenue and Ocean Boulevard, and service could deviate on request).

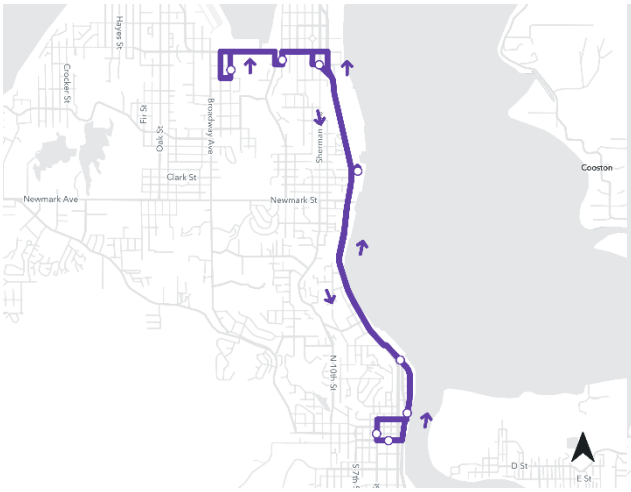
The schedule provides about 7 minutes per hour to serve route deviations.

Crab Express – Current

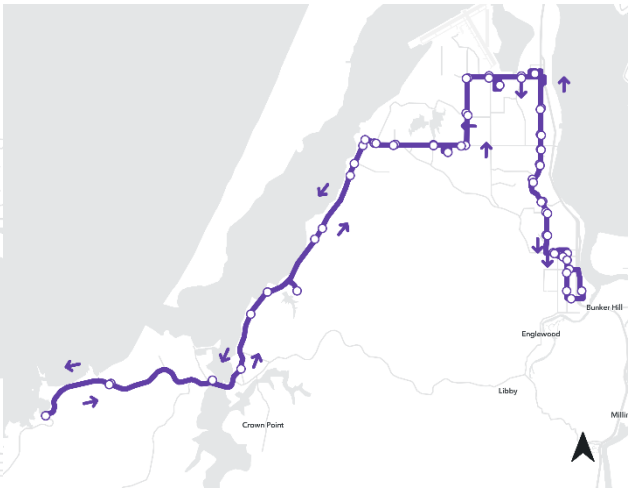
Crab Express – Package 2

Weekend Express Changes

Similar to Package 1, this alternative would extend service to Charleston, but would also continue to Sunset Beach State Park, both to serve recreational trips on Saturdays and because the schedule would not allow a Charleston–Coos Bay route to operate at 90-minute headways with time for deviations. From Charleston, the route would follow the weekday Package 2 Crab Express route to Pony Village Mall, without detouring through Airport Heights. It would then operate via Sherman Avenue, Koos Bay Boulevard, and 10th Street (Mingus Park) to connect downtown North Bend to downtown Coos Bay. Alternatively, the route could directly serve The Mill Casino instead of Sherman Avenue. Service would operate at 2-hour headways from 7:15 am to 5:00 pm, with a 1-hour lunch break. The schedule would provide about 15 minutes per round trip to accommodate deviations.



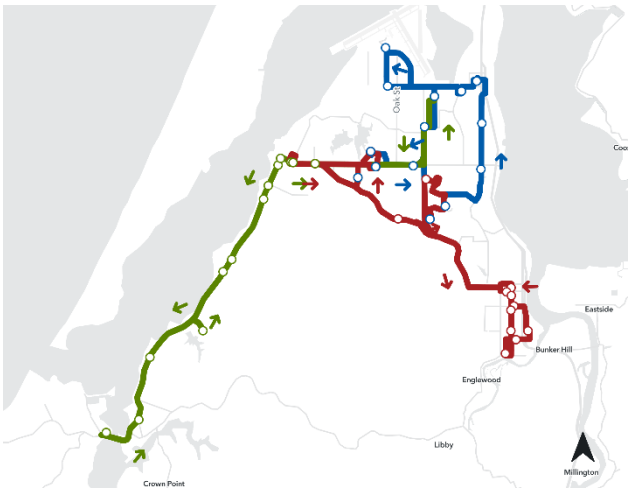
Weekend Express – Current



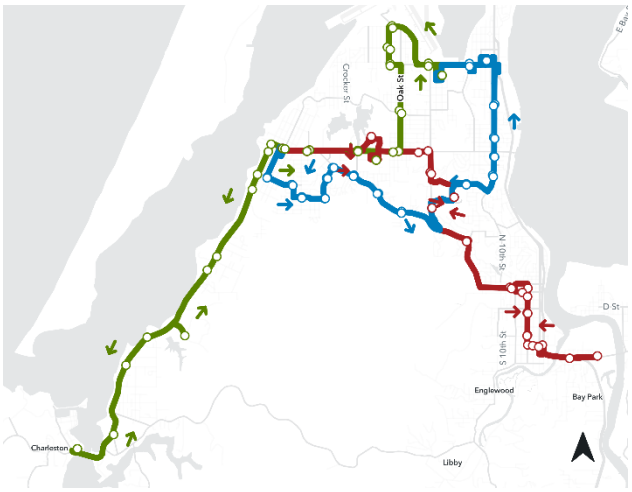
Weekend Express – Package 2

System Comparison

The following maps compare the current system's local weekday route structure with that provided under Package 2. Table 5 compares the current system and Package 2 in terms of population and jobs within ¼ mile of stops along each route, percentage of the population that is low income and minority, and number of vehicle trips operated annually. To provide an apples-to-apples comparison of the coverage areas of the current system and the two packages, additional stops have been added along routes as needed to ensure each route segment along a given street assumes the same stop locations in each alternative.



Bay Area Weekday Local Routes – Current



Bay Area Weekday Local Routes – Package 2

Table 5. Weekday Local Service Comparison: Existing vs Package 2

Route	Population within ¼ Mile		Jobs within ¼ Mile		% Population Low Income		% Population Minority		Service Level (vehicle trips/year)	
	Existing	Pkg. 2	Existing	Pkg. 2	Existing	Pkg. 2	Existing	Pkg. 2	Existing	Pkg. 2
Bulldog	6,921	5,803	4,705	4,306	17.7%	21.2%	22.2%	21.2%	1,208	1,359
Pirate	5,875	5,947	5,177	4,829	22.8%	20.3%	21.5%	20.3%	1,208	1,359
Crab	4,518	5,477	2,182	1,873	21.4%	20.8%	20.0%	20.0%	302	1,359
Total*	11,812	12,796	7,767	7,793	19.1%	19.6%	20.4%	19.9%	2,718	4,077

*Totals do not equal the sum of the routes due to route coverage overlaps.

As can be seen from Table 5, Package 2 would increase the number of annual trips operated by 50%, compared to the current system, primarily due to the substantial increase in service that would occur on the Crab Express to Charleston. The number of people served within ¼ mile of stops in Package 2 increases by about 900 compared to the current system, primarily due to added service in western Coos Bay. Although the number of jobs served by each route individually drops in Package 2 as a result of less overlap between routes, the number of jobs served systemwide within ¼ mile of stops in Package 2 increases slightly compared to the current system.

Table 6 compares the current system's Saturday service to that under Package 2. It can be seen that although the number of daily trips is reduced by 44%, 4.5 times as much population would receive Saturday service.

Table 6. Saturday Local Service Comparison: Existing vs Package 2

Route	Population within ¼ Mile		Jobs within ¼ Mile		Service Level (vehicle trips/year)	
	Existing	Pkg. 2	Existing	Pkg. 2	Existing	Pkg. 2
Weekend	2,152	9,750	2,276	6,183	468	260

Table 7 presents the changes in travel time between six Bay Area locations under Package 2, compared to the current system. Of the 30 origin origin–destination pairs, 13% would have essentially unchanged travel times, 10% would experience significantly longer travel times, and 77% would experience reductions in travel times (with eight of the 30 pairs experiencing reductions of over 30 minutes). Overall, Package 2's out-and-back route structure and centrally located timed transfer significantly improves travel times for many trips, particularly to and from downtown North Bend, Charleston, and (for the most part) downtown Coos Bay. The one portion of the system that is inconvenienced by Package 2 is the western portion of Ocean Boulevard, which experiences longer travel times to and from downtown Coos Bay due to the need to wait 30 minutes at the hospital in each direction to transfer.

Table 7. Weekday Travel Time Comparison: Package 2 vs. Existing

	North Bend City Hall	Coos Bay City Hall	Empire	Walmart	CCAT Office	Charleston
North Bend City Hall		15 (−48)	20 (−19)	15 (−11)	21 (−25)	26 (−71)
Coos Bay City Hall	13 (−34)		16 (−13)	11 (−10)	40 (+24)	47 (−34)
Empire	11 (−70)	16 (−8)		5 (−50)	8 (+1)	12 (−10)
Walmart	7 (−14)	14 (−15)	5 (0)		12 (0)	16 (−11)
CCAT Office	11 (−63)	40 (+23)	8 (−2)	10 (+5)		45 (−20)
Charleston	24 (−51)	48 (−28)	13 (−9)	17 (−12)	46 (−13)	

Note: ## (xx) = Package 2 travel time in minutes (change from current travel time).

INTRACOUNTY SERVICE

Timber Express

If the bus currently shared by the Timber Express and Crab Express routes is used full-time for the Crab Express as proposed in the two local Bay Area service packages above, the existing Timber Express route would be eliminated. Instead, service to Coquille and Myrtle Point would be provided by a combination of a new intercity route to Roseburg, a new South County route (described below), and the Powers Stage.

Although the Timber Express currently operates five days a week, it is scheduled to arrive in North Bend at 9:10 am and return again at 1:15 pm, which does not serve employment- or education-related trips from Myrtle Point and Coquille, nor trips to the court annex in North Bend, which are the types of trips most likely to require five-days-a-week service. Service from the Bay Area to the courthouse in Coquille (e.g., for jury duty, for participants in court proceedings) would not be available every day of the week, as it is now.

Cranberry Express

The Cranberry Express currently circulates around Bandon seven times a day on Mondays, Wednesdays, and Fridays, between 10:00 am and 11:56 am in the morning and between 1:10 pm and 3:56 pm in the afternoon. In FY2017-2018, the route had 2,597 boardings, an average of 2.5 boardings per round trip, which was the lowest per-trip ridership of any CCAT fixed route (Timber Express: 9.7 per round trip, Powers Stage: 3.0 per round trip). The Cranberry Express is proposed to be eliminated, with the bus used for it assigned instead for a new South County intercity route connecting Bandon, Myrtle Point, Coquille, and Coos Bay/North Bend, described below.

Demand-response service would still be provided three days a week, similar to at present, to serve trips within Bandon.

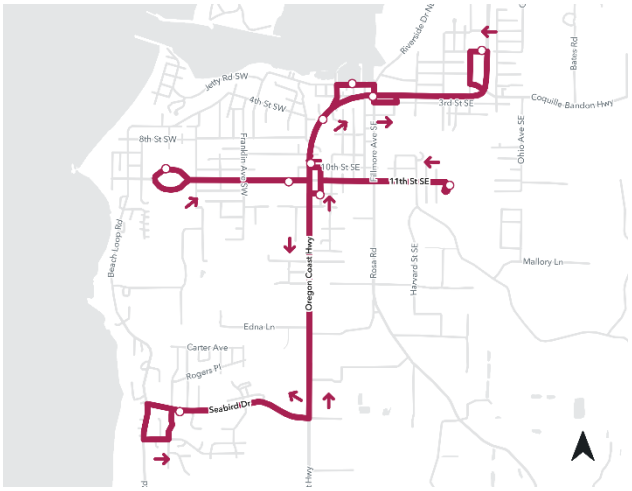
South County Route

CCAT proposes to start a new South County route that would operate in a loop twice a day, three times a week (Monday, Wednesday, Friday). In the morning, the bus would depart North Bend, traveling to Bandon, Myrtle Point, and Coquille before returning to Bandon. The bus would operate in the opposite direction in the afternoon. This bus would serve trips from Myrtle Point and Coquille to Coos Bay/North Bend and back that are currently served by the Timber Express, but only 3 days per week instead of the current 5 days per week. (The Powers Stage, which operates on Thursdays, could provide a fourth day of service each week for these trips). Depending on when the bus is scheduled to depart Bandon, this bus could also serve one of the following:

- Trips from Bandon to the courthouse in Coquille and back (desirably arriving in Coquille prior to 9:00 am), or
- Connections from Bandon and Curry County to the new Highway 42 route serving Roseburg, meeting the Curry County bus in Bandon and the Highway 42 bus in Myrtle Point. The first northbound Curry County bus arrives in Bandon at 9:35 am; according to Curry County Public Transit, its time cannot be adjusted due to the need to make connections at the south end of the route. The last southbound Curry County bus departs Bandon at 3:45 pm.

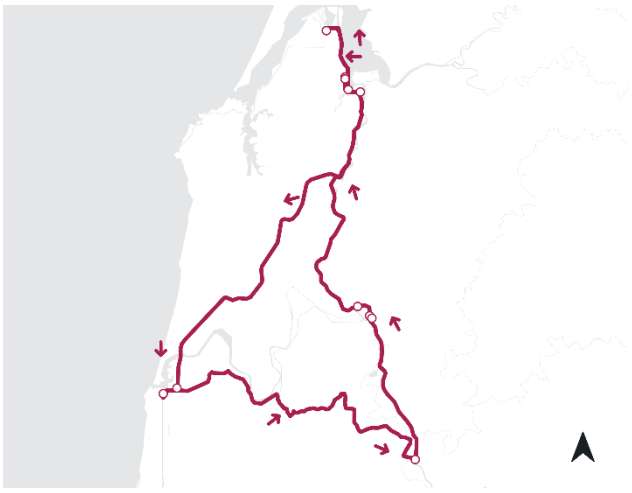
The route would provide a transit connection between Bandon, Myrtle Point, and Coquille that does not currently exist. It would continue to serve trips from Coquille and Myrtle Point to North Bend/Coos Bay that do not need to be made every day of the week.

Scheduling the route to provide timed connections between the Curry County (Coastal Express) route and the Highway 42 route to Roseburg would reduce travel time for connecting passengers from Bandon and Curry County, compared to transferring in Coos Bay or North Bend. It could potentially increase the time available in Roseburg for people making same-day round trips, because the Highway 42 bus could depart Coos Bay earlier without having to wait for the Curry County bus to arrive (and vice versa in the afternoon). However, to get the most benefit out of providing such a connection, the South County and Highway 42 routes would need to operate on the same days.

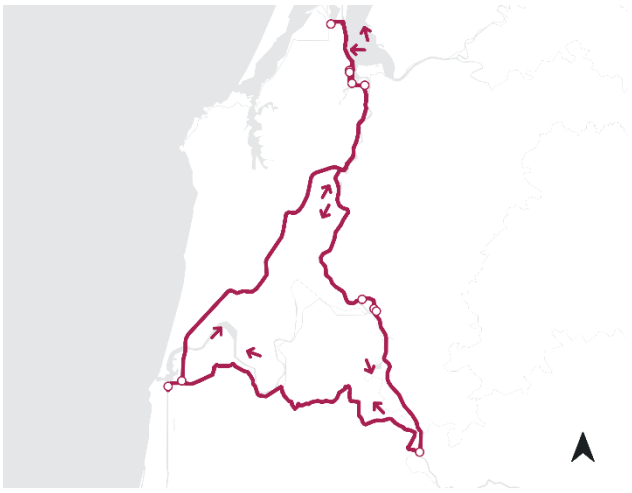


Cranberry Express – Current

Timber Express – Current



South County – Proposed (AM)



South County – Proposed (PM)

Powers Stage

The Powers Stage is proposed to continue to operate once a week on Thursdays, plus the second Tuesday of every month. The schedule could be adjusted to facilitate connections in Myrtle Point to the new Highway 42 route to Roseburg.

Powers Stage – Existing & Proposed

Intracounty Summary

Table 8 compares the current system's intracounty service to that proposed by CCAT. Note that the underlying Census data used by the Remix software to calculate population and job totals uses block groups as the smallest unit of geography. In rural areas, block groups can be many square miles in size, with the result that the population and jobs that are concentrated in a small area such as Powers are assumed by the software to be spread evenly over the entire block group (and thus the software calculates that providing service to Powers would only serve a couple of people). Consequently, population served in Powers and Lakeside has been manually adjusted to better reflect the actual number of people served; however, jobs served have not been adjusted.

Table 8. Intracounty Service Comparison: Existing vs Proposed

Route	Population within ¼ Mile		Jobs within ¼ Mile		Service Level (vehicle trips/year)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
Timber	583	—	216	—	506	0
Cranberry	896	—	394	—	1,771	0
Bandon DAR	—	896	—	394	N/A	N/A
South County	—	855	—	345	0	298
Powers	1,270	1,270	217	217	64	64
Highway 42*	—	584	—	216	0	104
Florence*	—	1,320	—	9	0	603
Total**	2,166	3,486	611	836	2,341	1,069

Note: N/A = not applicable, DAR = dial-a-ride

*Values only include portions of the intercity route in rural Coos County.

**Totals do not equal the sum of the routes due to route coverage overlaps.

On a countywide basis, the number of people and jobs served within ¼ mile of stops increases under CCAT's proposal.

- Bandon loses three-times-weekly fixed-route service, but retains dial-a-ride service on the same days, and gets a new connection to county services in Coquille three times a week.
- Coquille and Myrtle Point receive service to Coos Bay and North Bend four times a week between the South County and Powers routes, down from five times a week with the current Timber Express.
- Persons in Coos Bay and North Bend desiring to travel to Coquille and Myrtle Point can do so directly twice a week via the Highway 42 route and indirectly (via Bandon) two other days per week, compared to direct service five times a week with the current Timber Express.
- Lakeside receives new service three times a day in each direction, four times a week.

INTERCITY SERVICE

CCAT has received grant funding through Oregon's Statewide Transportation Improvement Fund to start two intercity routes: one to Roseburg and the other to Florence, with onward connections available to Eugene, the northern Oregon coast, and the Rogue Valley. These routes are discussed in this section.

Roseburg

A new route along the Highway 42 corridor to Roseburg will start operation this summer. Planning for the route is occurring under another project occurring in parallel with the CCAT Transit Master Plan work. The proposed route characteristics presented in this section reflect the draft preferred alternative from that planning work and are subject to change.

The Roseburg route is planned to initially operate two days per week, Tuesdays and Wednesdays, with service potentially increasing to other days of the week depending on how travel demand recovers as the Covid-19 pandemic evolves. The bus would depart from Pony Village Mall in North Bend at 7:30 am and arrive in downtown Roseburg at approximately 9:45 am, with stops in downtown Coos Bay, Coquille, Myrtle Point, Bridge, Camas Valley, Tenmile, Porter Creek, Winston, and Green. After dropping off passengers in downtown Roseburg who are being picked up or are transferring to Umpqua Transit or Greyhound, the bus would continue to the VA hospital and (on request) other medical-related destinations in Roseburg such as Mercy Medical Center,

medical offices, and drug treatment centers. The bus would depart Roseburg at 1:15 pm, returning to North Bend at 3:30 pm. The return trip would desirably be scheduled one hour later, to provide more time for appointments and errands in Roseburg, but would require one extra hour of service to Charleston and for the last southbound Curry Public Transit Coastal Express to depart North Bend 45–60 minutes later than at present, which may not be feasible.

The schedule is designed to connect to and from the northbound Greyhound bus in Roseburg. A connection to (but not from) a southbound Greyhound bus is also possible, but requires a 7-hour layover in Roseburg. The route would also be timed to connect in Coos Bay to the last southbound Coastal Express bus. Because the first northbound Coastal Express bus arrives in Coos Bay in the mid-morning, a round trip from Curry County to Roseburg in one day would not be possible; instead passengers would need to overnight in North Bend or Coos Bay prior to continuing to Roseburg and back.

The route provides a new public transit connection between Coos and Douglas Counties and is particularly expected to serve persons with medical appointments at the VA hospital and elsewhere in Roseburg and persons connecting to Greyhound bus service on the I-5 corridor. It partially replaces Timber Express service from North Bend/Coos Bay to Coquille and Myrtle Point and also provides expanded travel opportunities to the small communities along the Douglas County portion of the corridor.

Consideration could be given to creating a fare for Curry County riders that allows riders to pay their total fare once per direction, rather than separately with each boarding. If most riders make round trips, then there would be no net difference in revenue for the two agencies and passengers would experience more convenient fare payment. CCAT could also explore developing an interline agreement with Greyhound, where Greyhound handles ticketing for passengers connecting to or from Greyhound and pays CCAT for the portion of the trip between Coos County and Roseburg. Finally, if demand warrants, CCAT could explore fare-sharing options with Umpqua Public Transit that would allow riders to use local routes in Roseburg that day without having to pay additional fares.

Roseburg/Highway 42 Route – Proposed

Florence

A new route to Florence will start operation this summer, helping replace service lost when the Eugene–Coos Bay route operated by Pacific Crest Lines was discontinued in February 2020. The service is planned to operate four days per week (Monday, Tuesday, Thursday, Friday), with three round trips per day. The bus would depart Pony Village Mall in North Bend and arrive at the Three Rivers Casino in Florence about 2 hours later, with stops in Hauser, Lakeside, Winchester Bay, and Reedsport. In Florence, passengers can connect to Link Lane service to Eugene, with onward connections available in Eugene to Amtrak, Greyhound, and Cascades POINT intercity

services, among others. Passengers can also connect in Florence to Link Lane service to Yachats, where an onward connection can be made to Lincoln County Transit service to Newport and points north. The first bus is currently planned to depart Pony Village Mall at 7:30 am and the last bus is currently planned to return a little before 8:30 pm.

In addition to providing important public transit connectivity from the South Coast to the Willamette Valley, this route also provides new service from Lakeside to North Bend/Coos Bay and more frequent service between North Bend and Florence than with the previous Pacific Crest Lines route. The route fills the last gap in transit service on US 101 between Eureka, CA and Olympia, WA. Given that a number of riders will likely want to use this route to connect to the Link Lane route to Eugene, consideration could be given to creating a fare that allows riders to pay the total fare to their destination at the start of trip, rather than two separate fares.

Florence Route – Proposed

DIAL-A-RIDE

Paratransit

Under Package 1, the Bay Area local routes would continue to be fixed routes, with two vehicles used to provide complimentary paratransit service. Under Package 2, trips eligible for complimentary paratransit service would be served by route deviations on the local routes.

General Public

Under both packages, three vehicles would continue to provide dial-a-ride service in Bandon and other Coos County communities outside Charleston, Coos Bay, and North Bend.

SERVICE ALTERNATIVE COSTS AND OUTCOMES

Table 9 compares the service alternative packages' annual vehicle hours and annual costs. In calculating costs, CCAT's 2020 operating cost of $45 per vehicle hour is assumed. Table 9 also compares ridership between the service alternatives. Transit demand is currently very low as a result of the economic downturn and social distancing requirements caused by the Covid-19 pandemic and it is unknown at present how long it might take ridership to recover to pre-pandemic levels. Therefore, these ridership estimates should be interpreted as the percentage change in ridership that would be expected between alternatives, rather than as forecasts of actual near-term ridership.

The following process was used to estimate ridership:

- Local routes (Pirate, Bulldog, Crab, Weekend):
  - TCRP Report 161's guidance was followed that annual boardings increase on average by 5.77 trips for each annual revenue hour added. Deadheading time was not included as part of revenue hours for the purposes of this calculation.
  - The *Transit Capacity and Quality of Service Manual*'s guidance was followed that ridership increases by 0.4% for every 1% decrease in the travel time rate. The average travel time for the 30 trips shown in Table 4 and Table 7 is 39.3 minutes. Under Package 1, the average travel time would be reduced by 9.6 minutes, while under Package 2, the average travel time would be reduced by 19.6 minutes.
  - In Package 2, one-half of the existing Bay Area ADA complimentary paratransit ridership was assumed to switch to the local deviated routes. This assumption is based on a coverage area one-third the width of the current ADA complimentary paratransit coverage area (¼ mile vs. ¾ mile), while recognizing that areas closer to the fixed route are more densely populated than areas farther away from the fixed routes. In Package 1, all of the existing ADA ridership was assumed to remain on the ADA paratransit service.
- South County
  - It was assumed that half of the current Timber Express demand travels from Myrtle Point and Coquille to Coos Bay/North Bend in the morning (i.e., travels in the same direction as the South County loop). It was further assumed that 60% of this ridership would use the South County route (i.e., ridership would reduce in proportion to the proposed 3 days of service vs. the current 5 days).
  - It was assumed that an average of 2 round trips per day (4 boardings per day) would be made between Bandon and Coquille.
- Powers Stage
  - It was assumed that the Powers Stage would absorb the trips on Thursday currently made by the Timber Express (i.e., 20% of 50% of the current ridership).
- Highway 42 Route intracounty ridership
  - It was assumed that half of the current Timber Express demand travels from Coos Bay/North Bend to Coquille in the morning (i.e., travels in the same direction as the bus to Roseburg). It was further assumed that 40% of this ridership would use the Roseburg route (i.e., ridership would reduce in proportion to the proposed 2 days of service vs. the current 5 days).
- General public dial-a-ride
  - It was assumed that all of the current Cranberry Express ridership would switch to the Bandon dial-a-ride service.
  - It was assumed that general public dial-a-ride ridership elsewhere in the county would not change.

Table 9. Service Alternative Cost and Ridership Comparisons

Route	Annual Vehicle Hours			Annual Cost ($1,000)			Annual Boardings		
	Existing	Pkg. 1	Pkg. 2	Existing	Pkg. 1	Pkg. 2	Existing	Pkg. 1	Pkg. 2
Bay Area Local (Bulldog, Crab, Pirate, Weekend)	5,338	7,452	7,617	240.2	335.3	342.8	32,840	47,621	56,725
Timber Express	917	0	0	41.2	0	0	4,874	0	0
Cranberry Express	975	0	0	43.9	0	0	2,597	0	0
Powers Stage	384	384	384	17.3	17.3	17.3	316	803	803
South County	0	938	938	0	50.9	50.9	0	2,086	2,086
ADA Paratransit (Bay Area)	4,547	4,547	0	204.6	227.2	0	11,078	11,078	0
Dial-a-Ride (Bandon)	975	975	975	43.9	43.9	43.9	2,000*	4,597	4,597
Dial-a-Ride (Other)	4,300	4,300	4,300	193.5	193.5	193.5	2,265	2,265	2,265
Highway 42 (intracounty)**							0	975	975
Total	17,436	18,596	14,214	784.6	868.1	649.0	55,970	69,425	67,451

*Estimated based on May 2019 boardings at the most-requested locations.

**Represents share of Timber Express trips from the Bay Area to Coquille and Myrtle Point taken over by the new Highway 42 route.

Compared to existing service, Package 1 is estimated to cost 11% more but generate 24% more ridership. The increased ridership on the local routes results from increased service hours (78%) and travel time improvements (22%). Package 2 is estimated to cost 17% less than existing service but generate 21% more ridership. Package 2 local ridership is higher than in Package 1, partly due to a portion of ADA paratransit riders switching to route deviation service and partly due to travel time improvements. Package 1 overall ridership is higher than Package 2 because current ADA paratransit trips generated more than ¼ mile from the route deviation service would no longer be served under CCAT's proposed demand-response service model.

LONGER-TERM SERVICE ALTERNATIVES

CCAT's ability and need to expand service will depend on available funding and post-pandemic passenger levels. Although no one can predict at present when or whether demand will return to pre-pandemic levels, CCAT can nevertheless prepare for a future when service expansion is warranted.

BAY AREA LOCAL ROUTES

DEVIATED-ROUTE OPERATION

It is recommended that CCAT closely monitor demand for route deviations to fine-tune local route operations, assuming demand-response service is implemented. Two areas in particular are important to monitor:

- Monitoring how often particular destinations are requested for deviations. If a destination is requested several times per day, it may warrant adjusting the route so that the location becomes a regular stop, as long as this can be done without major impacts to the route's overall running time.
- Monitoring whether deviation requests are impacting schedule reliability.

The survey of CCAT drivers noted the potential need for additional dispatch support. The proposed switch to deviated routes, along with the proposed service changes in Bandon, will increase the volume of requests that are made for pick-ups, and CCAT further plans to prioritize requests by trip purpose. As discussed in the Public

Transportation System Technologies subsection toward the end of the memo, CCAT has purchased new dispatching software that other small-city Oregon systems use for dispatching their route deviation services.

ADDED COVERAGE

Larger areas currently unserved directly by weekday local routes include the following:

- Neighborhoods south of downtown Coos Bay, which have relatively high proportions of youth, low-income households, limited-English proficiency households, minorities, and persons with disabilities, as well as a relatively high overall population density. The limited street connectivity in these areas poses challenges to developing a route.
- Northwest Coos Bay and North Bend, which has relatively high proportions of seniors, youth, and minorities, along with relatively high overall population density.
- Eastside, which has a relatively high population density and proportion of minorities.
- Neighborhoods north of downtown North Bend, which have relatively high proportions of seniors.
- Neighborhoods along 10th Street and Coos Bay Boulevard, which have a high population density and are adjacent to the recreational facilities provided at Mingus Park.

Monitoring where requests are made for route deviations can help inform decisions about where to prioritize any new routes. However, one potential route could start in Eastside and serve SCBEC, portions of the neighborhoods south of downtown Coos Bay, grocery stores in downtown Coos Bay, and 10th Street/Koos Bay Boulevard, and ending by serving destinations in the hospital vicinity.

For a small city operation such as CCAT's local routes, providing additional coverage will likely generate more ridership than improving frequency on existing routes. However, service frequency between certain destinations can be improved by developing new routes that provide new service to selected areas, while connecting other existing destinations. An example would be the potential route described in the previous paragraph, which could provide two travel opportunities per hour between the hospital area and downtown Coos Bay in conjunction with the Pirate Express, and could also address Package 2's long transfer time for trips between western Ocean Boulevard and downtown Coos Bay.

INTRACOUNTY SERVICE

COQUILLE AND MYRTLE POINT

Service to and from Coquille and Myrtle Point would desirably be restored in the longer term to a minimum of two round trip opportunities per weekday in each direction, with a third daily trip in each direction desirable to accommodate both half-day and all-day passenger trips. Potential ways to accomplish this goal include:

- Service increases on the Highway 42 route, as discussed in the intercity section below, which would improve service for trips from Bay Area communities to Coquille and Myrtle Point.
- A Roseburg-based second bus on the Highway 42 route, primarily serving same-day round-trips from Roseburg, but also serving same-day round trips from Myrtle Point and Coquille to the Bay Area.
- Increasing service on the South County route to five days a week to serve round trips from Myrtle Point and Coquille to the Bay Area.

Depending on the timing of the Curry County and Highway 42 routes, the Bandon dial-a-ride bus could also make two round trips daily between Bandon and Coquille to serve connections between the two routes. In this scenario, having this bus and the South County bus and drivers based in Bandon would significantly reduce the amount of deadhead travel required daily between the CCAT office and Bandon.

LAKESIDE

Providing service every weekday between Lakeside and the Bay Area would be desirable in the longer term, to serve trips made every day (e.g., for employment or education) and provide greater flexibility in choosing when to travel. This service increase would most likely occur in conjunction with a decision to expand the days of operation of the Florence route.

Providing an early morning southbound trip from Lakeside to the Bay Area would also benefit employment- and education-related travel, and would allow connections to the Highway 42 route to Roseburg. Such a trip, extended farther north, could also benefit residents of Reedsport in Douglas County who work or study in the Bay Area or wish to travel to Roseburg. CCAT could consider working with Umpqua Public Transit to help fund such a trip, which would enable same-day round-trips from Reedsport to the services provided in the Douglas County seat of Roseburg and could eliminate the need for Umpqua Public Transit to operate its once-weekly Lifeline route to Reedsport. The last northbound trip to Florence is planned to connect with the Highway 42 route and would provide the late-afternoon return trip from Roseburg and the Bay Area to Lakeside and Reedsport.

INTERCITY SERVICE

In the longer term, it would be desirable to increase service on both intercity routes to at least 5 days per week, if not more, to provide a greater range of travel options, including being able to travel to and from Coos County over a weekend. All seven existing routes that connect the Oregon Coast to the I-5 corridor (Astoria–Portland via the Lower Columbia Connector or Northwest POINT, Tillamook–Portland, Lincoln City–Salem, Newport–Albany, Florence–Eugene, and Brookings–Grants Pass/Medford) operate 7 days per week.

ROSEBURG

The preliminary planning for the Highway 42 route recommends the following order for adding service days:

- Thursday—to allow connections to and from the weekly Powers Stage, which serves a portion of the county with a high proportion of veterans; a major VA hospital is located in Roseburg.
- Saturday—to provide opportunities for shopping, social, and intercity trips to Roseburg on the weekend.
- Friday—to allow overnight trips to Roseburg on the weekend.
- Monday—providing service all 5 weekdays and fully replacing the North Bend/Coos Bay to Coquille service currently provided by the Timber Express.
- Sunday—to provide service every day of the week, and to particularly serve weekend (Friday–Sunday) trips to other parts of the state.

Adding a second, Roseburg-based bus would allow same-day round trips to be made from Roseburg to Coos County. Such a bus could be operated by CCAT, Umpqua Public Transit, or a private operator (for example, as part of a North Bend-to-Medford route).

FLORENCE

The recommended order for adding service to the Florence route is as follows:

- Wednesday—to provide a second connection opportunity to the Highway 42 route and provide service every weekday.
- Sunday—to serve weekend (Friday–Sunday) trips to other parts of the state.
- Saturday—to provide service every day of the week, and serve overnight weekend trips to Eugene.

CAPITAL ALTERNATIVES

This section reviews the capital alternatives for the existing and future fleet, including fuel types and low floor bus options.

VEHICLE TYPES

Currently, CCAT has a fleet of 21 vehicles. A summary of the current fleet is provided in Table 10. The age of CCAT fleet is generally 5 years of use. Thirteen of the buses have exceeded their Expected Useful Life (EUL); a Dodge Caravan with 157,824 miles (with an EUL of 150,000 miles), two Eldorado Aerolite IIs with 234,316 miles and 232,582 miles each (with an EUL of 150,000 miles each), an Elkhart Coach Bus with 183,531 miles (with an EUL of 150,000 miles), a Ford Startrans with 183,353 miles (with an EUL of 150,000 miles), and three StarCraft Starlites with 183,237 miles, 161,913 miles and 101,086 miles (with an EUL of 100,000 miles each); including five buses that have exceeded their lifetime of five years, namely, the old mobile car (Olds Sedan), maintenance (Ford F350), two Bay Area DAR (Ford Startrans and Transit 350) and a Bandon DAR (Ford Cutaway). Three vehicles were acquired in 2019 and have logged approximately 5,500 miles or fewer. CCAT tracks bus age and mileage to determine a bus replacement schedule. The replacement needs by year for the next five years are shown in Table 11.

Table 10. Coos County Area Transit Active Vehicle Fleet

Unit #	Service	Odometer Reading	EUL Category	Year	Make	Model	Passenger
#1	Old Mobile Car		5 years/150,000 miles	2003	Olds	Sedan	4
#101	Fixed Route	82,036	5 years/150,000 miles	2017	Ford	E-450	17
#102	Fixed Route	73,196	5 years/150,000 miles	2017	Ford	E-450	17
#2	Maintenance		5 years/150,000 miles	1990	Ford	F350	2
#201	Bay Area DAR	101,086	4 years/100,000 miles	2014	StarCraft	Starlite	7
#202	Bay Area DAR	144,928	5 years/150,000 miles	2013	Ford	Startrans	9
#203	Bay Area DAR	69,043	5 years/150,000 miles	2015	Ford	Transit 350	2
#204	Bay Area DAR	157,824	5 years/150,000 miles	2010	Dodge	Caravan	5
#205	Bandon DAR	33,186	5 years/150,000 miles	2017	Ford	Transit 150	3
#206	Bay Area DAR/Timber Express	234,316	5 years/150,000 miles	2009	Eldorado	Aerolite II	12
#207	Lakeside-Hauser/Fixed-Route (Back Up)	183,531	5 years/150,000 miles	2009	Elkhart	Coach Bus	16
#208	Bay Area DAR/Timber Express	232,582	5 years/150,000 miles	2009	Eldorado	Aerolite II	12
#210	Intercity and Fixed (Back Up)	183,353	5 years/150,000 miles	2010	Ford	Startrans	18
#212	Bandon DAR	122,785	5 years/150,000 miles	2003	Ford	Cutaway	6
#213	DAR (Back Up)	183,237	4 years/100,000 miles	2009	StarCraft	Starlite	10
#215	DAR Back-up	161,913	4 years/100,000 miles	2009	StarCraft	Starlite	10
216 VA	VA Van	17,207	5 years/150,000 miles				
#217	Trolley	9,241	5 years/150,000 miles	2018	Chevy	G4500	21 or 17
#300		5,452	5 years/150,000 miles	2019	Ford	Transit	5
#301	Florence	2,686	5 years/150,000 miles	2019	Ford	Transit	
#302	Roseburg	4,079	5 years/150,000 miles	2019	Ford	Transit	

Note: DAR = Dial-A-Ride

Thirteen buses are eligible to be replaced in FY 20/21 as it exceeds the EUL (lifetime/mileage) and two buses, in FY 23/24, as shown in table 11. These calculations are based on mileage projections forecasted on the basis of current odometer readings for each vehicle in CCAT's vehicle fleet used by the routes. Vehicles are

recommended to be replaced in a specific year if the projected mileage for the year exceeds the EUL of the vehicle in that year. Capital costs per vehicle are expected to be $125,000 per 22-foot bus, based on the American Public Transportation Association (APTA)'s *2020 Public Transportation Vehicle Database*. Over the next five years, approximately 15 vehicles will reach their useful life and should be budgeted for replacement. Approximately 80-90% of these costs may be funded by state and federal grants; however, 10-20% of the costs should be budgeted for grant match funds. Based on these cost calculations, approximately $375,000 should be budgeted over the next five years for local match for replacing buses, or $75,000 per year from FY 20/21 to FY 24/25.

Table 11. Vehicle Replacement by Fiscal Year based on Eligibility

	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
Vehicles Eligible for Replacement in FY	13 vehicles	-	-	2 vehicles	-
Vehicle Replacement Cost by Year of Eligibility	$1,625,000	-	-	$250,000	-
Annual Average -Vehicles Replaced -Total Cost -Local Match	3 vehicles $375,000 total $75,000 match	3 vehicles $375,000 total $75,000 match	3 vehicles $375,000 total $75,000 match	3 vehicles $375,000 total $75,000 match	3 vehicles $375,000 total $75,000 match

This tracking can be converted into a fleet plan that includes a twenty-year projection of fleet needs, allowing CCAT to develop a long-range fleet financing plan. The plan would include both a replacement schedule for existing buses as they reach the end of their useful life, as well as an element for possible fleet expansion to accommodate service growth.

The fleet plan should also address the types of vehicles to be purchased. Transit agencies face the issue of balancing the efficiency advantages of fleet standardization with the benefits of matching vehicle size and other vehicle attributes with specific service needs. Benefits of fleet standardization include greater flexibility in vehicle assignments and a reduced need for spare vehicles because sub-fleets each require their own spare vehicles, and smaller fleets typically require a greater spare ratio. CCAT uses commercial vehicle workshops to perform major servicing on its vehicles and therefore avoids the needs to maintain a parts inventory for each vehicle model or have mechanics trained in servicing each model, which are issues faced by larger transit agencies with in-house maintenance staff. At the same time, longer-distance service is harder on vehicles than in-city service, and coastal conditions are particularly rough on vehicles. These considerations suggest the need for a higher spare ratio for a CCAT than a purely small-city system would require.

For CCAT, it is recommended that the fleet be standardized to two types of vehicles:

- Medium-sized (approximately 20- to 25-foot) buses for fixed/deviated-route service; and
- Accessible vans for dial-a-ride service

It is also recommended that CCAT maintain an average fleet age that is less than half the vehicles' average life span of the vehicles. For example, medium-sized buses have a minimum useful life of five years; therefore, the average age of vehicles in the medium-size bus sub-fleet is recommended to be 2.5 years or less.

FLEET SIZE

The size of the fleet is determined by service needs, and a final size recommendation will be made once the future service plan has been established and financial forecasts are finalized.

Typically, a 20 percent spare ratio is recommended, but as mentioned above, this could be higher (e.g., 25%) based on the types of services CCAT offers. Adequate spare buses are particularly important for small fleets, because having one or two buses out of service for an extended period (such as after an accident) can have a significant impact on the service provider's ability to meet service needs. In addition, with some routes operating only a few times per week, missing a trip due to not having an available spare bus will have a significant impact on passengers.

There are two approaches to establishing the spare fleet. One approach is that spares are composed of older buses that are no longer cost-effective for daily service, but are maintained to the point that they can be used on a limited basis. Typically, the maintenance costs to keep the older buses in running condition are higher than for a newer bus.

The other option is to have a spare fleet that is similar in age to the in-service fleet. In this case, the spare buses can be rotated into service, which can reduce the mileage accrued on individual vehicles and extend vehicle life. In addition, the incidence of road calls with a newer spare fleet is likely to be lower.

FUEL TYPES

CCAT has been purchasing gasoline-powered buses. CCAT could consider purchasing lower-emission vehicles, such as buses using hybrid-electric propulsion. A bus with hybrid-electric propulsion costs $150,000 to $200,000 more than a similar bus with diesel propulsion, but will generally reduce fuel costs by 25 to 30 percent. Given these costs and savings, the payback on the initial higher purchase price is unlikely to be sufficient to justify the purchase of hybrid-electric buses simply on a direct cost-benefit basis. However, some transit agencies believe there is additional value to hybrid technology resulting from reduced emissions and an improved community perception of the transit agency. In addition, there are occasionally federal funding incentives for the purchase of low-emission buses that may make the purchase of hybrid-electric buses more feasible.

There have also been substantial advancements in all-electric buses. A promising option for all-electric bus technology appears to be quick re-charging of batteries while the bus is stopped at a station or at a layover spot, often without substantial service delay. While this technology has not advanced to the point that it is currently marketable, it may be an option to consider farther not the future.

A third fuel type option is compressed natural gas (CNG) buses. Natural gas is an abundant, domestically produced fuel that is used in transit vehicle throughout the United States. Advantages of CNG buses include the lower cost of natural gas and reduced greenhouse gas emissions (20 percent less compared to diesel buses). Challenges in using CNG include the additional cost of purchasing new vehicles (typically $25,000 to $50,000 more than comparable diesel models), the need to have duel fueling facilities, prohibitions on CNG- or propane-powered vehicles on certain roadways, availability of natural gas, CNG storage needs, and development of an implementation schedule in regards to fleet conversion.

LOW FLOOR

The transit vehicle market is clearly trending toward low-floor buses. Low-floor buses eliminate the steps in the vehicle, provide easier access for riders, and speed boarding and alighting, particularly for riders using mobility aids, and for people with strollers or carts. Compared to using a wheelchair lift, passengers can board and alight more quickly with the ramps provided on low-floor buses, and often with less driver assistance. Minimizing

dwell time at stops is particularly important with deviated-route service to ensure the schedule can be operated reliably while providing sufficient time in the schedule to accommodate deviations.

It is recommended that CCAT purchase low-floor buses for all deviated and fixed routes that are able to accommodate low-floor buses. Routes with steep grades and stops where it is difficult to maintain an ADA-compliant slope on the ramp, for example, are best served by buses with lift systems to accommodate passengers with disabilities. Eventually, as part of the normal bus replacement schedule and as sidewalk infrastructure improves, replace any remaining high-floor buses with low-floor models.

Another new technology is auto loaders for passengers using mobility devices, to eliminate the need for drivers to contact passengers, which is a particular issue now due to the Covid-19 pandemic. These devices add weight and sometimes limit the number of seats, but could protect drivers and passengers. CARES Need funding through ODOT might be able to fund this type of device.

FACILITY IMPROVEMENTS

Transit passenger facilities include bus stops, passenger shelters, signage, transit centers, and park-and-ride lots. Discussion of each of these follows. A good information source for transit facilities in smaller communities is *Transit in Small Cities: A Primer for Planning, Siting, and Designing Transit Facilities in Oregon*, (http://www.oregon.gov/LCD/TGM/docs/fulltransitprimer4-4-13.pdf)

TRANSIT CENTERS AND MAJOR TRANSIT STOPS

Transit centers provide a connecting (transfer) point for bus routes, while major transit stops are typically provided at major activity centers. In addition to providing greater passenger amenities that improve rider comfort, transit centers and major transit stops provide visibility for the transit service, reminding residents and visitors of the availability of the service within their community.

CCAT has developed a transfer stop at Pony Village Mall in North Bend and plans to upgrade it as a "super stop" with a higher level of amenities. Shelters have already been installed at a number of other stops throughout the system, particularly at stops with higher boarding volumes and locations where passengers may have to wait a long time after completing their errand. It is recommended that CCAT install shelters at other stops with relatively high boarding volumes (e.g., 10 daily boardings or greater).

Final decisions about transit center locations and other stop improvements will be made when the service network is finalized.

BUS STOPS

Waiting at a bus stop is generally the first part of a CCAT rider's journey. Given the switch to deviated-route service, with buses potentially bypassing sections of the fixed route between stops, it is recommended that CCAT install bus stop signs at all stops, so that passengers experience no confusion in identifying the locations where they can board the next bus to come along. In conjunction with developing these designated stop locations, it is further recommended that CCAT work with local cities, Coos County, and ODOT (depending on road jurisdiction) to prioritize developing ADA landing pads and developing accessible pedestrian routes (including curb ramps) to bus stops. Making stops more accessible helps reduce the number of route deviation requests, making service more reliable and increasing the length of time that deviated-route service will be a viable alternative to the combination of fixed-route and ADA paratransit service.

Designated bus stops have the following additional advantages:

- They provide community awareness of the service, improving CCAT's visibility.

- Stops can be located in places providing safe bus and passenger access.
- Compared to using flag stops, the number of stops a bus makes along a route is reduced and more consistent, helping improve bus speeds and schedule reliability.
- They can help communicate service if information such as route names and timetables are posted at the stop.

The cost for a new bus stop signage and pole, installed, can range from $300 to $1,000, depending on the material and the installation conditions. Bus stop poles and the attached signs should be sturdy to stand up to the high coastal winds. An option of perforated metal poles in concrete footings may work well. It is recommended that route names be placed on the signs to assist riders in identifying the service. Bus stop displays with specific route, schedule, and fare information can also be very helpful, although they require updating when there are services or fare changes, which adds to operating cost. If service and fare changes are relatively infrequent, providing more specific rider information at highly used bus stops is recommended. This action is especially important in areas where visitors tend to use CCAT services, because visitors are less likely to be familiar with the fares, routes and schedules. Given the relatively frequent recent and proposed changes to CCAT service, providing up-to-date rider information will also be important for retaining existing passengers and attracting new passengers.

Bus stops should be located to where safe bus and passenger access can be provided. Where possible, bus stops would be located at locations that have sidewalks or other pedestrian connections, and that allow for safe pedestrian crossing of the street. On major roadways, such as state highways, bus stops should allow for the bus to stop out of the traffic lane to avoid rear-end collisions and discourage unsafe passing of the bus by motorists. Major bus stops should have some lighting and accommodations for bicycle parking such as racks.

SHELTERS

Passenger shelters add to the comfort of using transit and are generally very popular with riders. An "off the shelf" passenger shelter (there are several companies that provide them) typically costs approximately $6,000 installed. In addition to initial capital costs, passenger shelters will incur maintenance costs, both for routine on-going cleaning and repair and replacement as needed. The primary maintenance issues for shelters, apart from the routine cleaning, are vandalism and fading/clouding of the windscreen. For routine cleaning, trash receptacles, if included, would dictate the frequency that the shelter should be serviced. If trash receptacles are not provided, the regular cleaning and servicing of shelters can be as low as a once per month.

Passenger shelters must be designed to meet the requirements of the Americans with Disabilities Act (ADA) and should be located so as to provide safe and convenient pedestrian connections with nearby destinations. Coordination of shelter placement with sidewalk and other pedestrian improvements projects planned by ODOT or local agencies is encouraged. In addition to the overhead protection (roof), shelter amenities can include:

- Windscreens
- Benches
- Trash receptacles
- Passenger information

Passenger shelters are recommended at high-use stops. They are especially important in a coastal community given the high incidence of wind and inclement weather. CCAT currently has approximately four bus stops with shelters (Advanced Health, SOCC, North Bend City Hall and the VA Clinic – Safeway – Pony Village Mall stops). The condition of existing shelters at these locations should be reviewed and additional amenities considered, although final locations and prioritization depends on the future service plan.

There is a tradeoff between the level of wind/weather protection provided through the use of windscreens and an open shelter design, without a windscreen, that reduces maintenance costs. If vandalism is not a major problem for CCAT, windscreens are recommended for CCAT shelters both to address coastal winds and because the infrequent service can lead to longer wait times which suggests the need for a higher level of protection from the weather. Glass in lieu of acrylic should be considered to address weathering and fading issues.

An alternative to a shelter for a stop that has less ridership is a bench. Benches should be considered for stops with at least three boardings per day, although other factors, such as the proximity to senior housing and nearby businesses willing to contribute to the costs, should be factored into the decision a well. Benches that attach to the bus stop pole, such as the Simmi-Seat (see Figure 2) take up very little space, have low maintenance, and are relatively inexpensive. Installed benches vary in price from $500 to $1,500, depending on materials, the quality of the product, and the installation conditions.

Figure 2. Simmi Seat

© 2015 Simme LLC

PARK-AND-RIDE LOTS

Park-and-ride lots are typically feasible in situations where there is either a parking charge or parking shortages at the rider's destination, or if there is a substantial savings in travel cost or time by using transit. Without one or more of these factors, park-and-ride use is generally very low.

For CCAT, park-and-ride options might be feasible in the following situations:

- The intercity routes are long enough that the transit trip may yield substantial user cost savings (particularly if gas prices increase).
- Locations where there are parking shortages during peak tourism times, or parks that charge for vehicle parking. Locations within Coos County that might be candidates include Charleston and the state and county parks west of Charleston.

The intercity park-and-ride demand is likely to be relatively small and peak tourism park-and-ride demand (if any) would be seasonal. Thus, it likely would not make sense for CCAT to invest in a substantial park-and-ride program. Instead, agreements with local business, local government, and community organizations to allow use of a few spaces for "informal" Park-and-Ride usage is recommended. For example, a grocery store or shopping center might be willing to designate four to six typically unused spaces in their lot for park-and-ride use, with the expectation that park-and-riders would often shop after completing their trip or on another occasion. This approach can be used to test park-and-ride demand without a substantial investment by CCAT.

Seasonal park-and-ride could be provided anywhere along a route serving a destination with limited parking or parking fees.

BICYCLE AND PEDESTRIAN AMENITIES

Bicycle and pedestrian access is very important to transit. Virtually every bus rider is also a pedestrian, and bicycles provide an important "last mile" option for transit, particularly for a system such as CCAT that serves rural areas. While it is not within CCAT's scope or financial capability to provide safe and convenient pedestrian access to transit stops, it can work with local cities, the county, and ODOT to prioritize pedestrian improvements that serve transit stops. In addition, pedestrian improvements in the immediate vicinity of a transit center or shelter can sometimes be funded by other projects.

It is of particular importance and a legal requirement to provide for access by persons with disabilities. Transit centers, shelters, and new or relocated bus stops should be designed to meet the requirements of the Americans with Disabilities Act (ADA). It is recommended that cities, the county, and ODOT prioritize street corners near transit centers and shelters for ADA ramps. This is also particularly relevant to CCAT due to the high proportion of seniors within its service area.

The bicycle/transit connection can be facilitated by providing bicycle parking at high-usage stops and by providing bicycle racks on buses. CCAT should provide bicycle racks on all of their buses and the agency should make this information more prominent on its website and other promotional materials.

PUBLIC TRANSPORTATION SYSTEM TECHNOLOGIES

REAL-TIME CUSTOMER INFORMATION

CCAT's website provides schedules for all routes, but does not currently provide real-time bus arrival information. Real-time information helps improve the ridership experience by reducing passenger wait times at the stop (passengers know when they should leave for the stop) and provides confidence that a bus has not been missed. With the introduction of deviated-route service, bus arrival times at stops become more approximate, depending on whether or not a deviation was made earlier in the trip, and with hourly headways creating long waits if a bus is missed, real-time information helps reassure riders that their bus is on the way. Information can be provided via CCAT's website, smartphones, and through "push" technologies such as text messages. If the data are made freely available, software developers may develop smartphone apps that use the data, without requiring a significant investment on CCAT's part. The local community college could be a partner in developing such an app. Developing real-time customer information is a project type eligible for STIF discretionary grant funding.

DISPATCHING

CCAT has recently purchased Ecolane dispatching software, which has the capability to support the proposed route deviation system.

CAMERAS

CCAT currently equips buses with security cameras. On-vehicle surveillance provides for documentation of criminal acts and can also be used to absolve the transit agency of fault in litigation involving passenger incidents. Security cameras (Closed Circuit Television, or CCTV) should also be considered for transit centers.

CCTV can be used to enhance safety and security at transit centers and major transit stops. Criminal behavior can be documented and recordings used to help prosecute perpetrators. In addition, the presence of a camera at a transit center can deter criminal activity and add to the sense of security for riders. For that reason,

the presence of the cameras at the transit centers should be communicated. CCTV cameras pointed at a bicycle parking area can enhance security for bike parking that may be located at or next to a transit center.

CCTV can act as standalone units that record video that can be accessed as needed in response to an incident. They can also be paired with many other technologies, such as radio communications, silent alarms, and Automatic Vehicle Location (AVL) to create a broader security system. There are many options for security systems with wide ranges in capability and cost. Should CCAT wish to pursue a possible security system, it is recommended that a study be conducted of possible options and their associated costs to allow for the selection of a system that best meets CCAT's needs.

RECOMMENDATION

Based on feedback from the CCAT board meeting held on September 14, 2020, the South County route is recommended to be adjusted such that it arrives at the courthouse prior to 8:30 am.

NEXT STEPS

Feedback on the needs and opportunities presented in this memorandum will be solicited from the project advisory committee and from the public via an online survey and virtual open house. The feedback will help refine the needs and opportunities being considered and will inform priorities for the draft transit master plan.

APPENDIX A - SERVICE ROUTE ALTERNATIVES SUMMARY

Date:	September 8, 2020 Project #: 23514.0
To:	David Hope, Coos County Area Transit Jennifer Boardman and Virginia Elandt, Oregon Department of Transportation
From:	Susan Wright, PE and Nick Gross, Bincy Koshy, Paul Ryus, Kittelson & Associates, Inc.
Project:	Coos County Transit Master Plan
Subject:	Service Route Alternatives Summary

ALTERNATIVES SUMMARY

The following alternatives have been developed to better address identified passenger needs while accommodating budget constraints.

Pirate Express Changes

The recommended Pirate alignment reduces the length of the route from 16.4 miles to 12.27. This is accomplished primarily by eliminating 4.7 route miles and 17.6 minutes generated by providing a second trip to the North Bend Medical Center each hour. The additional changes include removing SOCC, The Waterfall Clinic, and the DMV as timepoints. However, they will be eligible as requested deviated stops.

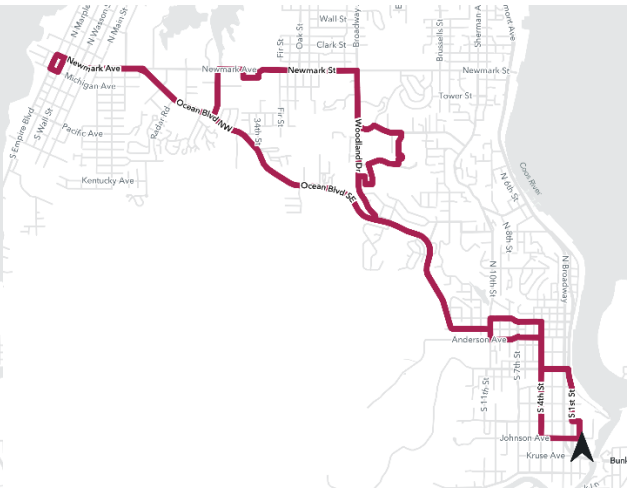
Changes to the route alignment would include:

- Service in this alternative would operate at consistent 60-minute headways throughout the day between 8:00 am and 5:00 pm
- The route would be extended to the South Coast Business Employment Corporation upon request
- In downtown Coos Bay, the route would travel on 4th Street serving the DMV upon request. Fred Meyer and Safeway will be designated stops
- The route will continue to serve the North Bay Medical Center and Bay Area Hospital once each hour.
- The route would no longer regularly serve destinations along Kinney Road and Waite Street (but could still deviate there on request).
- The route will continue to provide service to Advanced Health, Oregon Coast Community Action, and Coos Health and Wellness

The schedule provides about 18 minutes per hour to support deviations. The schedule is shown below. Transfers to the Bulldog are shown in green shade and transfers to the Charleston route are shown in yellow shade.

Pirate Recommended			M-F								
1 - Coos Health & Wellness	2 - Wal-Mart	3-NBMC	4 - Bay Hospital	5 - Library	6 - Bi Mart	7- DMV (request deviation)	8 -SCBEC (request Deviation)	9 -4th & Elrod	10 - Mingus Park	11 -CCAT Star of Hope (xfer to Charleston)	12 - Coos Health & Wellness
8:00 AM	8:02 AM	8:07 AM	8:09 AM	8:18 AM	8:20 AM	8:20 AM	8:28 AM	8:30 AM	8:34 AM	**8:40 AM**	9:00 AM
9:00 AM	9:02 AM	9:07 AM	9:09 AM	9:18 AM	9:20 AM	9:20 AM	9:28 AM	9:30 AM	9:34 AM	**9:40 AM**	10:00 AM
10:00 AM	10:02 AM	10:07 AM	10:09 AM	10:18 AM	10:20 AM	10:20 AM	10:28 AM	10:30 AM	10:34 AM	**10:40 AM**	11:00 AM
11:00 AM	11:02 AM	11:07 AM	11:09 AM	11:18 AM	11:20 AM	11:20 AM	11:28 AM	11:30 AM	11:34 AM	**11:40 AM**	12:00 PM
12:00 PM	12:02 PM	12:07 PM	12:09 PM	12:18 PM	12:20 PM	12:20 PM	12:28 PM	12:30 PM	12:34 PM	**12:40 PM**	1:00 PM
1:00 PM	1:02 PM	1:07 PM	1:09 PM	1:18 PM	1:20 PM	1:20 PM	1:28 PM	1:30 PM	1:34 PM	**1:40 PM**	2:00 PM
2:00 PM	2:02 PM	2:07 PM	2:09 PM	2:18 PM	2:20 PM	2:20 PM	2:28 PM	2:30 PM	2:34 PM	**2:40 PM**	3:00 PM
3:00 PM	3:02 PM	3:07 PM	3:09 PM	3:18 PM	3:20 PM	3:20 PM	3:28 PM	3:30 PM	3:34 PM	**3:40 PM**	4:00 PM
4:00 PM	4:02 PM	4:07 PM	4:09 PM	4:18 PM	4:20 PM	4:20 PM	4:28 PM	4:30 PM	4:34 PM	**4:40 PM**	5:00 PM

Pirate Express – Current



Pirate Express – Recommended

Bulldog Express Changes

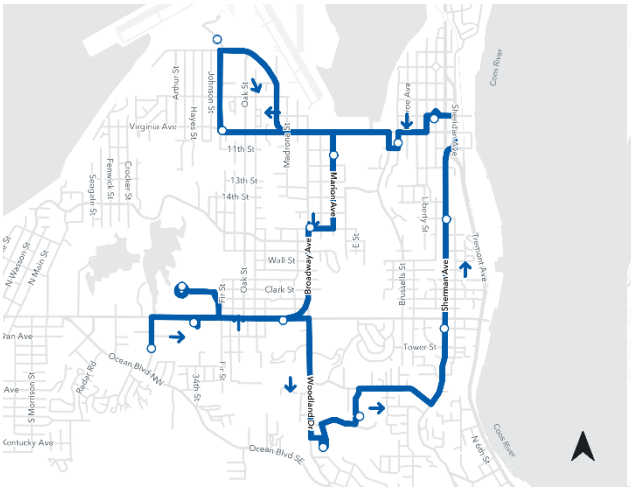
The schedule would have Pirate and Bulldog buses meet at SCBEC upon request to transfer passengers at 0:28 past each hour. Connections to the Charleston route may be made at the Superstop after a 30-minute layover. Connections to the Florence and Roseburg intercity routes may also be made at the Superstop.

Changes to the route alignment would consist of:

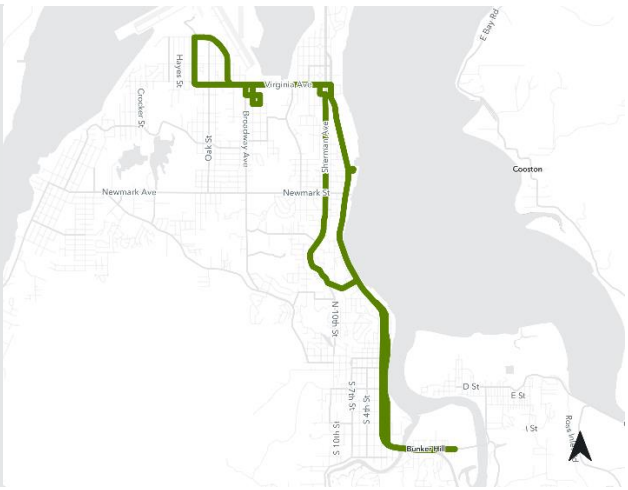
- Service in this alternative would operate at consistent 60-minute headways throughout the day, but with a service span of 8:00 am to 5:00 pm to facilitate connections with other routes.
- The route would no longer directly serve the North Bay Medical Center, however, passengers may transfer to to Pirate to access the medical facilities.
- The route would serve a major portion of Sherman Ave to serve adjacent residential areas and a stop would be provided at THE house and The Mill Casino. The route would serve the North Bend Lanes, the post Office on McPherson and the Boardwalk upon deviated request.
- Passengers may transfer to the Pirate to access Advanced Health, Oregon Coast Community Action, and Coos Health and Wellness

The schedule provides about 21 minutes per hour to support deviations.

Bulldog Recommended			M-F					Deviated request			
1- Superstop	2 -Airport Market	3 - DHS	4- Washington & 101	5-Bungalow Market	6- THE House	7 - SCBEC (Transfer to Pirate)	8-Mill Casino	*9- Harbor Ave Boardwalk*	*10- McPherson*	*11- Hamilton Apts*	12 - Superstop
8:00 AM	8:03 AM	8:05 AM	8:11 AM	8:12 AM	8:17 AM	8:28 AM	8:36 AM	8:36 AM	8:36 AM	8:36 AM	9:00 AM
9:00 AM	9:03 AM	9:05 AM	9:11 AM	9:12 AM	9:17 AM	9:28 AM	9:36 AM	*9:36 AM*	*9:36 AM*	*9:36 AM*	10:00 AM
10:00 AM	10:03 AM	10:05 AM	10:11 AM	10:12 AM	10:17 AM	10:28 AM	10:36 AM	*10:36 AM*	*10:36 AM*	*10:36 AM*	11:00 AM
11:00 AM	11:03 AM	11:05 AM	11:11 AM	11:12 AM	11:17 AM	11:28 AM	11:36 AM	*11:36 AM*	*11:36 AM*	*11:36 AM*	12:00 PM
12:00 PM	12:03 PM	12:05 PM	12:11 PM	12:12 PM	12:17 PM	12:28 PM	12:36 PM	*12:36 PM*	*12:36 PM*	*12:36 PM*	1:00 PM
1:00 PM	1:03 PM	1:05 PM	1:11 PM	1:12 PM	1:17 PM	1:28 PM	1:36 PM	*1:36 PM*	*1:36 PM*	*1:36 PM*	2:00 PM
2:00 PM	2:03 PM	2:05 PM	2:11 PM	2:12 PM	2:17 PM	2:28 PM	2:36 PM	*2:36 PM*	*2:36 PM*	*2:36 PM*	3:00 PM
3:00 PM	3:03 PM	3:05 PM	3:11 PM	3:12 PM	3:17 PM	3:28 PM	3:36 PM	*3:36 PM*	*3:36 PM*	*3:36 PM*	4:00 PM
4:00 PM	4:03 PM	4:05 PM	4:11 PM	4:12 PM	4:17 PM	4:28 PM	4:36 PM	*4:36 PM*	*4:36 PM*	*4:36 PM*	5:00 PM
Note: Time and mileage above includes time and miles for deviations. Deviations may occur anywhere along the route.											



Bulldog Express – Current



Bulldog Express – Recommended

Charleston Route (Old Crab Express)

The schedule is be timed to allow connections to intercity bus routes serving Florence, Roseburg, and Curry County at the Superstop. Connections to the Pirate route may be made in Empire, while connections to the Bulldog route may be made at the Superstop after a 30-minute layover.

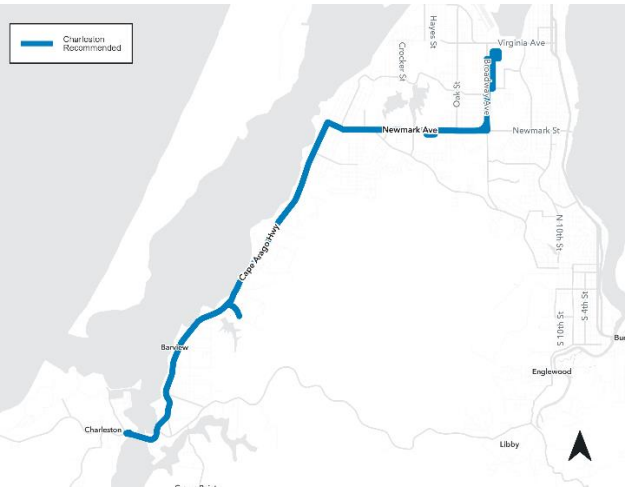
Changes to the route alignment would consist of:

- Service would be improved to 1-hour headways between 7:00 am and 5:00 pm. The current Crab provides one round trip per day.

The schedule provides about 22 minutes per hour to serve route deviations.

Charleston Recommended			Mon -Fri								
1- Charleston Visitor Center	2 -Barview Market	3 -Miluk Dr	4 - Lighthouse Market	5- Star of Hope	6 - Superstop	7 -Dishners	8 - Wal-Mart	9- post Office	10 -Star of Hope (Xfer to Pirate)	11- Charleston Fire Station	12- Charleston Visitor Center
7:00 AM	7:03 AM	7:07 AM	7:11 AM	7:13 AM	7:30 AM	7:32 AM	7:34 AM	7:37 AM	**7:40 AM**	7:43 AM	8:00 AM
8:00 AM	8:03 AM	8:07 AM	8:11 AM	8:13 AM	8:30 AM	8:32 AM	8:34 AM	8:37 AM	**8:40 AM**	8:43 AM	9:00 AM
9:00 AM	9:03 AM	9:07 AM	9:11 AM	9:13 AM	9:30 AM	9:32 AM	9:34 AM	9:37 AM	**9:40 AM**	9:43 AM	10:00 AM
10:00 AM	10:03 AM	10:07 AM	10:11 AM	10:13 AM	10:30 AM	10:32 AM	10:34 AM	10:37 AM	**10:40 AM**	10:43 AM	11:00 AM
11:00 AM	11:03 AM	11:07 AM	11:11 AM	11:13 AM	11:30 AM	11:32 AM	11:34 AM	11:37 AM	**11:40 AM**	11:43 AM	12:00 PM
12:00 PM	12:03 PM	12:07 PM	12:11 PM	12:13 PM	12:30 PM	12:32 PM	12:34 PM	12:37 PM	**12:40 PM**	12:43 PM	1:00 PM
1:00 PM	1:03 PM	1:07 PM	1:11 PM	1:13 PM	1:30 PM	1:32 PM	1:34 PM	1:37 PM	**1:40 PM**	1:43 PM	2:00 PM
2:00 PM	2:03 PM	2:07 PM	2:11 PM	2:13 PM	2:30 PM	2:32 PM	2:34 PM	2:37 PM	**2:40 PM**	2:43 PM	3:00 PM
3:00 PM	3:03 PM	3:07 PM	3:11 PM	3:13 PM	3:30 PM	3:32 PM	3:34 PM	3:37 PM	**3:40 PM**	3:43 PM	4:00 PM
4:00 PM	4:03 PM	4:07 PM	4:11 PM	4:13 PM	4:30 PM	4:32 PM	4:34 PM	4:37 PM	**4:40 PM**	4:43 PM	5:00 PM

Crab Express – Current

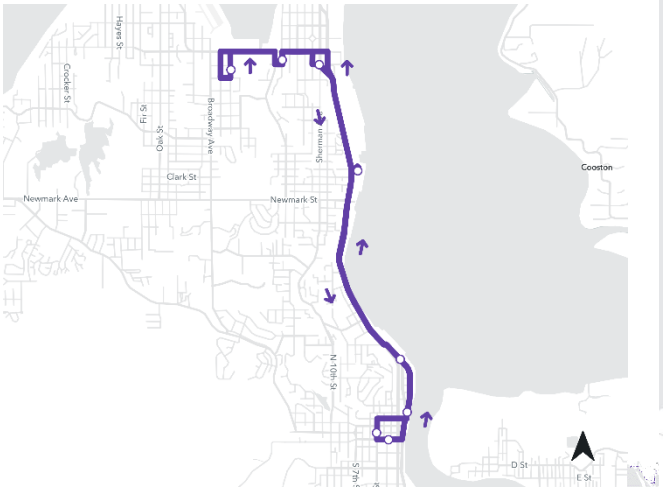


Charleston Recommended

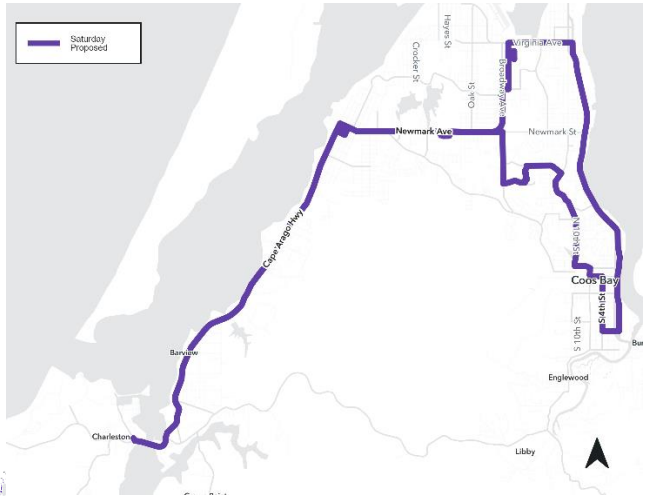
Weekend Express Changes

The schedule would provide about 20 minutes per round trip to accommodate deviations. Changes to the route alignment would consist of:

- Service would operate at 90 minute headways from 7:00 am to 5:00 pm, with a 90 min lunch break providing 5 round trips per day.
- The route will directly serve Charleston, The Mill Casino, downtown Coos bay and the Superstop.



Weekend Express – Current

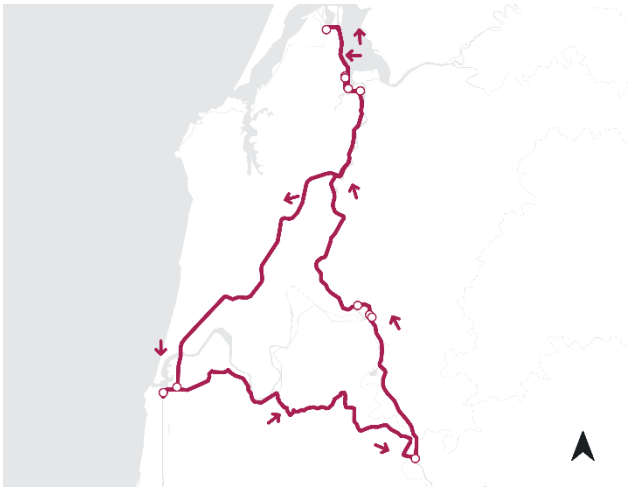


Weekend Express – Recommended

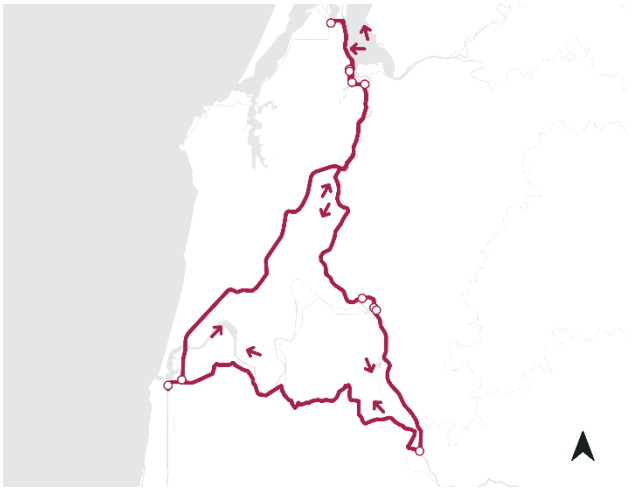
South County Route

- CCAT proposes to start a new South County route that would operate in a loop twice a day, five days per week (Monday - Friday).
- In the morning, the bus would depart Bandon traveling to Coos Bay, Coquille, Myrtle Point and back to Coquille The bus would operate in the opposite direction in the afternoon.
- This bus would serve trips from Myrtle Point and Coquille to Coos Bay/North Bend and back that are currently served by the Timber Express

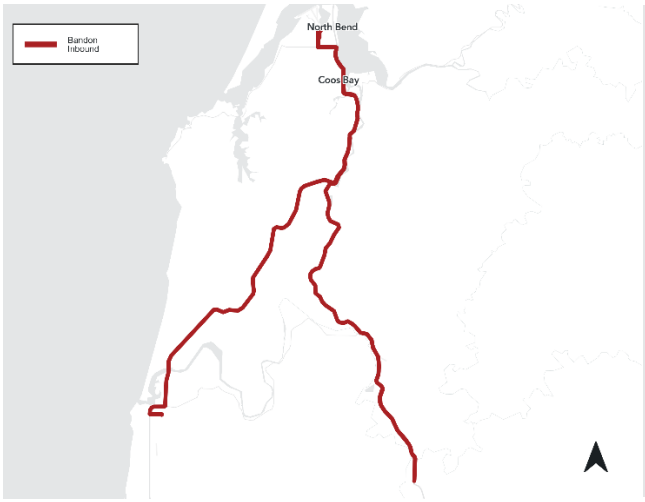
- The route will serve:
    - Trips from Bandon and Coos bay to the courthouse in Coquille and back (desirably arriving in Coquille at 9:02
- The route would provide a transit connection between Bandon, Myrtle Point, Coquille and Coos Bay that does not currently exist. It would continue to serve trips from Coquille and Myrtle Point to North Bend/Coos Bay that do not need to be made every day of the week.



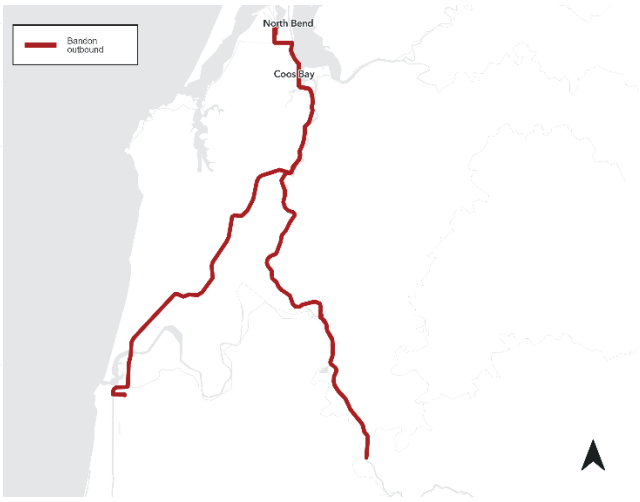
South County – Proposed (AM)



South County – Proposed (PM)



Recommended Inbound



Recommended Outbound

Bandon Outbound (Sept - Dec 2020)						Mon -Fri					
Bandon - Hospital	Bandon - City Park	Bandon - Face Rock Creamery	Coos Bay - Superstop	Coos Bay - SCBEC	Coquille-Central and Laurel	Coquille - Courthouse	Myrtle Point - McKays	Myrtle Point-City Hall	Coquille - Courthouse	Coquille-McKays	Coquille-Central and Laurel
7:00 AM	7:06 AM	7:10 AM	8:08 AM	8:21 AM	8:40 AM	9:02 AM	9:14 AM	9:16 AM	9:41 AM	9:43 AM	10:00 AM

Bandon Inbound (Sept - Dec 2020)						Mon -Fri					
Coquille-Central and Laurel	Coquille-McKays	Coquille - Courthouse	Myrtle Point-City Hall	Myrtle Point - McKays	Coquille - Courthouse	Coquille-Central and Laurel	Coos Bay - SCBEC	Coos Bay - Superstop	Bandon - Face Rock Creamery	Bandon - City Park	Bandon - Hospital
2:49 PM	2:51 PM	2:53 PM	3:22 PM	3:24 PM	3:36 PM	3:58 PM	4:17 PM	4:30 PM	5:24 PM	5:28 PM	5:49 PM

Powers Stage

The Powers Stage is proposed to continue to operate once a week on Thursdays, plus the second Tuesday of every month. The schedule could be adjusted to facilitate connections in Myrtle Point to the new Highway 42 route to Roseburg.

Powers Stage – Existing & Proposed

Roseburg

The Roseburg Route will start on 7/13/2020

- The Roseburg route will operate two days per week, Tuesdays and Wednesdays,
- The bus would depart from the Superstop at 7:30 am and arrive in downtown Roseburg at approximately 10:30 am, with stops in downtown Coos Bay, Coquille, Myrtle Point, Bridge, Camas Valley, Tenmile, Porter Creek, Winston, and Green.
- After dropping off passengers in downtown Roseburg who are being picked up or are transferring to Umpqua Transit or Greyhound, the bus will continue to the VA hospital and (on request) other medical-related destinations in Roseburg such as Mercy Medical Center, medical offices, and drug treatment centers.

The bus will depart Roseburg at 1:37 pm, returning to North Bend at 4:30 pm.

Eastbound Roseburg 7/13/2020					**Tue & Wed**														
North Bend Safeway/VA Clinic	Coos Bay City Hall	Coos Bay Fred Meyer	SCBEC	Coquille - Roads	Coquille - McKay's	Coquille - Courthouse	Myrtle Point	Bridge	Camas Valley	Tenmile	Porter Creek	Winston Abbys	Green-Roberts Creek Rd	Roseburg Downtown	Roseburg VA Hosp	Roseburg Mercy Hosp	Roseburg Crossroads	Roseburg Downtown
7:30 AM	7:42 AM	7:44 AM	7:47 AM	8:07 AM	8:10 AM	8:12 AM	8:27 AM	8:42 AM	9:07 AM	9:20 AM	9:24 AM	9:31 AM	9:35 AM	9:47 AM	9:57 AM	10:07 AM	10:17 AM	10:30 AM

Westbound Roseburg 7/13/2020					**Tue & Wed**													
Roseburg Downtown	Roseburg Crossroads	Roseburg Mercy Hosp	Roseburg VA Hosp	Roseburg Downtown	Green-Roberts Creek Rd	Winston Abbys	Porter Creek	Tenmile	Camas Valley	Bridge	Myrtle Point	Coquille - Courthouse	Coquille - McKay's	Coquille - Roads	SCBEC	Coos Bay Fred Meyer	Coos Bay City Hall	Pony Village Mall
1:37 PM	1:43 PM	1:53 PM	2:03 PM	2:13 PM	2:25 PM	2:29 PM	2:36 PM	2:40 PM	2:53 PM	3:18 PM	3:33 PM	3:48 PM	3:50 PM	3:53 PM	4:13 PM	4:16 PM	4:18 PM	4:30 PM

Roseburg/Highway 42 Route – 7/13/2020

Florence

A new route to Florence will start operation on 7/13/2020, helping replace service lost when the Eugene–Coos Bay route operated by Pacific Crest Lines was discontinued in February 2020.

- The service will operate four days per week (Monday, Tuesday, Thursday, Friday), with three round trips per day.
- The bus will depart the Superstop and arrive at the Three Rivers Casino in Florence about 2 hours later, with stops in Hauser, Lakeside, Winchester Bay, and Reedsport.
- In Florence, passengers can connect to Link Lane service to Eugene, with onward connections available in Eugene to Amtrak, Greyhound, and Cascades POINT intercity services, among others.
- Passengers can also connect in Florence to Link Lane service to Yachats, where an onward connection can be made to Lincoln County Transit service to Newport and points north. The first bus will depart the Superstop at 7:30 am and the last bus is currently planned to return a little before 8:30 pm.

Florence			M, T, T, F								
North Bend Safeway/VA Clinic	**Hauser**	**Lakeside**	**Winchester Bay**	**Reedsport**	**Florence (Three Rivers Casino)**	**Florence (Three Rivers Casino)**	**Reedsport**	**Winchester Bay**	**Lakeside**	**Hauser**	**North Bend Safeway/VA Clinic**
7:30 AM	7:45 AM	8:04 AM	8:26 AM	8:44 AM	9:23 AM	9:30 AM	10:09 AM	10:27 AM	10:49 AM	11:08 AM	11:23 AM
10:35 AM	10:50 AM	11:09 AM	11:31 AM	11:49 AM	12:28 PM	12:30 PM	12:45 PM	1:04 PM	1:26 PM	1:44 PM	2:23 PM
4:30 PM	4:45 PM	5:04 PM	5:26 PM	5:44 PM	6:23 PM	6:30 PM	6:45 PM	7:04 PM	7:26 PM	7:44 PM	8:23 PM

Florence Route – 7/13/2020