



Technical Memorandum #4

September 29, 2022

Project# 23021.039

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CC: Ian Horlacher, ODOT

RE: Final TM#4: Unmet Transportation Needs (Task 3.1)
 Curry County Transit Development Plan

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SUMMARY OF NEEDS

This memorandum summarizes unmet transportation needs within the Curry Public Transit (CPT) study area. These needs have been identified through a combination of:

- Comparing existing service to CPT's goals and policies.
- Measuring population and employment density to determine areas that may be able to support and benefit from transit services.
- Conducting online, onboard, and operator surveys, and community outreach events.
- Interviewing representatives of key stakeholder groups about needs related to their clients or members.
- Evaluating intracounty transit service needs to connect Curry County to neighboring counties, to the remainder of Oregon, northern California, and beyond.

Given finite budget resources to provide transit service, this project will need to develop priorities for how service can be improved (e.g., expanding service into new areas versus using the same budget to provide more frequent service or longer service hours in areas already provided with service). The needs identified in this memorandum will support the development of *Memorandum #5: Future Service Opportunities*.

CPT's operational, development, marketing, and bus stop amenity needs are summarized in the following sections. The remainder of this memo describes how these needs were developed.

OPERATIONAL NEEDS

TITLE VI POPULATIONS

- Ensure service improvements specifically focused on serving Title VI populations¹ are focused on key destinations.

LEVEL OF SERVICE

- Increase the level of service of the Coastal Express, including:
 - Increase Coastal Express' service span to accommodate a greater variety of work and school schedules, including reinstating Saturday service.
 - Increase Coastal Express' service frequency (trips per day).
 - Provide opportunities for residents of inland areas of Curry County to access the Coastal Express.

TARGETED AREAS

- Expand service to targeted areas, including:
 - Provide fixed-route circulator service for Brookings/Harbor, the most densely populated region in Curry County. This route could serve residential areas and key destinations that are more than ¼ mile from the existing Coastal Express stops. In particular, provide service on Railroad Street, Park Avenue, Fern Avenue, and Easy Street.
 - Extend service to Crescent City, California.
 - Ensure key destinations are accessible by transit (fixed-route or dial-a-ride). Key destinations include the DMV in Brookings, the courthouse in Gold Beach, specialist health care in Coos Bay, the Social Security office in Crescent City, Coast Community Health Center in Brookings, and the Walmart in Crescent City.

¹ Title VI of the Civil Rights Act of 1964 prohibits discrimination in the provision of federally supported benefits and services, including public transportation service. The Title VI populations represents the composition of study area population in terms of poverty status, age, racial/ethnic composition, English proficiency, and proportion of people with disabilities.

DIAL-A-RIDE

- Retain Dial-A-Ride as a door-to-door service available through appointments made the previous day. Expand and improve on services by:
 - Starting Dial-a-Ride service in Port Orford to connect the Coastal Express to key destinations and serving the southern part of the city and scattered residential developments.
 - Expanding Dial-A-Ride services in Brookings and Gold Beach to provide transfer options between the Coastal Express and key destinations such as the Gold Beach courthouse, grocery stores, and medical facilities. In Gold Beach, there is a need to provide more access to the southern part of the city and residential developments.

HEALTHCARE

- Seek opportunities with healthcare organizations by:
 - Providing greater connections and schedule coordination between Redwood Coast Transit and Curry Public Transit. Transfer tickets or integration of fare systems would also be helpful for people making the journey between Curry County and Del Norte County.
 - Working with healthcare providers to provide bus rides to appointments.
 - Including hospital and community organizations on planning committees and for planning to be done in conjunction with local agencies and organizations.
 - Collaborating with Medicare and Medicaid to provide transportation services to and from appointments.

REGIONAL CONNECTIVITY

- Provide service or timed connections to Crescent City, Grants Pass, and Coos Bay, which are the top three employment destinations of Curry County residents who worked outside the county. Serve commute times of 6:30 AM to 8:30 AM, the time frame in which almost half of workers commuted.

DEVELOPMENT NEEDS

A summary of **development needs** is presented below.

BROOKINGS-HARBOR

- Meet current and future development needs in Brookings and Harbor:
 - Serve residential neighborhoods on the north end of Brookings both east and west of US 101 via a city circulator.
 - There is potential for residential growth, and thus potential need for future service, at the following locations:

- Parcels adjacent to Azalea Park and just up Chetco River from the park on the east side of Brookings; land on US 101 directly west of the Chetco River; and land south of Fred Meyer and US 101.
 - Large blocks of vacant R-1-zoned land in north-central Brookings.
 - A large amount of vacant land (roughly 450 acres) on the north edge of Brookings is zoned Master Plan Development (MPD).
- Improve access to commercial and employment destinations located more than ¼ mile from a bus stop. In addition, there is potential for non-residential growth, and thus potential need for future service, at the following locations:
 - Vacant commercial land located between US 101 and the coast on the west side of Brookings.
 - The MPD land on the north edge of Brookings.

GOLD BEACH

- Meet current and future development needs in Gold Beach:
 - Continue serving commercial uses and other services along US 101 in the north half of the city; serve the southern part of the city.
 - Support future development with the existing Coastal Express stop. Future development opportunity is mostly located within ½ mile of the existing Coastal Express stop at Ray's Food Place.

PORT ORFORD

- Meet current and future development needs in Port Orford:
 - Serve grocery and public services destinations in the southern part of town that are further away from the Coastal Express stop, as well as residential developments, which are scattered throughout town.
 - Serve potential future development within ¾ mile of the existing Coastal Express stop.

MARKETING AND BUS STOP AMENITY NEEDS

A summary of the **marketing and bus stop amenity needs** is presented below.

MARKETING AND AWARENESS

- Increase ridership with strategies related to communication, connectivity, and accessibility, including education and marketing about CPT's services.

BUS STOP AMENITIES

- Improve bus stop amenities, including installing bus stop signage at all stops and considering amenities such as trash cans and improved lighting. Collaborate with local and state agencies to improve the sidewalk network and road crossings in the vicinity of bus stops.
 - At higher-usage stops, install weather-resistant and covered bus stop shelters that can withstand rain and wind, given coastal weather conditions.

FLAG STOPS

- Formalize flag stops at Langlois Public Library and Langlois Store.

TECHNOLOGY

- Provide more information assistance and referral services for available mobility options, particularly targeted to the elderly and people with physical, sensory, and cognitive disabilities.
- Provide technology updates, including:
 - Real-time vehicle arrival information to improve the convenience of riding transit.
 - Support for online/mobile trip planning.
 - Mobile ticketing fares and reciprocity with connecting systems in the region.
 - On-board cameras.

WORKFORCE HIRING

- Labor shortages are resulting in reduced transit service. CPT is having difficulty retaining and attracting new bus drivers even with hiring incentives and increased benefits.

NEEDS RELATED TO CPT GOALS AND POLICIES

CPT's goals seek to improve customer-focused services, accessibility and connectivity, coordination, and health and sustainability. CPT's policies focus on providing reliable public transportation (Policy 1A); improving existing services (Policy 2A); ensuring access to employment, education, and health services (Policy 2B); and strengthening coordination with other transportation services (Policy 3A). Based on peer comparisons with similar transit providers described in *Memorandum #3: Transit Benchmarks and Monitoring Program*, CPT's service productivity (rides per hour) is lower than most of its peer agencies located on the Oregon and Washington coast and in Northern California.

Based on an assessment of existing conditions and stakeholder input (*Memorandum 1: Existing System Conditions*), CPT goals and policies (*Memorandum #2: Goals, Policies, and Practices*), and the proposed framework for performance monitoring (*Memorandum #3: Transit Benchmarks and Monitoring Program*), the following high-level needs have been identified:

- Improve service utilization, safety and security, and resource utilization.
- Improve connectivity and service levels for frequent destinations and transit-dependent populations.

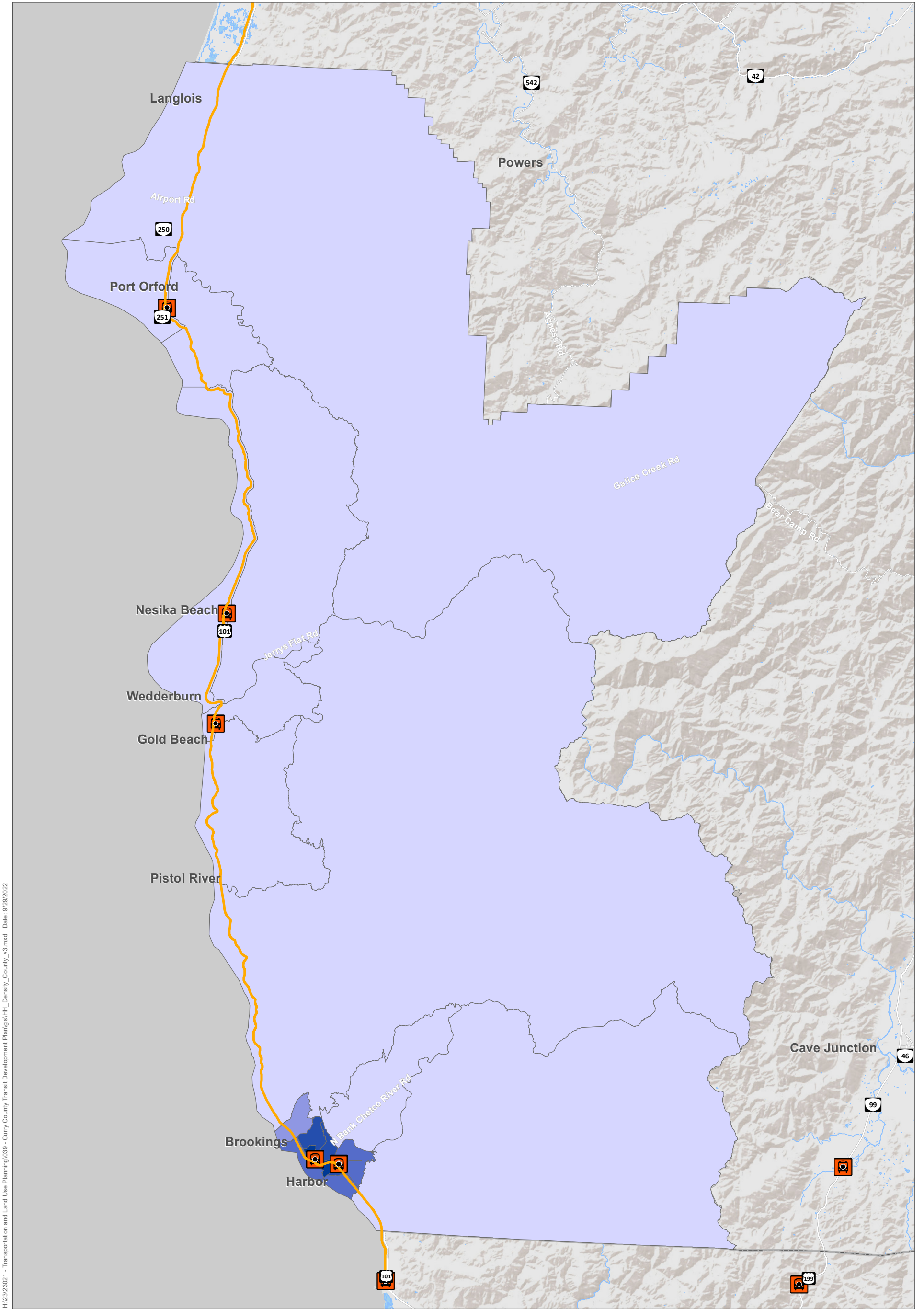
- Increase ridership with strategies related to communication, connectivity, and accessibility.
- Improve route and service efficiency.
- Expand routes to targeted areas, including:
 - Providing fixed-route circulator service for Brookings/Harbor with scheduled stops and providing bus shelters at higher-usage locations, including service on Railroad Street, Park Avenue, Fern Avenue, and Easy Street;
 - Expanding service to Crescent City, California (in particular, to provide service to Walmart and the Social Security office); and
 - Expanding Dial-A-Ride services in Gold Beach to provide transfer options to the Coastal Express.
- Retaining Dial-A-Ride as a door-to-door service reserved with by appointments made the previous day.
- Hiring more bus operators.
- Improving bus stop amenities, including installing bus stop signage for all stops and considering amenities such as trash cans and improved lighting. Collaborate with local and state bodies to improve the sidewalk network and road crossings in the vicinity of bus stops.
- Increase the service span to accommodate a greater variety of work and school schedules, including reinstating Saturday service.
- Focus service improvements targeted to Title VI populations on key destinations rather than particular housing locations.

POPULATION AND EMPLOYMENT DENSITY

Population and employment density provides insight into areas that may be able to support and benefit from transit services.

Figure 1 and Figure 2 demonstrate the household density per acre and employment density per acre in Curry County. As shown, Brookings and Harbor have the highest levels of household and employment density, with Gold Beach also demonstrating some employment density.

A transit-supportive area analysis was performed, which identifies current and future areas with sufficient density to support fixed-route transit at hourly headways. Typically, this analysis is performed at a smaller scale using Transportation Analysis Zone (TAZ) data from the regional transportation planning model. However, because TAZ data were not available for Curry County, larger-scale census data were used to obtain current household and employment densities. A TAZ is considered "transit supportive" if it has more than 3 households per acre or 4 jobs per acre. This analysis showed no transit-supportive areas in the county under existing conditions; however, the census block groups used were large and included rural and industrial land. Because census data were used for the analysis, it was not possible to perform a future-year analysis.



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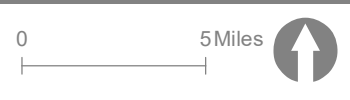
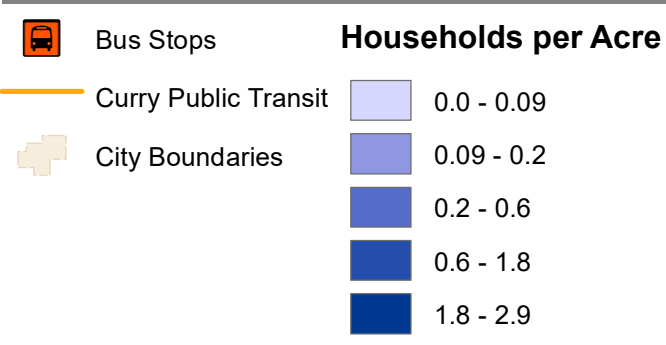
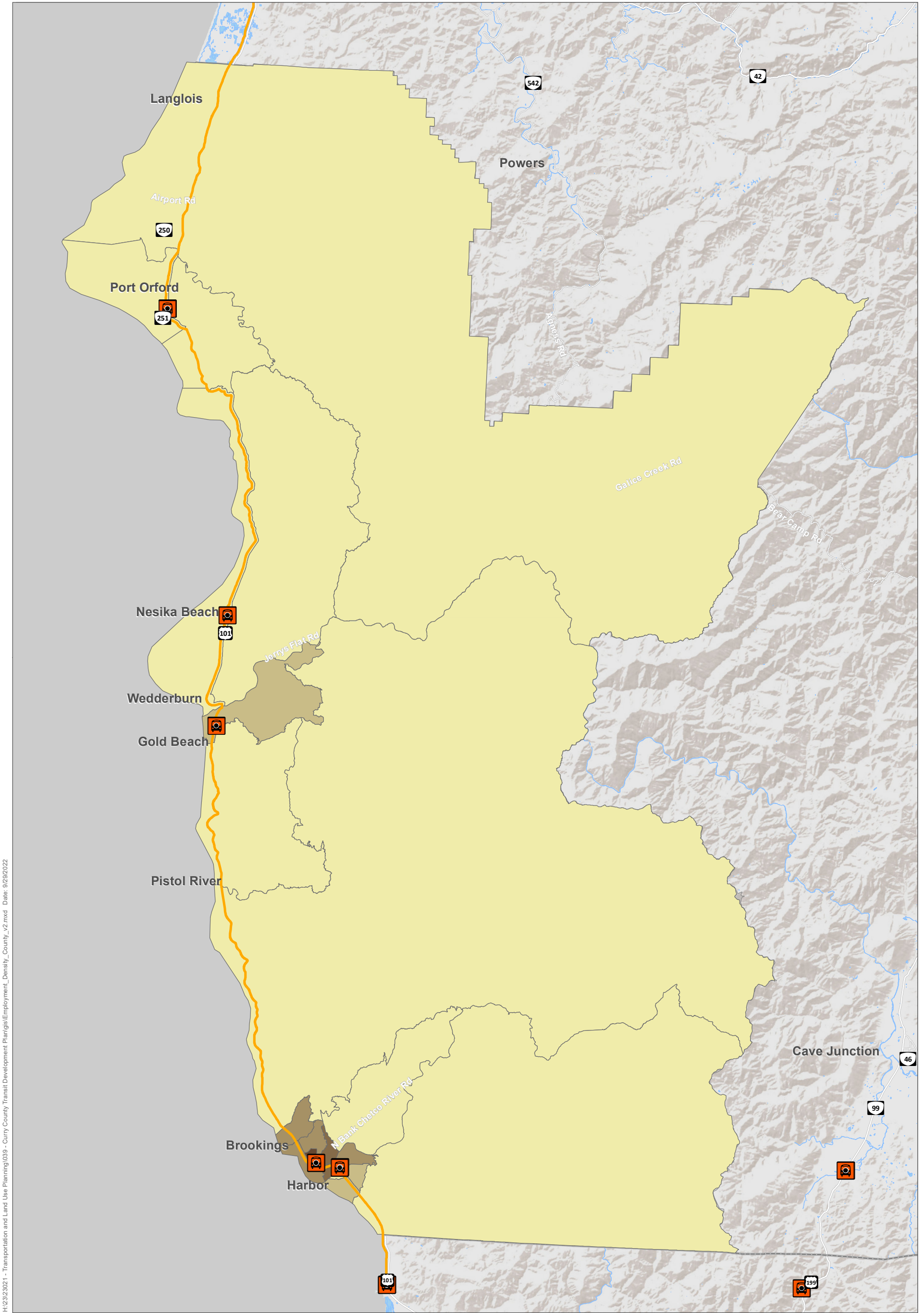


Figure 1
Household Density per Acre
Curry County, Oregon



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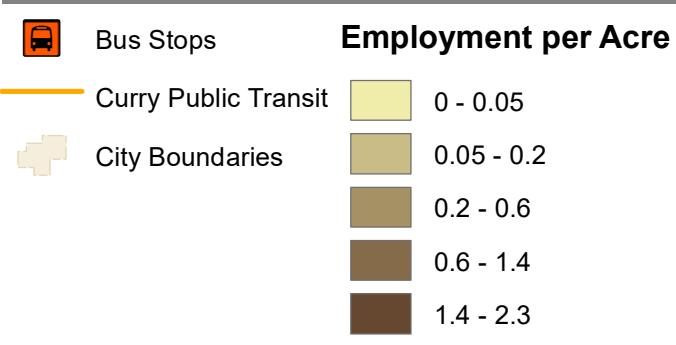


Figure 2
Employment Density per Acre
Curry County, Oregon

STAKEHOLDER AND PUBLIC IDENTIFIED NEEDS

Needs identified to date by riders, bus drivers, partner agencies, and the general public are summarized below. The onboard, driver, and online surveys were summarized previously in Technical Memorandum #3.

ONBOARD RIDER SURVEY

- Most respondents are satisfied with Curry Public Transit's services, rating service quality as "good" to "very good".
- The highest-priority improvements for survey respondents were extended hours, increased frequency, weekend service, more destinations, and benches and shelters.
- Real-time vehicle arrival information and more park-and-rides would improve convenience of riding transit.
- The most common origin cities on the Coastal Express were Port Orford and Bandon. The most common destination cities were Brookings, Coos Bay (Fred Meyer stop), and Port Orford.
- Most respondents use the service to travel to shopping, work, and healthcare.
- Most riders indicated they would ride more frequently after COVID.
- Survey respondents stated that when they do not use transit services, it is due to reliability, fare cost, and accessibility.

DRIVER SURVEY

- Some drivers reported challenges with rainy, foggy nights and wet roads; occasional disruptive passengers; and potential COVID exposure.
- Several drivers reported challenges with service delays when picking-up/dropping-off wheelchair riders, general logistics of moving passengers, and delays in wait time for passengers.
- Drivers identified increased frequency as their highest priority for improving service.
- Drivers recommended continuing Dial-A-Ride as a door-to-door service reserved with appointments made the previous day.
- Drivers recommend providing fixed-route city service in Brookings/Harbor with scheduled stops and bus shelters.
- Drivers recommended expanding the Coastal Express further into California (to provide service to Walmart).
- Drivers recommended expanding Dial-A-Ride services in Gold Beach to provide transfer options to the Coastal Express.
- Drivers recommended hiring more drivers.
- Drivers recommended providing service on Railroad Street, Park Avenue, Fern Avenue, and Easy Street (where Good Samaritan Society – Jerstad, schools and residential areas are located.)

ONLINE SURVEY

The highest-priority needs identified by respondents to the online survey were:

- Improved connections to other transit providers;
- Extended service hours for Dial-a-Ride and Coastal Express;
- Formalizing transit stops; and
- Providing online/mobile trip planning.

FOCUS GROUPS

Four focus groups were conducted in June 2022 with one church/social service provider and three health care providers. These include:

- St. Timothy's Episcopal Church (401 Fir Street, Brookings)
- Brookings Core Response (97900 Shopping Center Avenue Unit 31 above the DMV in Harbor directly next to Bud Mart)
- Sutter Health (multiple locations in Brookings-Harbor and Crescent City)
- Coast Community Health Center (Bandon and Port Orford)

The following is a summary of findings:

- Multiple providers mentioned that they distribute bus passes for their clients to use to access their services.
 - Coast Community Health Center provides gas cards because the bus stop is not accessible to their hospital.
- There is need for greater connections and schedule coordination between Redwood Coast Transit and Curry Public Transit. Transfer tickets or fare system integration would be helpful for people making the journey between Curry County and Del Norte County.
- Social service providers help clients obtain non-emergency medical transportation with insurance and help coordinate bus services, but it is generally difficult for clients to get to appointments on time.
- Long headways make journeys to neighboring cities an all-day trip, causing people to miss a whole day of work just to go to a courthouse or a doctor's appointment.
 - The schedule doesn't support the needs of the working poor, who are unable to miss a day of work.
- Key destinations include the DMV in Brookings, the courthouse in Gold Beach, specialist health care in Coos Bay, the Social Security office in Crescent City, and the Walmart in Crescent City.
 - Another destination is the Coast Community Health Center in Brookings. The Coastal Express stop is 0.4 mile walk from the center, which is challenging if not impossible for persons with disabilities and the elderly.

- If people do not take the bus to the providers, they often bike, walk, or get a ride from someone else.
- Education about the bus service is important to inform people of the services available.
- There is an opportunity to work with healthcare providers to provide bus rides to appointments.
- There is some demand for to travel to Medford and Astoria. Medford is currently served once a day, except Sunday, from Brookings (with two transfers en route). The outbound trip has a timed connection with the first southbound Coastal Express trip, but the return trip arrives after the last northbound Coastal Express trip leaves. It is possible to travel to Astoria (or Eugene or Portland) via US 101 on weekdays (except Wednesdays) but the trip requires multiple transfers and an overnight stay in Florence. It is also possible to travel via I-5 all days except Sunday, but the trip requires an overnight stay in Grants Pass.
- There is an opportunity to increase Dial-A-Ride services, including expanding to Port Orford and adding more buses in Gold Beach and Brookings to go further up the rivers.
 - There is a need to expand Dial-A-Ride service time to 7 PM.
- Rain and wind make walking from bus stops to destinations challenging. There is a need for more frequent bus stops and better shelters.
- There is a need for routes with more frequent, inter-city stops, especially in Brookings. There is also a need for ways for people from inland to access the Coastal Express.
- There is a need for more hospital and community organizations to be on planning committees and for planning to be done in conjunction with local agencies and organizations.
- There is a need for Medicare and Medicaid patients to access appointments. Medicare does not pay for people's transportation, so patients often miss appointments.

INTRACOUNTY SERVICE

The Coastal Express runs through three counties: Coos, Curry, and Del Norte. The Coastal Express has two stops in North Bend and two stops in Coos Bay, which are located in Coos County. There is need for increased schedule coordination between the Coastal Express and Coos County Area Transit, which runs several intercity and intracity routes. More aligned schedules, including weekend service, would allow passengers travelling into Coos County to ride CCAT within Coos Bay and to other cities such as Florence and Roseburg.

The Coastal Express has one stop in Del Norte County, located in Smith River. This stop is currently located 12 miles north of the Walmart, Sutter Coast Hospital, and Social Security office in Crescent City, which are all key destinations for Curry County residents, with only the Social Security office within ¼ mile of a Redwood Coast Transit bus stop. Increased coordination with Redwood Coast Transit and/or direct service into Crescent City, is needed to facilitate travel to destinations in Del Norte County and beyond. In addition, fare integration with Redwood Coast Transit or a method of transferring would facilitate payment and ease of experience for passengers.

FLEET, TECHNOLOGY, AND MARKETING

The following sections provide an overview of fleet, technology, and marketing needs:

FLEET

CPT currently owns and operates 12 regular buses and two vans. The average age of the active fleet is 4.4 years. The following provides an overview CPT's fleet and needs:

- Eight vehicles are beyond their expected useful life (EUL) in years and two vehicles are past their EUL in miles.
- Most vehicles run on non-ethanol gasoline, with four vehicles running on diesel.
- Seven new vehicles have been ordered recently. These vehicles have standard high floors with lifts as low-floor kneeling buses are not preferred due to lack of sidewalk and curbs at stops needed for low-floor ramps .

TECHNOLOGIES

Information and technology services can improve the riding experience for existing riders, attract new riders by improving ease of transit use, and provide information to transit agencies to help plan and operate transit service in the future.

CPT does not currently provide real-time bus arrival information, mobile ticketing, or fare reciprocity with adjacent providers. These technologies and services facilitate a more efficient and convenient user experience and have the potential to better serve CPT riders in the future.

FARE PAYMENT OPTIONS

CPT does not currently provide mobile ticketing for their services and requires exact fare for trips or passes. While new fare payment systems, such as smartcards with built-in electronic wallets, add convenience and simplify the boarding process for many riders, they also create challenges in human services transportation. For example, transportation providers typically charge an up-front fee to purchase a card. This upfront fee may be cost-prohibitive. Additionally, while smartphone fare payment does not require a card, it does require a smartphone and a reliable internet connection. Again, these types of systems may be cost-prohibitive for people with low incomes. In rural areas of the state, people with special transportation needs often transfer between service providers. New fare payment systems can make these transfers easier, but can also create limitations if the providers use different systems. CPT should explore mobile ticketing fares and reciprocity with connecting systems in the region.

TRIP PLANNING SUPPORT

Online mobile trip planning tools can help the public get travel information at any day or time. While some providers create proprietary trip planning tools, free and readily available trip planning tools are available and more fitting to CPT's size and needs. These tools include Google Maps, OneBusAway, Moovit, and Transit. All of these tools depend on the open data format GTFS. In addition to using GTFS for scheduled stops and routes, CPT could also pursue GTFS-flex, an emerging format for demand-response services, which can increase awareness and use of the overall transit system.

ON-BOARD CAMERAS

On-board cameras seek to provide customer and driver safety, assist with accidents and insurance claims, and provide insight on bus operator performance and passenger counting by monitoring activity in real time.

Total capital cost varies from \$4,000 to \$14,000 each to retrofit one-door buses. Other cost considerations include hardware such as servers and equipment to view camera footage. All CPT buses are currently equipped with on-board cameras and all future buses are ordered with camera systems

REAL-TIME VEHICLE ARRIVAL INFORMATION

Real-time information provides riders with trip-planning information (i.e., when will the next buses arrive at the closest stop) and assurance that one's bus is on the way if it is running late. It can be provided in a number of ways, including by text message or phone call to an automated system using a bus stop number, by accessing the transit provider's website, by using a dedicated smartphone app, or by using a third party's website or app (e.g., Google Maps). Knowing when their bus will arrive helps riders better plan when to depart for the bus stop and avoid waiting outside longer than necessary when weather conditions are poor. ODOT encourage providers to buy systems that support GTFIS-Realtime (GTFIS-rt), allowing for up-to-date information on vehicle arrivals to be pushed through various tools. Currently, there is a need for more robust messaging and providing a real-time tracking system that shows all buses operating in the region.

MARKETING

CPT currently advertises on the public radio station. Increased marketing and education about CPT's services would help people become aware about the Coastal Express and Dial-a-Ride services and increase ridership.

DIAL-A-RIDE ORIGINS AND DESTINATIONS

Information about Dial-a-Ride pick-up and drop-off locations in Brookings and Gold Beach were provided for five days in April 2022. These locations were compiled and are mapped in Figure 3 and Figure 4.

In Brookings, the most popular locations were in central Brookings and Harbor, with Fred Meyer being the location with the most activity. Other popular locations included Riverbend, Driftwood, Grocery Outlet, BiMart, Pelican Perch, Crestline, Dollar Tree, and Rite Aid. Several locations were close to the Coastal Express stop in Brookings, including Grocery Outlet, Goodwill, Chase Bank, and the bus stop itself.

In Gold Beach, the most popular pick-up/drop-off location was McKay's Market. Most other stops were dispersed along or near Highway 101, include Hummingbird Hill, Ray's Market, and Umpqua Bank. Several people were picked up or dropped off at the Coastal Express bus stop.

Key needs identified from this analysis include:

- Dial-a-Ride currently serves local trips within Brookings, Harbor, and Gold Beach and provides first-/last-mile access to the Coastal Express stop in each community.
- A local circulator route in Brookings and Harbor could serve many existing Dial-a-Ride trips.



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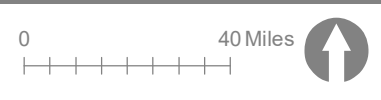
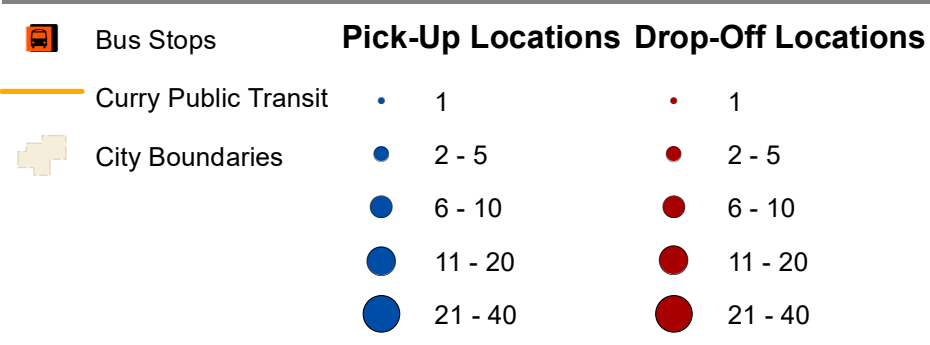


Figure 3
**Dial-A-Ride Pick-Up and Drop-Off Locations
 Curry County, Oregon**



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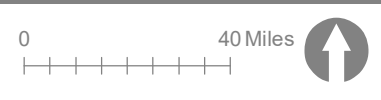
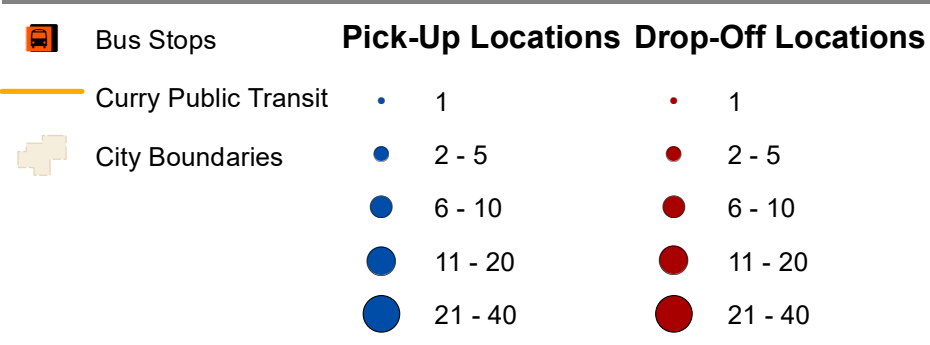


Figure 4
**Dial-A-Ride Pick-Up and Drop-Off Locations
 Curry County, Oregon**

EXISTING DEMOGRAPHICS

Memorandum #1: Existing System Conditions discussed several aspects of people living and working in Curry County, including employment and commute data, population growth and decline, and populations in the county protected by federal Title VI provisions. Highlights from that memorandum are presented here with the intention of understanding how existing demographics shape transit needs.

The following key employment and commute characteristics from *Memorandum #1* should be considered when evaluating transit needs in the CPT service area:

- There were 7,243 workers and 6,225 jobs in Curry County in 2019, per the US Census Bureau.
- Approximately 68 percent of Curry County residents also worked in Curry County.
- Beyond Curry county, Crescent City, Grants Pass, and Coos Bay were the most common cities in which Curry County residents worked.
- Approximately 47 percent of Curry County residents commuted to work between 6:30 and 8:30 a.m.
- Approximately 58 percent of Curry County residents commuted less than 10 miles and approximately 21 percent commuted more than 50 miles.

Memorandum #1 presented detailed information about the county's demographic characteristics. Key demographic findings for the CPT area include the findings following:

- Table 1 shows 2020 Census figures for Curry County, with modest growth in Curry County in the 2010–2020 time period. The county's average growth rate of 4.8 percent is less than half of Oregon's statewide growth rate over the same time period. Growth – in absolute number and percentage – occurred predominantly in Brookings.

Table 1: Curry County Population 2010–2020

Geography	2010 Population	2020 Population	2010–2020 Change	
			Number	Percent
State of Oregon	3,831,074	4,237,256	406,182	10.6%
Curry County	22,364	23,446	1,082	4.8%
City				
Brookings	6,336	6,744	408	6.4%
Gold Beach	2,253	2,341	88	3.9%
Port Orford	1,133	1,146	13	1.1%
Census Designated Place (CDP)				
Harbor CDP	2,391	2,551	160	6.7%
Nesika Beach CDP	463	432	-31	-6.7%
Langlois CDP	177	196	19	10.7%
Pistol River CDP	84	89	5	6.0%

Source: 2010 US Census, 2020 US Census

- Population density is generally low throughout the county, with the highest concentrations of residents in Brookings–Harbor and the lowest population in inland areas of the county.

- *Memorandum #1* includes extensive mapping of Title VI populations in the county at the Census block group level. Table 2 compares Title VI population figures between the county and the state. Key takeaways related to Title VI population figures include:
 - **Seniors** – The county is home to a far greater percentage of senior residents (65 years and older) than the state as a whole; seniors compose 34 percent of the county's population and 42 percent of Port Orford's population, compared to 17 percent of the state's population.
 - **Poverty** – Poverty (a ratio of Income to Poverty less than 2) occurs in Curry County at rates comparable to or higher than Oregon as a whole. Thirty-four percent of county residents live in poverty, with 29 percent of Brookings' residents in poverty and 56 percent of Port Orford's residents in poverty, compared to 31 percent of the state's residents.
 - **Race and ethnicity** – The county has a significantly greater percentage of white population than the state, with white residents forming 83 percent of the county's population, compared to 72 percent of the state's population. However, this gap varies by particular race and ethnicity populations; the county and cities are home to a larger percentage of Native Americans than the state (2 percent versus 1 percent), and are home to comparable percentages of those who identify as "other" race/ethnicity or as two or more races.
 - **Disability** – Curry County has a significantly higher percentage of people living with a disability (in the functions of hearing, vision, cognition, and/or ambulation) than the state overall, where the county's percentage is 24 percent and the state's percentage is 14 percent. In the county's cities, the percentage of residents living with a disability ranges from 17 percent in Brookings to 40 percent in Port Orford.

Table 2: Curry County Title VI Populations

	Curry County	State of Oregon
Population	23,446	4,237,256
Percent youth (under 18 years old)	14.6%	21.0%
Percent seniors (65 years or older)	33.7%	17.2%
Percent minority populations	17.1%	28.3%
Percent Hispanic or Latino	7.1%	13.9%
Percent below poverty line	34.3%	30.8%
Percent with disability	23.5%	14.4%

Source: 2020 US Census; 2019 American Community Survey

POPULATION AND EMPLOYMENT GROWTH FORECASTS

The following sections describe population and employment growth trends in Curry County.

POPULATION GROWTH

Based on population forecasts from the Portland State University (PSU) Population Research Center (PRC), Curry County's population is expected to grow modestly through 2040, reaching a forecasted total of 24,525 people. As shown in Table 3, areas of the county outside urban growth boundaries (UGBs) are forecasted to decline in population, but these losses are more than offset by increases in population within the UGBs of the county's three cities: Brookings, Gold Beach, and Port Orford.

Table 3. Curry County Population Forecasts

	2020	2030	2040
Curry County	23,446	23,976	24,525
Brookings UGB	11,489	11,994	12,525
Gold Beach UGB	3,186	3,421	3,691
Port Orford UGB	1,865	1,976	2,092
Outside UGB Areas	6,631	6,585	6,217

Source: PSU Population Research Center

The PSU population forecast is not broken down into the Title VI demographic groups summarized in the previous Existing Demographics section. However, it is possible that the characteristics exhibited in 2020 will continue through 2040; namely that Curry County will have a higher percentage of seniors, people in poverty, and people with disabilities than the state as a whole. Distribution of these populations may continue to follow the patterns shown in Title VI mapping in *Memorandum #1: Existing Conditions*.

EMPLOYMENT GROWTH

The State of Oregon Employment Department (OED) publishes medium-range employment projections for regions throughout the state.² While covering a larger geographic area than just Curry County, the information in Table 4 provides an indication of growth sectors that could influence future land uses and transit trip generators in the county. Generally:

- Overall employment is expected to increase modestly during the 10-year horizon.
- Private educational and health services account for the largest numerical growth in the forecast.
- Construction accounts for the largest percentage growth in the forecast.
- Other growth sectors include trade, transportation, and utilities; leisure and hospitality; and self-employment.

Table 4: Industry Employment Forecast, 2017–2027; Coos, Curry, and Douglas Counties

	2017	2027	Change	% Change
Total Employment	72,550	77,290	4,740	7%
Total payroll employment	68,600	72,940	4,340	6%
Total private	54,600	58,670	4,070	7%
Natural resources and mining	3,490	3,650	160	5%
Mining and logging	1,650	1,660	10	1%
Construction	2,830	3,340	510	18%
Manufacturing	7,140	7,390	250	4%
Durable goods	6,240	6,410	170	3%
Wood product manufacturing	4,500	4,570	70	2%
Nondurable goods	900	990	90	10%
Trade, transportation, and utilities	12,190	12,680	490	4%
Wholesale trade	1,060	1,100	40	4%
Retail trade	8,580	8,990	410	5%
Food and beverage stores	1,990	2,090	100	5%
General merchandise stores	2,200	2,250	50	2%
Transportation, warehousing, and utilities	2,550	2,590	40	2%
Information	520	470	-50	-10%
Financial activities	2,490	2,620	130	5%
Professional and business services	6,170	6,540	370	6%
Private educational and health services	9,800	11,140	1,340	14%
Leisure and hospitality	7,270	7,850	580	8%
Food services and drinking places	6,770	7,300	530	8%
Other services and private households	2,700	2,990	290	11%
Government	14,000	14,270	270	2%
Federal government	1,850	1,870	20	1%
State government	1,230	1,280	50	4%
Local government	10,920	11,120	200	2%
Local education	4,140	4,030	-110	-3%
Self-employment	3,950	4,350	400	10%

² Published June 26, 2018. For information, contact: Annette Shelton-Tideman, Annette.I.SheltonTideman@oregon.gov, 541-252-2047.

LAND USE EVALUATION

This section summarizes existing development and potential future growth in Brookings, Gold Beach, and Port Orford. The land use evaluation can inform the TDP by describing existing and future land uses that may influence transit demand.

BROOKINGS

Existing Conditions

Brookings is located in southern Curry County, with the city center located 6 miles north of the California border. The city is bounded by the ocean on the west and south and by the Chetco River on the east. The city had a population of 6,744 in its city limits and 11,489 in its UGB in the 2020 Census.

Brookings is the largest city in Curry County. While development, as in many coastal Oregon cities, is generally focused along US 101, relatively dense development also radiates out from the city center in areas zoned General Commercial (C-3) and Tourist Commercial (C-4). Significant residential neighborhoods exist on the north side of Brookings both east and west of US 101, separated from the rest of the city by Harris Beach State Park.

Patterns of existing development – particularly along the highway – are generally consistent with the City's zoning, as shown in Figure 5. Lower-density residential zoning and development characterizes the north and southeast ends of Brookings along the highway. A mixture of services and commercial uses characterize land use in the city center along the highway; commercial uses are more-or-less limited to the highway corridor around the city center. Significant public and open space uses correspond to large areas of Public and Open Space (P/OS) zoning in the city: Harris Beach State Park in the northwest, Brookings Airport in the north, three schools (Kalmiopsis Elementary School, Azalea Middle School, and Brookings-Harbor High School) in the center of Brookings; Chetco Point Park in the south; and Azalea Park in the east.

As is shown in Figure 6,³ the Coastal Express stops centrally in the commercial core of Brookings, in front of Grocery Outlet and across from Fred Meyer. A number of health care facilities are located within blocks of the stop, while numerous schools and government services (e.g., post office and library) are located within ¼ to 1 mile of the stop.

Future Growth

The population in the Brookings UGB is projected to grow by about 1,036 residents by 2040, a 9 percent increase from 2020. Figure 7 shows vacant land in Brookings city limits, by zone.

RESIDENTIAL GROWTH

The vacant land mapping suggests that residential development potential exists in several areas around Brookings, with the more significant opportunities in the following areas: vacant land zoned Multiple-Family Residential (3-R), Two-Family Residential (2-R), and Single-Family Residential (1-R) adjacent to Azalea Park and just up Chetco River from the park on the east side of town; 3-R-zoned land on US 101 directly west of the Chetco River; and 3-R-zoned land south of Fred Meyer and US 101.

³ Figure 6, as well as Figure 9 and Figure 11, are "key activity" maps produced for Memorandum #1: Existing System Conditions.

There are large blocks of vacant R-1-zoned land in north-central Brookings; however, minimum lot sizes are relatively high in that zone and residential density is low.

A large amount of vacant land (roughly 450 acres) on the very north end of the city is zoned Master Plan Development (MPD). The MPD zone allows uses permitted in any of Brookings's residential, commercial, and industrial zones; thus, it is possible that some part of this area could develop as residential uses.

NON-RESIDENTIAL GROWTH

While smaller vacant land opportunities exist on C-3-zoned land in south-central Brookings, the largest piece of vacant commercial land is zoned C-4, located between US 101 and the coast on the west side of the city. Other potential for non-residential — including employment — growth is found in the large amount of land on the very north end of the city zoned MPD. As noted above, the MPD zone allows uses permitted in any of the City's residential, commercial, and industrial zones; thus, it is possible that some part of this area could develop as commercial and/or industrial uses.

The Coastal Express stop is centrally located within Brookings's commercial core. It is adjacent to or within a few blocks of commercial goods and services, and within walking distance (considered to be $\frac{1}{4}$ mile) of multiple key destinations, including health care services. While the existing transit stop can serve multiple places that transit riders need and want to access, key destinations more than $\frac{1}{4}$ mile from the existing stop and the potential areas of residential and non-residential growth noted above should be flagged for service consideration through this transit planning process.

Figure 5. Brookings Zoning

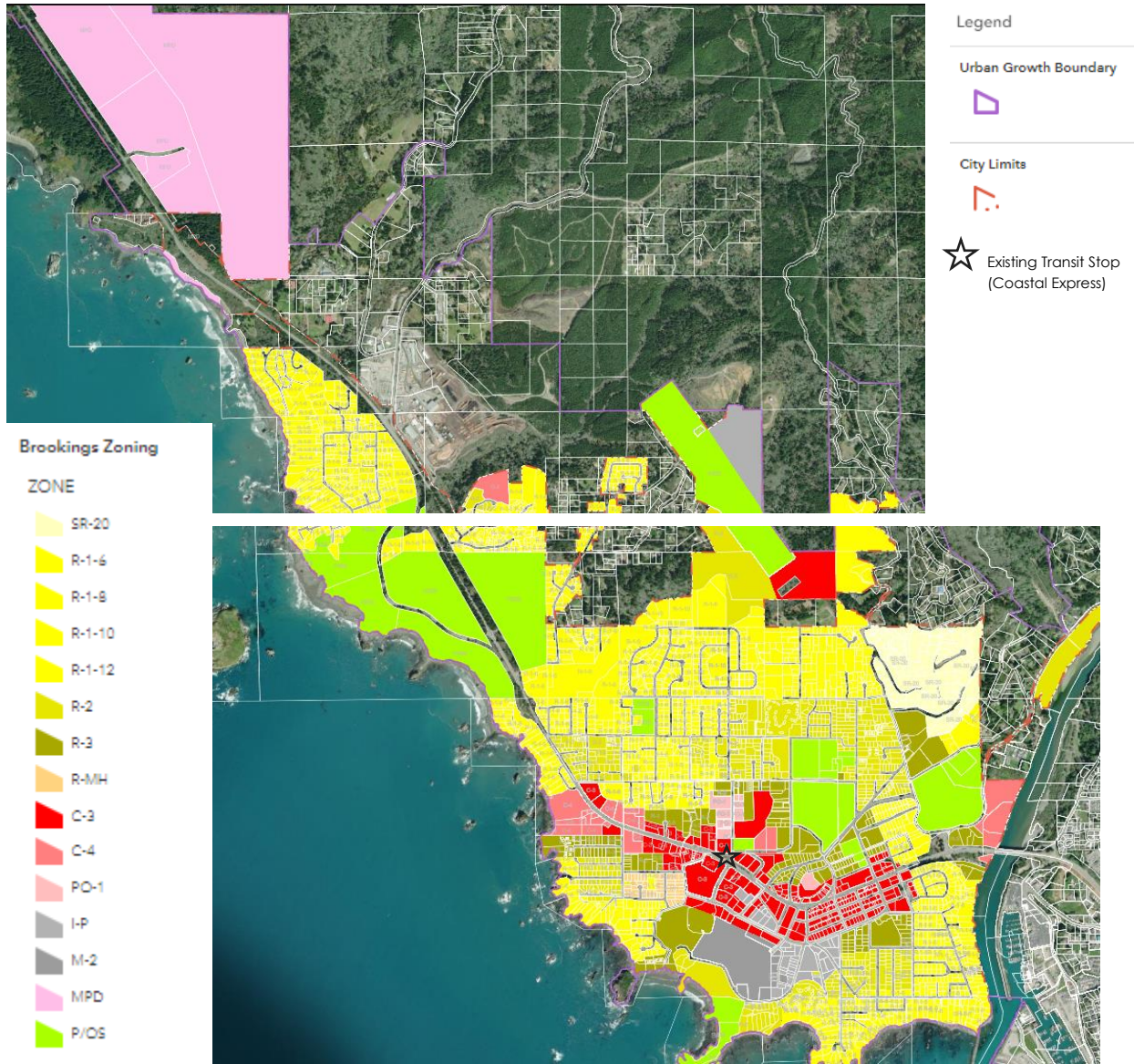


Figure 6. Brookings Key Destinations

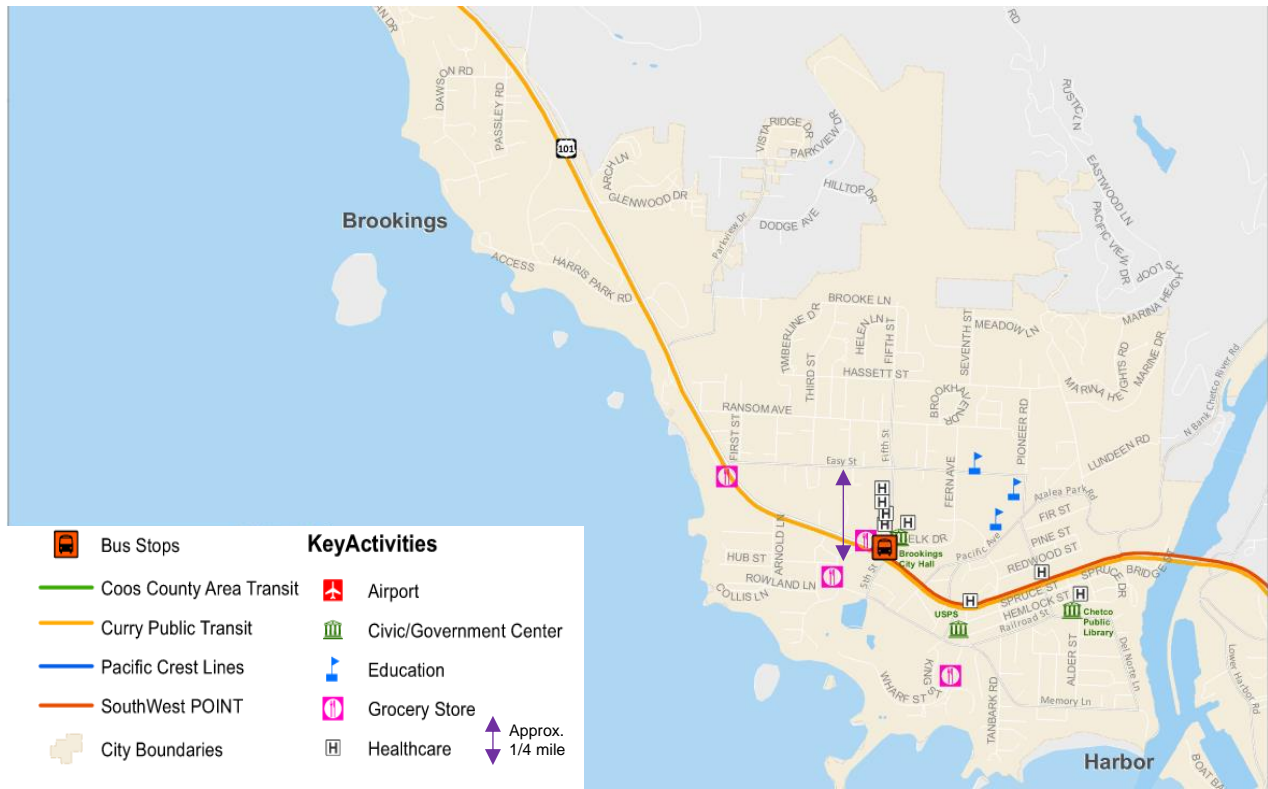
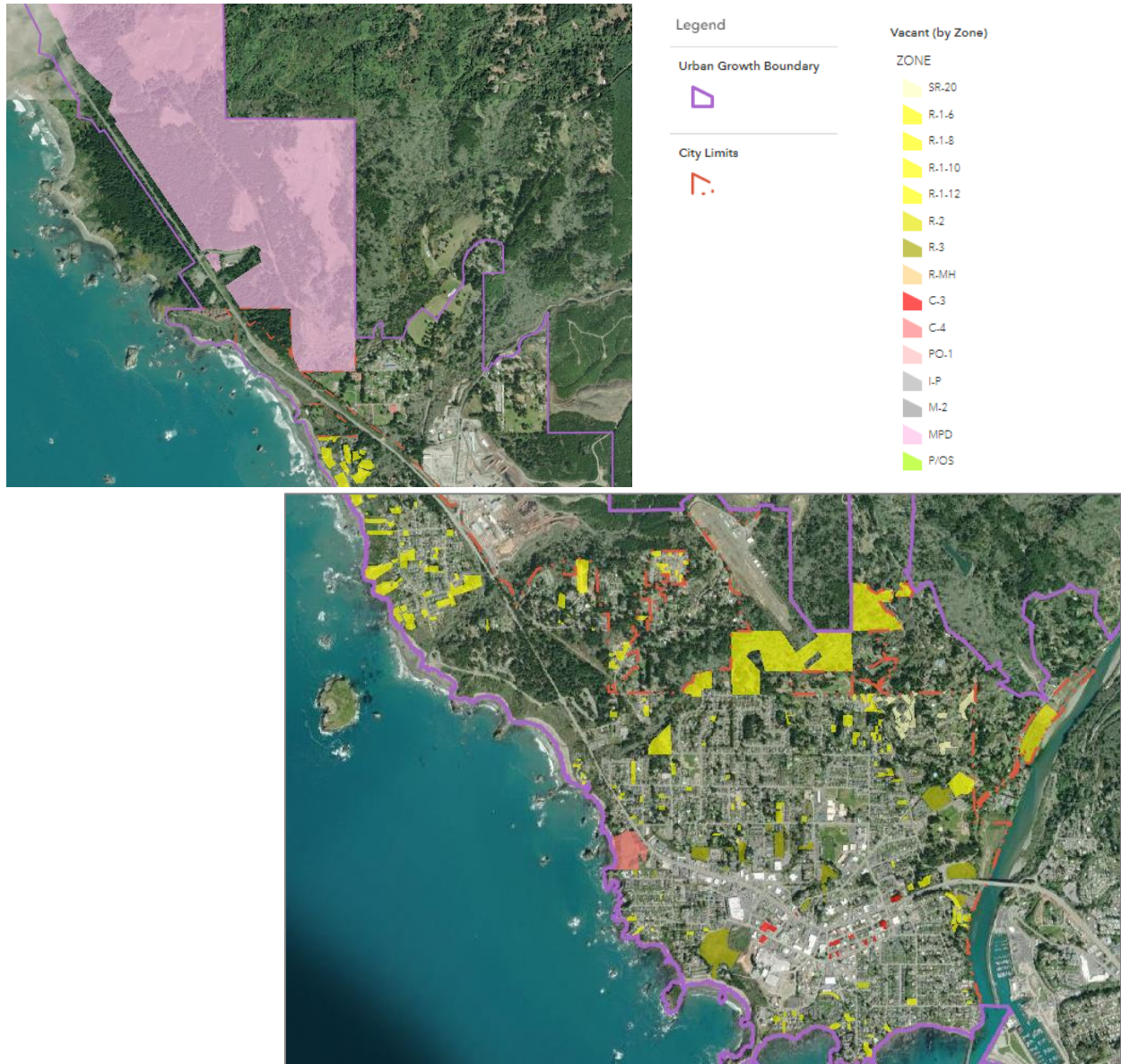


Figure 7. Brookings Vacant Land, by Zone



GOLD BEACH

Existing Conditions

Gold Beach is located in central Curry County, 28 miles north of Brookings. The city had a population of 2,341 in its city limits and 3,186 in its UGB in the 2020 Census. The city has a long narrow geography bounded by the Rogue River on the north, the ocean on the west, and steep slopes to the east for most of its length until it flattens out around Hunter Creek in the south. As with many Oregon coastal towns, development is focused along the highway (US 101).

Commercial uses and other services – from government services to food/beverage and lodging – predominate along the highway for the northern half to two-thirds of the city; residential uses and lodging characterize the southern part of the city. These patterns of development appear consistent with the City's zoning, shown in Figure 8. Large public uses such as the Gold Beach Municipal Airport and Curry County Fairgrounds occupy land between US 101 and the ocean; there is generally less land and development west of the highway.

As shown in Figure 9, the Coastal Express stop is located in the northern third of the city – at Ray's Food Place (grocery) – amid a cluster of commercial and public services.

Future Growth

The population in the Gold Beach UGB is projected to grow by about 505 residents by 2040, a 16 percent increase from 2020. The most intensive zoning in the city is Residential Zone 3-R and Commercial Zone 4-C. This zoning is concentrated in the northern half of the city. Figure 8 shows that lower-density residential, public facility, and constrained (Natural Hazard NH) zoning are more characteristic in the southern half of the city.

A scan of aerial imagery from the County's online GIS system suggests that opportunities for more residential and commercial development exist in the 3-R and 4-C zones in the northern half of the city. Most of that land is within a half mile of the Coastal Express stop at Ray's Food Place, indicating that the bus stop serves the city's growth center. As shown in Figure 9, most key locations are also fairly accessible, lying within $\frac{1}{4}$ and $\frac{1}{2}$ mile of the bus stop.

Figure 8. Gold Beach Zoning

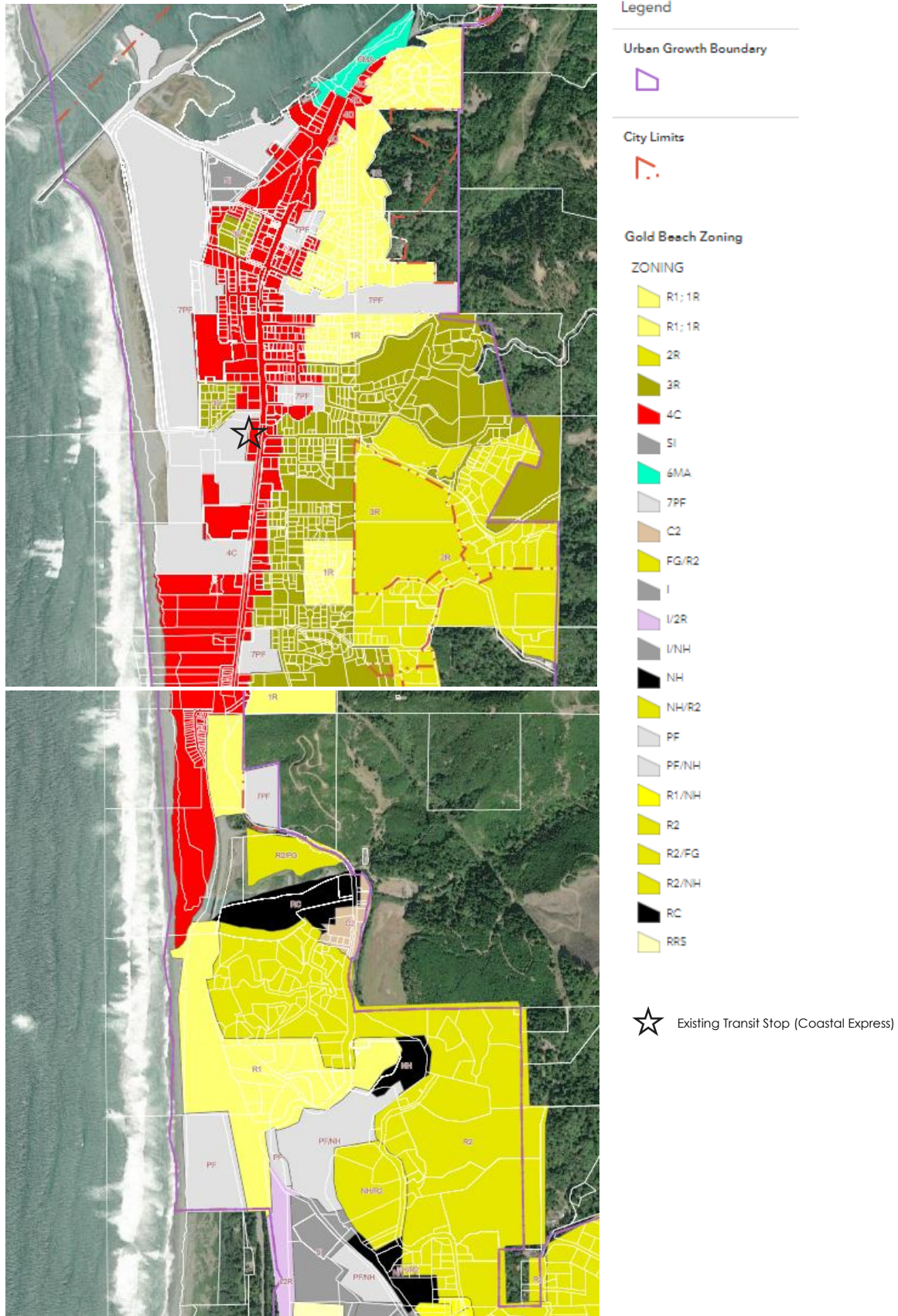
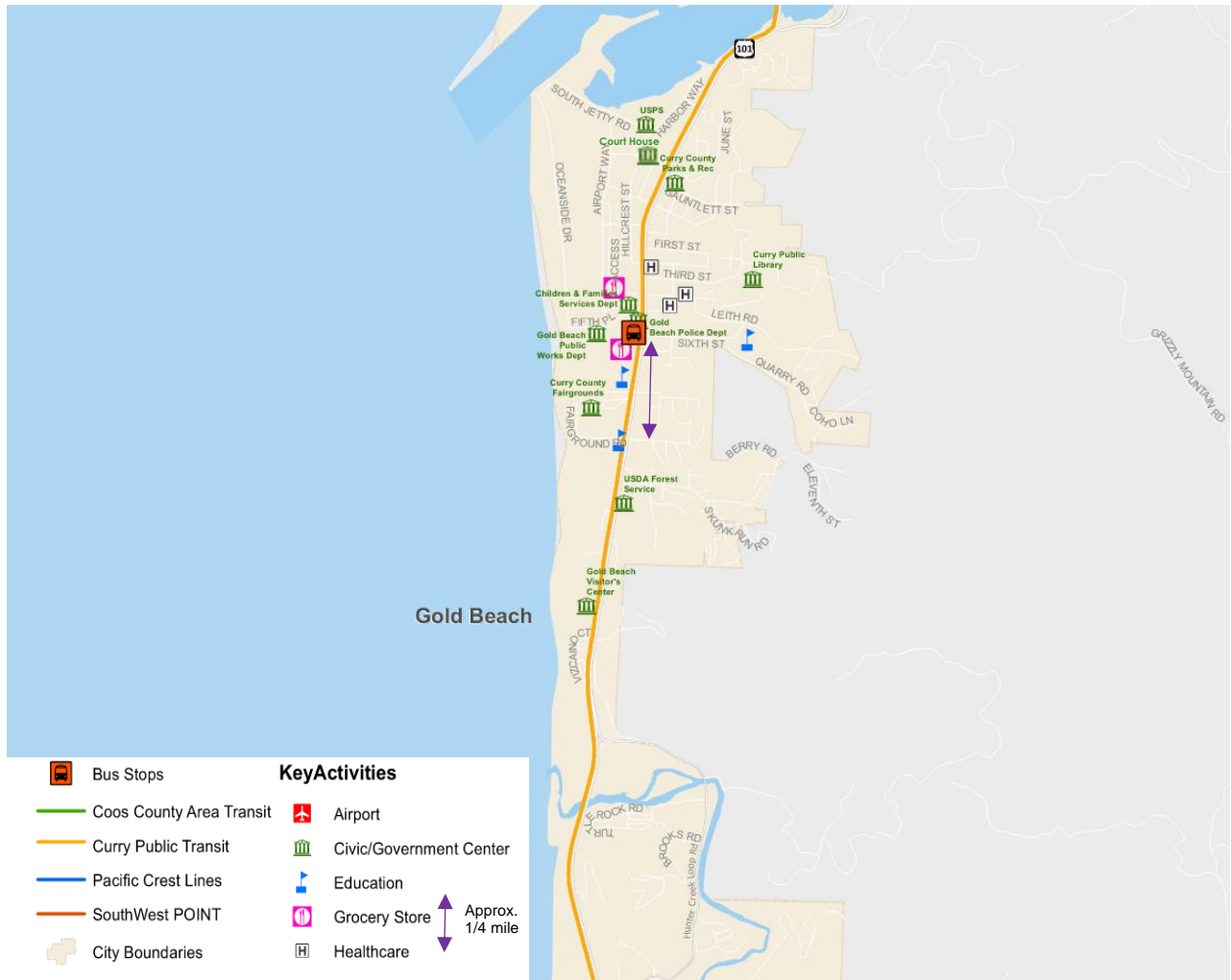


Figure 9. Gold Beach Key Destinations



PORT ORFORD

Existing Conditions

Port Orford is located in northern Curry County, 28 miles north of Gold Beach and 51 miles south of Coos Bay. The city had a population of 1,146 in the city limits and 1,865 in its UGB in the 2020 Census. Garrison Lake and Port Orford Headlands State Park form part of the city's western boundary and the ocean lies to the south of the city.

Existing development is somewhat low density and is generally most concentrated along and near (within roughly two blocks of) US 101. There is relatively dense residential development around and near Garrison Lake. Development is sparsest in the north-central, southwestern, and eastern parts of the city, where slopes and natural resources are constraints, and in the south-central part of the city where the Port of Port Orford is located.

This development pattern appears to be generally consistent with zoning (see Figure 10). Commercial (4-C) and Battle Rock Mixed Use (10-MU) zoning lines most of the highway through town, extending at least a block from the highway; residential (1-R and 2-R) zoning predominates otherwise. The 4-C and 10-MU zones can be developed fairly intensively, as they allow multi-family housing in addition to single-family housing, commercial uses, and other uses, and there are no minimum lot size requirements if development is served with public water and sewer. The 1-R and 2-R zones have a 5,000-square-foot minimum lot size; only the 2-R zone allows for multi-family housing in addition to single-family housing.

As is shown in Figure 11, the Coastal Express bus stop is located in the city center at Ray's Food Place (grocery). The stop is within blocks of other services, including the Port Orford Library, Driftwood School, and Port Orford Senior Center.

Future Growth

The population in the Port Orford UGB is projected to grow by about 227 residents by 2040, a 12 percent increase from 2020. A scan of aerial imagery from the County's online GIS system suggests that opportunities for more residential and commercial development exist in the 4-C and 10-MU commercial and mixed-use zones found throughout most of the US 101 corridor in Port Orford; these are the City's most intensive and permissive zones. Residential development can also be expected outside the corridor, but in lower-density residential zones, where transit service is less viable.

Most of the 4-C-zoned land is within ¼ mile of the Coastal Express stop at Ray's Food Place; land zoned 10-MU is within ¾ mile of the stop, indicating that the existing stop could provide a fair amount of transit accessibility to potential growth areas in the city. As seen in Figure 11, many key destinations in the city are accessible, within ¼ mile of the existing transit stop; some grocery and public services destinations in the south part of town are further away, but still within 1 mile of the stop.

Figure 10. Port Orford Zoning

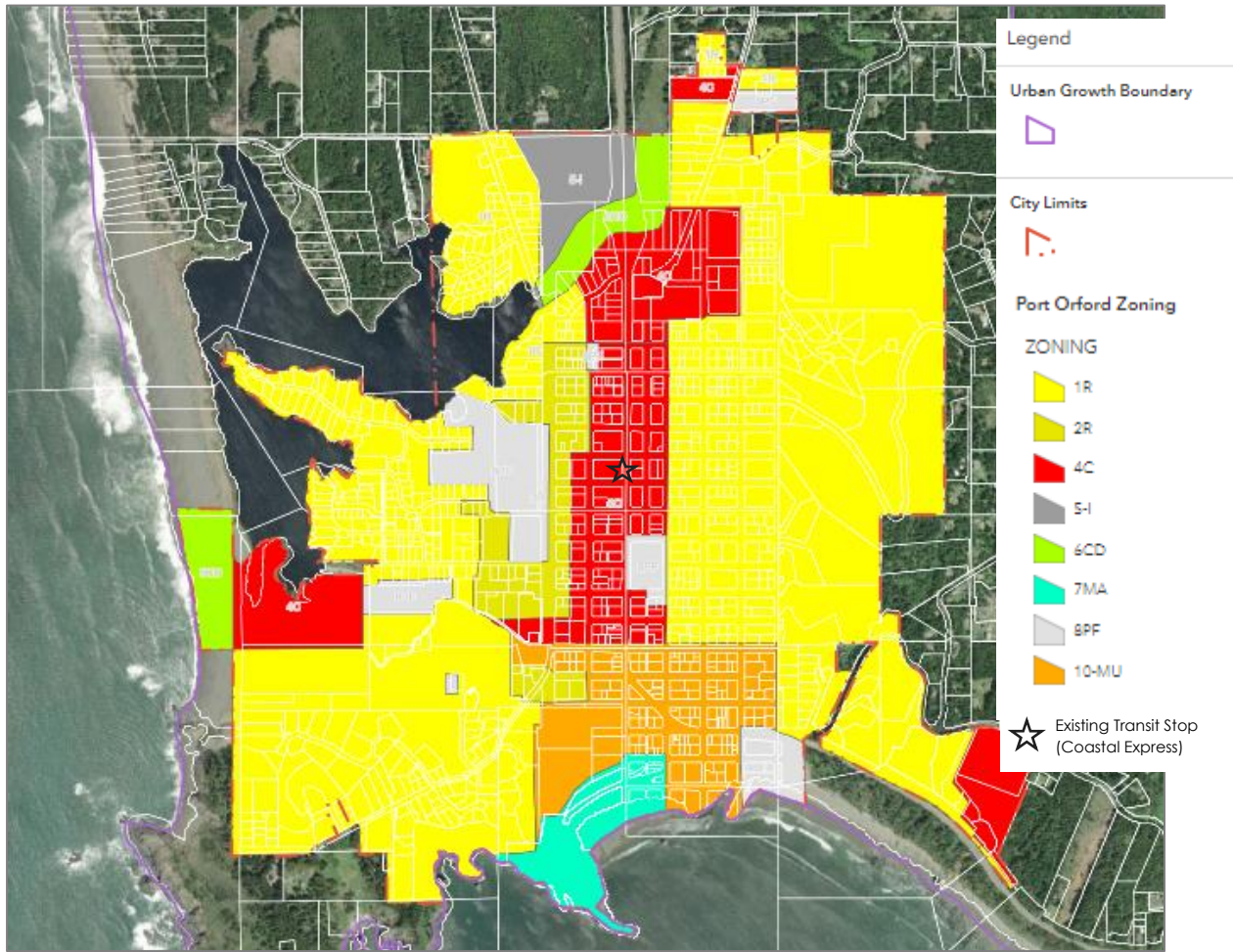


Figure 11. Port Orford Key Destinations



NEXT STEPS

The needs identified in this memorandum will be reviewed with the Project Management Team and will be used in developing *Memorandum #5: Future Service Opportunities*.