# SOCIOECONOMIC PROFILE OF THE OREGON COAST:

**A COMPARATIVE ANALYSIS** 

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# BACKGROUND<sup>1</sup>

In 2008, the state of Oregon began a process to establish a limited system of marine reserves within state waters. Marine reserves are areas in Oregon coastal waters that have been designated for conservation and scientific research. All removal of marine life is prohibited, as is ocean development. Some of the sites also include Marine Protected Areas (MPAs) adjacent to the reserves. In the MPAs, ocean development is still prohibited, but some fishing activities are allowed. State mandates and guidelines for the Oregon marine reserves are provided in Executive Order 08-07 (2008), House Bill 3013 (2009), Senate Bill 1510 (2012), administrative rules adopted by state agencies (OAR 635-012, OAR 141-142, and OAR 736-029), and in the *Oregon Marine Reserve Policy Recommendations* adopted by the Oregon Ocean Policy Advisory Council (OPAC) in 2008. The Oregon Department of Fish and Wildlife (ODFW) was designated the lead agency responsible for implementing and managing the Oregon Marine Reserve System. The OPAC policy recommendations provided the foundation for monitoring of the marine reserves.

During an extensive public engagement process, local communities worked with state officials to site the reserves in areas that would provide ecological benefits, and also avoid significant negative impacts to ocean users and coastal communities, in accordance with Executive Order 08-07. The reserves were to be phased in over several years. With the addition of Cape Falcon Marine Reserve on January 1, 2016, Oregon completed implementation of five marine reserve sites off the Oregon coast, all within 3 nautical miles from shore. The marine reserve sites are named after local natural landmarks, and are located at Cape Falcon, Cascade Head, Otter Rock, Cape Perpetua, and Redfish Rocks.

## **OREGON MARINE RESERVE GOALS**

Based on the OPAC policy recommendations (OPAC 2008), the goals of the Oregon Marine Reserve System are:

**Conservation** Conserve marine habitats and biodiversity.

- **Research** Serve as scientific reference sites to investigate marine reserve protections and the Oregon territorial seas, to inform nearshore ocean management.
- **Communities** Avoid significant adverse impacts to ocean users and coastal communities.

#### **PROGRAM EVALUATION IN 2023: A CHECK-IN**

The Oregon Legislature requires a check-in and report on the Oregon Marine Reserves Program due in 2023. The check-in will include evaluating the various aspects of the Program including management, scientific monitoring and research, outreach, community engagement, compliance, and enforcement of the reserves. It also marks the first point at which the state may consider adaptive management of the marine reserve system, including the role of reserves as a nearshore resource management tool moving into the future.

There is general agreement from the scientific community that this evaluation timeframe is too brief for substantive ecological changes to occur due to marine reserve protections. With Oregon's temperate

<sup>&</sup>lt;sup>1</sup> An earlier version of sections of this report appeared in chapter IV of the Oregon Nearshore Strategy.

marine ecosystem – where many species grow slowly, mature late, and are long-lived – scientists project a minimum of 10-15 years after extractive activities (e.g., fishing) have ceased before we might begin to scientifically detect any ecological changes. However, this timeframe does provide for the establishment and evaluation of: (a) rigorous long-term ecological and human dimensions monitoring programs, (b) the generation of robust datasets from which we can track and understand future ocean changes, (c) information that furthers our knowledge about design and placement of marine reserves in Oregon, and (d) contributions of data and information used to support other nearshore ocean management and policy efforts as well as support understanding of emerging ocean issues. A comparative examination of research across the five sites will help ascertain the socioeconomic impacts of reserve implementation.

The ODFW Marine Reserves Program was established in 2009, to oversee the management and scientific monitoring of the Oregon Marine Reserve System. The Human Dimensions Monitoring Program was developed by ODFW staff in collaboration with, and assistance from, external scientists and marine reserve community members. The Oregon Marine Reserves Human Dimension Monitoring and Research Plan (Murphy et al., 2012) documents the monitoring program objectives and research purposes. Research results are presented in interim project and summary reports.

To contribute to the evaluation of the marine reserve system, the studies conducted by ODFW and research collaborators are designed to address the following:

- Determine if marine reserves increase our knowledge of the Oregon nearshore environment, resources, and uses. Ascertain if this information is useful to support nearshore resource management.
- Determine if the marine reserves and associated marine protected areas, and the system as a whole, avoid significant adverse social and economic impacts to ocean users and coastal communities.

Human dimensions research pertaining to the Oregon Marine Reserve System is designed to determine the direct and indirect social, cultural, and economic impacts which result from reserve site implementation. Study subjects include related ocean users, communities of interest, and communities of place. The information collected through this process should be relevant to other marine and coastal natural resource policy issues in Oregon. Thus, the intention is to design a monitoring program that provides area specific data, but also addresses a sufficiently broad scope of research to inform statewide coastal resource management and policy.

In order to assess the impacts of the marine reserves on coastal communities, a key consideration is whether the communities of place, those in closer proximity to the reserves, experience change in socioeconomic conditions that are specifically related to the reserves. These changes could be positive, such as greater lodging tax revenues, or negative, such as a decline in local fisheries income. Since the socioeconomic conditions of any community are constantly evolving, attribution of any change specifically to the reserves could be problematic. Any assessment of socioeconomic change therefore should include comparisons of communities of place to those more distant from, and presumably less affected by, the marine reserves. Anomalously different patterns of change over time in communities of place might be indicative of a reserve effect. Similar patterns of socioeconomic change between communities of place and other coastal communities would suggest that the reserves had no substantive community impacts. Such comparisons should include data from the time frame prior to

implementation up to the most recent data available prior to marine reserve program evaluation in 2023. This report will cover a compilation of such secondary socioeconomic data for the current period.

# **INTRODUCTION**

This report was created to provide a broad socioeconomic profile of the Oregon coastal communities. It originated from a need to understand how the coastal communities are similar or different, and how the coast differs from the rest of the state. The purpose of this report is to:

- Provide a basic understanding of the historic conditions that defined the coastal communities.
- Describe, in very general terms, various economic characteristics of the coastal communities.
- Illustrate the unique demographic attributes of the coastal communities.
- Provide demographic and economic comparisons to differentiate between these communities and between the coastal communities and the rest of the state.
- Discuss several significant socioeconomic issues and trends that impact coastal communities.

The information presented in this report should be of value to readers who want a general orientation to the coast of Oregon. The data are drawn from secondary sources. Certain issues such as poverty, housing affordability, population trends and gentrification are highlighted. It is common knowledge that these topics are of concern on the Oregon coast. The purpose herein is to comparatively illustrate the nature of these socioeconomic conditions along the coast. Finally, the data that form the basis of this report will be used for the evaluative purposes previously discussed, anticipating the marine reserve evaluation process in 2023.

The Oregon coast is a unique region that stretches 363 miles from the Columbia River in the north to the California state border in the south. Bordered by the Pacific Ocean to the west, the Oregon coast is separated from the rest of the state by the Oregon Coast Range to the east. Seven counties comprise the Oregon coast region. The eastern boundaries of five coastal counties (Clatsop, Tillamook, Lincoln, Coos, and Curry) end to the west of the Coast Range crest, while Lane and Douglas counties extend farther east to interior valleys. In the following report, comparative data for the counties of Clatsop, Tillamook, Lincoln, Coos, and Curry are used. Similar data presented for coastal Lane County are derived from the towns of Florence and Dunes City, and data from Reedsport and Winchester Bay are used for coastal Douglas County.

Livelihoods, demographics, and other socioeconomic characteristics of coastal residents vary significantly in comparison to the general Oregon population. This report is designed to capture a snapshot of the socioeconomic conditions on the Oregon coast and includes comparisons between coastal communities. In addition, the socioeconomic characteristics of Oregon's coastal communities are compared to the data for the rest of the state. All coastal communities are included in the tables throughout the report. However, the smaller coastal communities often exhibit anomalously extreme characteristics. For this reason, communities with a population size of less than 500 are excluded from the comparative discussions. This topic is covered in more detail in the next section of this paper.

Compared to the rest of Oregon, the coast is comprised of an older, less educated population with greater economic dependence on tourism and retirement. Coastal communities generally have a larger proportion of retirement-age people, higher poverty rates, and higher second-home vacancy rates than state averages. These differences, amongst others, have led to diverse coastal communities distinct

from other communities throughout the rest of Oregon. In addition, the variances observed between coastal towns are often larger than those found between the coast and the state.<sup>2</sup> Many coastal towns are widely associated with a specific economic sector (e.g. a fishing village, a tourism town, or a retirement community). Many characteristics of a town with a strong fishing industry presence will differ substantially from a community that is dependent on a significant tourism economic base. The comparisons highlighted in this paper are intended to facilitate an initial understanding of the Oregon coastal communities, but the socioeconomic circumstances of the coast warrant additional study. A brief historical chapter is presented first to facilitate readers' understanding of how the current circumstances evolved.

## **ABOUT THESE DATA**

Most data in this report are drawn from the American Community Survey (ACS) 5-year estimates from the Census Bureau's website (https://data.census.gov/cedsci/). The ACS uses monthly samples to estimate annual socioeconomic statistics for an area. The ACS 5-year estimates are an average of the current year and previous four years (e.g., 2014 ACS 5-year estimates are averages from 2010 to 2014). For small communities, annual sampling rates are between 10-15% (ACS Design and Methodology 2014). These data are useful for investigating the demographic and economic characteristics of communities. However, understanding the nuances of these data is an important prerequisite to interpretation.

Despite the ACS sampling a greater percentage of the population in smaller communities, estimates from these communities are still based on a small number of people and may not accurately reflect the community's characteristics. This is particularly true for communities with less than 500 residents and often applies to communities with up to 1,000 residents. For example, consider the case study of Neskowin, a community with less than 200 residents. Based on ACS 5-year estimates from 2010 through 2018, Neskowin demonstrated much higher variance in estimates than larger coastal communities. For example, the standard deviation in the percentage of households receiving retirement income from 2010 to 2018 was 18.1 for Neskowin as compared to 0.71 for Astoria, a community with just under 10,000 residents. Astoria's estimates for the percentage of residents receiving retirement income from 2010 to 2018 ranged from 20.7% in 2016 to 23.1% in 2018. In comparison, Neskowin's estimates ranged from 18% in 2012 to 67.2% in 2016. Clearly this extreme jump in Neskowin's estimate is a function of a small sample size and does not accurately represent the community's retiree population.

The following community estimates should be interpreted with caution based on high standard deviations calculated from 2010 to 2018: Cape Meares, Langlois, Manzanita, Nehalem, Neskowin, Netarts, Oceanside, Pacific City, Port Orford, Wheeler, Winchester Bay and Yachats.

<sup>&</sup>lt;sup>2</sup> When comparing communities, proportional differences are normally used in this report rather than absolute differences. Absolute differences may sometimes obscure important large disparities. For example, there is only a 5% absolute difference between town A with a 5% poverty rate and town B with a 10% poverty rate. However, comparing proportional differences, Town B has a much higher poverty rate than Town A [[(10-5]/5]\*100 = 100% higher poverty rate]. Proportional differences can highlight the significance of the absolute differences. Throughout this report, when proportional differences are discussed, the actual percentages from which the proportions are derived are noted in parentheses.

# CHAPTER 1 COASTAL OREGON HISTORY

This brief historical section is included in this paper to provide a background for understanding how the current communities developed along the Oregon coast. Multiple perspectives can describe how geographic and economic conditions affect settlement patterns (Nelson and Behar, 2009; Krugman, 1995). This chapter focuses on the influence of several key determinants of settlement in this region – natural resources, terrestrial transportation, marine transportation, particularly deep water ports, and tourism. The central focus is on natural resource supply development. The discussion examines early resource use and settlement patterns among both Native Americans and subsequent European American settlers. Also discussed are the implications of transportation difficulties between the Willamette Valley and the coast, and between coastal communities.

#### THE EARLY HISTORY OF THE COAST

The land and waters of the Oregon coast were the setting for a dynamic aboriginal culture characterized by diverse natural resource acquisition and use (Moss and Erlandson, 1995). The more predominant Native American tribes living on the Oregon coast included the Clatsop, Tillamook, Alsea, Siuslaw, Coos, and Coquille (Tveskov, 2007). Tribes on the Oregon coast were among the most socially complex hunter-gatherer groups found throughout history (Losey, 2007). Prior to European contact, Native Americans relied chiefly on fishing, hunting, gathering, and trading for sustenance. On the Oregon coast, their natural resource use occurred in a wide variety of environments, including sand spits, saltwater bays, tidal and intertidal estuaries, lake shorelines, river mouths and their ocean confluences. Archeological evidence of subsistence activities can be found along the Oregon coastline in the form of shell middens, fishing weirs, food processing sites, villages, and seasonal occupation camps. The types of resources utilized were directly related to the food sources spatially available. The diets of the aboriginal people primarily consisted of salmon, shellfish, plants, and land mammals. Native cultures in general were renowned for their maritime lifestyles, elaborate technology, high population densities, sophisticated art and architectural traditions, and sociopolitical complexity (Moss and Erlandson, 1995).

Coastal Oregon is geographically separated from the rest of the state by a low-lying steep mountain range that parallels the coastline. This geography had a direct effect on early European settlement patterns. European explorers and fur traders began traveling to Oregon in the 18<sup>th</sup> and early 19<sup>th</sup> century. The Hudson Bay Company had established fur trading outposts in the region in the late 18<sup>th</sup> century (Stark, 2014). In 1828, Jedediah Smith explored fur trading opportunities as far south as present day Curry County (Nelson, 2010). Sailing an American merchant ship, Captain Robert Gray sighted the Columbia River in 1788 and crossed the bar into the river in 1792 (Smith et al., 2011). George Vancouver, a British Royal Navy captain, explored along the northwest coast in 1791-95, and Alexander Mackenzie crossed the continent overland in 1793, arriving at Bella Coola, British Columbia. In 1805, the Lewis and Clark Expedition finished their cross-country journey at the Oregon coast, near present-day Astoria, and built Fort Clatsop to reside in through the winter months (NPS1, n.d.; Stark, 2014; Ambrose, 1996). Thus both Britain and the United States had claims to the same region.

Due to the high demand for beaver pelts in European and Asian markets (McAleer, 2003; Stark, 2014), the fur trade greatly increased exploration and settlement of the Pacific Northwest region. Astoria, the first United States community on the Pacific coast, originated during this period as a fur trading outpost. The outpost, funded by wealthy fur trader John Jacob Astor of New York, was established in 1811 by a

sailing expedition around Cape Horn and then reinforced by an overland expedition. The Astor Overland Expedition deviated from the route of the Lewis and Clarke Expedition and blazed the route that became the Oregon Trail (Stark, 2014; NPS2, n.d.). Although Astoria returned to British control during the War of 1812, the resolution of that conflict led to a joint occupancy agreement in the region that lasted until 1846, when the existing border between the United States and Canada was established at the 49<sup>th</sup> parallel (Smith et al., 2011; Wikipedia1, n.d.).

The first American missions had been established in the Willamette Valley near Salem (Lee Mission, 1834, Wikipedia2, n.d.) and on the Columbia Plateau north of the river near present day Walla Walla (Whitman Mission, 1836, NPS3, n.d.).<sup>3</sup> Establishment of the latter was accomplished with the first wagon train over the Oregon Trail (NPS2, n.d.). Whitman subsequently helped lead the first large wagon train of American settlers over the Oregon Trail, the 1843 "Great Migration" with about 1,000 American settlers (NPS2). A dramatic influx of American settlers soon occurred (NPS2, n.d.; Trinklein, 2012), particularly in the Willamette Valley. According to Unruh (cited in Van Laere, 2010), by 1848, there were over 11,000 American settlers in Oregon, and Britain soon ceded the region to the United States (NPS2, n.d.; Wikipedia1, n.d.).

Following the Whitman Massacre of 1847, Congress took action to assert greater control of the region (Wikipedia5, n.d.). The Oregon Territory, covering present day Oregon and Washington, was formally established in 1848. The Oregon Donation Land Act, created in 1850, allowed U.S. immigrants to claim up to 320 acres of land each, which resulted in 2.8 million acres of land claims by 1855 (Beckham, 2004). Native American populations were quickly displaced as settlement of the Pacific Northwest increased.<sup>4</sup> According to Unruh (cited in Van Laere, 2010), by 1860, there were over 53,000 settlers in Oregon. However, settlement along the Oregon Coast before the 1860s was sparse for several reasons. Access was very difficult with dangerous seas and no practical overland routes from the interior. The Willamette Valley also offered much better opportunities for homesteading agriculturalists. This settlement pattern was soon changed.

## EUROPEAN AMERICAN COASTAL SETTLERS ARRIVE

The Applegate (southern) Route off the main Oregon Trail was established to allow overland access to northern California (Wikipedia6, n.d.). An influx of American miners to the south coast began in 1848 during the gold rush in Northern California (Boice, 2012). When gold was discovered along the beach near present day Port Orford, there was a dramatic increase in mining along the south coast and along the Rogue River at Gold Beach (Nelson, 2010). By 1852, there were 28 land claims by whites in the Rogue Valley. Small mining communities developed in many places on the South Coast; most are no longer there (Boice, 2012; Nelson, 2010).<sup>5</sup>

Conflicts between the miners and the Native Americans quickly escalated, culminating in 1856 with the defeat of the native tribes during the Rogue River War (Wikipedia6, n.d.; Hull, 2007). When the natives were defeated, a very large section of the coast from the Siltcoos River in the south to Cape Lookout, north of Tillamook Bay, was designated as the coast reservation for all native tribes (Val Laere, 2010;

<sup>&</sup>lt;sup>3</sup> Another area settled by missionaries in 1841 was near present day Gearhart (Wikipedia3 and 4, n.d.). The mission only operated from 1841 to 1844, but some settlers remained thereafter (Cuyle, 2016).

<sup>&</sup>lt;sup>4</sup> Native American populations were also rapidly decimated by European diseases.

<sup>&</sup>lt;sup>5</sup> Coos Bay also experienced early development with coal mining (Hull, 2007; Wagner et al., 2010).

Wikipedia6, n.d.). This Native American reservation initially hindered European American coastal settlement from 1855 until 1865, 1875, or 1894, depending on location (Van Laere, 2010).

The 1848 Oregon Territory Organic Act, building on the Northwest Ordinance of 1787, included language obligating the American settlers to respect Native American property rights (Oregon Blue Book, n.d., Van Laere, 2010). The Indian Appropriation Act of 1851 instituted a federal policy of reservation establishment (Weeks, 1990, Van Laere, 2010). Most natives were relocated to the [Siletz] Coast Reservation or the Grande Ronde Reservation after the Rogue River Wars, with some living in small, marginalized communities such as Table Rock, on the outskirts of towns (Tveskov, 2007, Van Laere, 2010). At this point, the south coast around Gold Beach and Port Orford, and the area around Astoria were populated by European Americans, but the balance of the coast was in reservation lands.

## **COASTAL COMMUNITY ECONOMIC DEVELOPMENT**

Under pressure from oystermen operating in what is now Newport, in 1865, an area from south of the Siletz River to the Alsea River was opened to nonnative settlement by the federal government. Immediately, the white residents in Yaquina Bay area (soldiers, trappers, oystermen) staked claims. The town of Newport was developed, with oyster harvest, fish packing, sawmilling and marine shipping to San Francisco and Portland anchoring the local economy. While the port and available natural resources initially spurred the town's development, two hotels were among the first few businesses in 1867. When the railroad arrived in the early 1880's, tourism became an integral part of the local economy, particularly in the Nye Beach area (Disse et al., 2010).

Congress reduced the reservation lands to the immediate Siletz area in 1875, which opened much of the coast to further settlement and land claims (Van Laere, 2010). Numerous small homesteads sprang up along the rivers and bottomlands where subsistence agriculture was possible. However, due to the topography, much of the coast is not arable land. More viable agricultural areas included Tillamook and Curry Counties, areas which today sustain large agricultural economic sectors (Boice, 2012; Miller et al., 2013). Many other river valleys sustained smaller scale agriculture (e.g., Hays, 1976). Early settlers lived by gathering locally available resources, growing their own food in large subsistence gardens, and maintaining the few possessions they brought with them (ICF International, 2010). In addition to their gardens and livestock, they also utilized many of the same resources as the Native Americans - wild berries, deer, elk, and estuarine animals such as clams, crab, and fish. Shelter, often in the form of log cabins, was a required first priority on any new land claim (Hays, 1976). As these early families became more settled, larger houses and outbuildings were constructed. These agricultural settlements remained small, and modest villages evolved primarily to serve local consumption. Other small communities developed adjacent to canneries and sawmills. Many of these smaller cross roads communities no longer exist (see footnote 9). While local towns played important roles in trade and commerce, most early residents continued to live in rural areas. Trade developed as agricultural products, particularly dairy products, but also woolens, cranberries, peas, and other goods, were shipped to Portland and San Francisco (Graves, 2010; Akre et al., 2011; Wagner et al., 2010; Hull, 2007; Miller et al., 2013). Larger towns evolved with this natural resource based trade, many of which still exist, including Tillamook, North Bend, Coos Bay, and Bandon.

Commercial fishing developed in the coastal rivers as one of the primary sectors in the communities' economic bases early during this period. Some early fishermen were farmers working part-time to raise income to supplement subsistence agriculture (Bottenberg, 2008). Many towns soon had canneries, most notably Astoria, that developed into a major regional industry (Smith et al., 2011). Other

canneries existed along the coast wherever rivers were located, including Hobsonville (Tillamook area, Graves, 2010), Pacific City (Bottenberg, 2008), the Lincoln City area (Hall, 2008), Newport (Disse et al., 2010), Waldport (Hays, 1976), Florence (Fleagle, 2014), Reedsport (Akre, 2011), North Bend (Wagner et al., 2010), Coos Bay (Hull, 2007), Port Orford (Nelson, 2010), and Ellensburg (present day Gold Beach, Boice, 2012). Early commercial fishing and canneries were dependent on salmon runs in the rivers, many of which were depleted by the time commercial river seining and gillnetting were outlawed in 1927, except on the Columbia River (Fleagle, 2014; Bottenberg, 2008). With the advent of gasoline motors on commercial fishing boats during the 1920s, marine fisheries became more important (Disse et al., 2010; Akre, 2011). Those communities with good ports along navigable rivers and bays continue to sustain a viable fisheries sector into the present, including Astoria, Garibaldi, Newport, Coos Bay/Charleston, and Brookings.<sup>6</sup>

Shipping also played a large role in the development of those communities suitably situated with good ports. At first, agricultural products were shipped from large and small towns all along the coast. With industrial development in cannery production and wood products, shipping became more concentrated at ports with larger harbors. Significant ports included Astoria, Tillamook Bay, Newport, Florence, Gardiner, Coos Bay, North Bend, Bandon, Port Orford, and Gold Beach. Ship building was present at some ports that also had sawmills (Astoria, Bay City, Reedsport, Gardiner, North Bend, Coos Bay, Bandon).

One of the coastal natural resources that most affected European American settlement patterns was the wealth of forest resources. All the communities along the coast with river access were involved at some point in logging, timber exports, and the wood products industry. Sawmills were among the first established businesses in almost every town. Given the relative isolation of the towns due to difficult overland travel, sawmills initially served local needs. Much of the early logging was conducted using cross cut saws and oxen teams, practices that continued in some locations into the 20<sup>th</sup> century (Hays 1976). However, by the time the Oregon Coast was settled, the wood products industry was on the cusp of mechanization (steam donkeys and logging railroads) and large scale industrial sawmill production. Astoria had mills serving the Portland area very early in that community's development (Smith et al., 2011). The reconstruction of San Francisco after the fire of 1851 spurred development of wood products exports from the Simpson mills in the Coos Bay, Gardiner and Astoria areas (Wagner et al., 2010; Hull, 2007; Akre et al., 2011). Tan oaks were an early export from Curry County, and cedar exports played a significant role in the development of Port Orford (Nelson, 2010). Wood products were the dominant industry in Florence until quite recently (Fleagle, 2014). Garibaldi was a mill town as much as a fishing village (Graves, 2010); Newport exported logs and wood products for many years (Port of Newport, n.d.). Both Waldport and Yachats developed with logging operations upriver and sawmills in the towns (Hays 1976). The development of a large scale wood products industry accelerated when the Army built huge sawmills and additional rail links for spruce logging during WW1 (Wikipedia7, n.d.).

Towns along the coast originally developed in isolation with no substantial roads connecting them and poor connections over the Coast Range to the Willamette Valley. Oregon's inland residents travelled to the coast via train or wagon. The first wagon road connecting the Willamette Valley to the coast was completed in 1866 (Husing, 2009). Most travel was by sea, and local travel predominantly occurred along the beaches and rivers. Nevertheless, lodging businesses typically evolved in all of the communities where itinerant workers (miners, loggers) or other travelers ventured. At first, many such

<sup>&</sup>lt;sup>6</sup> Port Orford, and to a lesser extent Pacific City, survive as fishing communities despite a lack of these resources. Florence and Gold Beach had a larger commercial fishing economic sector until more recently.

establishments were essentially boarding houses. However, the town of Newport (named after the Rhode Island vacation resort) was established in 1866 with 2 hotels and soon thereafter had cottages and campgrounds to accommodate tourism (Disse et al., 2010). Later in the 19<sup>th</sup> century, nicer accommodations designed for tourists developed in Astoria (Smith at al., 2011), Seaside (Glen, 2007), Cannon Beach (Cuyle, 2016), Newport (Disse et al., 2010), Florence (Fleagle, 2014), North Beach (Wagner et al., 2010), Coos Bay (Hull, 2007), Gold Beach (Boice, 2012), and Bandon (Miller et al., 2013). During this same time period, campgrounds and cottages were found in many locations, including Seaside (Glen, 2007), Cannon Beach (Cuyle, 2016), Neotsu (Lincoln City, Hall, 2008), and Newport (Disse et al., 2010).

Although Astoria was not connected to transcontinental rails until 1898 and thus remained dependent on river transportation, it hosted coastal tourists very early in its history. Travel by steamship brought visitors to the coast in Astoria (Smith et al., 2011), and then to Seaside House, the first resort on the coast with steamer access in 1871. Travel south of Seaside was initially only possible via stage coach routes along the beach. Rail access from Seaside to Astoria was established in 1889, and Seaside was incorporated in 1899 (Glen, 2007). Cannon Beach was established in 1890 specifically as a tourism destination (Cuyle, 2016). Bayocean was developed on Tillamook Bay in 1906.<sup>7</sup> Both Nelscott (1925) and Depoe Bay (1926) were developed as tourism destinations. Bandon developed a tourism sector at the turn of the 20<sup>th</sup> century. The rail line from Corvallis to Yaquina City brought tourists to Newport beginning in 1884, and by the 1890s Nye Beach was an established tourism destination (Disse et al., 2010). Rail connection to the valley came later to Garibaldi and Tillamook (1911), Florence (1915), Reedsport and Coos Bay (1916). All of the towns along these rail connections developed significant tourism sectors before automobile travel along the coast became practical.

After the automobile became more common in the early 20<sup>th</sup> century, roads over the Coast Range were improved to Cannon Beach, Tillamook, Lincoln City, Newport, Florence, and Reedsport, linking these communities to the urban centers in the valley.<sup>8</sup> These roads facilitated coastal access for inland tourists. In response to the need for a more reliable road connecting coastal towns, construction of a coastal highway commenced in 1921 and was completed in 1936 at a cost of \$25 million (Husing, 2008). U.S. Highway 101, which runs north to south along the entire Oregon coast, made travel dramatically easier between coastal towns. After completion of the notably scenic highway, tourism significantly increased on the coast.

In the early twentieth century, the Governor of Oregon, Oswald West, embraced the idea of designating all Oregon beaches as public property (Blakely, 2013), and in 1913, the Oregon coast was officially declared a state highway. Private hotel owners in the 1960s began purchasing beach rights from the state to develop on the sand and create private beaches for their guests. This privatization of Oregon beaches caused a public outcry. In response to these public concerns, the Oregon Beach Bill was enacted during the administration of Governor Tom McCall in 1967, which made all of Oregon's beaches free and accessible to the public (The Beach Bill, 2007; The Oregon Encyclopedia, n.d.). This bill also declared the beach area as a state recreation area, and the Oregon Parks and Recreation Department was given the responsibility to protect and preserve the beaches (House Bill 1601, 1967). The free access to continuous beaches, the development of 77 state parks and recreation sites on the coast (OSP, 2016), and improvements in the routes going to the coast from the larger Oregon population centers in the Willamette Valley, have resulted in steady growth of coastal tourism.

<sup>&</sup>lt;sup>7</sup> Between 1932 and 1952, this community, located on the oceanside spit of Tillamook Bay, was destroyed.

<sup>&</sup>lt;sup>8</sup> South of Coos Bay, there are still no major highways connecting the coast to the interior.

## THE ECONOMIC BASE OF OREGON'S COASTAL COMMUNITIES

Coastal Oregon has a rich history beginning with the early Native American settlements followed by European Americans colonizing the region. In later years, the lack of easy transportation between the Willamette Valley and the coast, and even between coastal communities, led to many coastal towns developing in isolation. This isolation, combined with the varying natural resources available, has shaped the coastal communities into what they are today.

Many of the early towns along the Oregon coast had brief periods of prosperity before disappearing<sup>9</sup>. Most of the earliest communities that persisted initially had a small but viable agricultural base that supported exports to Portland and San Francisco, especially in Tillamook and Curry Counties.<sup>10</sup> The first large scale industries that created more significant economic growth were natural resource based in salmon canneries and wood products. All of the older Oregon coastal communities were involved to some degree in fishing, logging, and wood products. Greater success in these industries was possible with the capacity to support exports with ocean going trade. While some communities were able to initiate limited trade without deep water port facilities in harbors (e.g., Port Orford, Three Sisters - Frankport), these communities did not thrive to the same extent as the more advantageous geographic locations. Those early natural resource dependent communities with a viable deep-water port, river and rail access developed better shipping capabilities to support exports (Astoria, Newport, Florence, Gardiner/Reedsport, Coos Bay). The Coos Bay area, with a strong industrial natural resource base and a significant wood products shipping industry, prospered and became the largest community along the coast.<sup>11</sup> Mining also contributed to the development of the Coos Bay area (coal) and towns in Curry County, Gold Beach and the Port Orford area (gold).

Towns with ports, rivers, and earlier train access to the interior commonly developed larger tourism sectors. These towns tended to have a more diverse economy at an earlier point in their history than those towns that were more exclusively dependent on natural resources. The towns with early tourism development included Astoria, Newport, and Florence. Rail access from Astoria allowed the Seaside and Cannon Beach communities to develop specifically as tourism destinations in the late 19<sup>th</sup> century. These two communities preceded the development of the tourism communities at Depoe Bay<sup>12</sup> and the Lincoln City area in the early 20<sup>th</sup> century. Depoe Bay and Lincoln City developed more recently with automotive highway access to the urban population centers of the valley. With completion of the coast highway, tourism development accelerated all along the coast, and some degree of economic dependence on tourism is now common in all Oregon coastal communities.

The decline of the natural resource industries in the late 20<sup>th</sup> century impacted all the coastal communities, but some were more adversely impacted given differences in the community economic

<sup>&</sup>lt;sup>9</sup> The list of these towns is extensive: Hobsonville, Bayocean, Woods, Kernville, Oysterville, Yaquina City, Randolph, Whiskey Run, Waldo, Dardanelles, Elizabethtown, Sailor's Diggings, Lakeport, Yarrow, Dairyville, Three Sisters, Frankport, Corbin, Marial, and more. Some of these locations persist as Census Data Points.

<sup>&</sup>lt;sup>10</sup> Newport (more specifically, Oysterville) is an exception, as it started with commercial oyster exports to San Francisco (Disse et al., 2010).

<sup>&</sup>lt;sup>11</sup> The area around Coos Bay and North Bend has a population more than twice as large as any other town on the coast.

<sup>&</sup>lt;sup>12</sup> Depoe Bay had a strong commercial fishing economic base until recently, and continues to have a significant charter fishing economic sector. However, the land was originally purchased for tourism development.

base. Towns along the south coast most dependent on the natural resource economic sector were generally the most adversely affected coastal communities.<sup>13</sup> More diverse communities<sup>14</sup> were less impacted. As an example, Newport is quite diverse, with an economic base in natural resources, industry, tourism, government, and research/education. The impact to this area was less adverse than in Florence, Gold Beach, Gardiner, or Bandon. Subsequently, Florence, Gold Beach, and Bandon have embraced retirement and tourism to recover from the decline of natural resource dependence and the Great Recession (Ackerman et al., 2016). Native American investment in casinos has increased the tourism sector in some communities (Florence, Coos Bay) once far more dependent on natural resources. As the following chapters will illustrate, the growth of tourism and retirement during the most recent period of economic expansion has had a pronounced, although variable, impact on all the Oregon coastal communities.

As this report was first written, the national economy is near full employment.<sup>15</sup> Many of the Oregon coastal communities still had higher unemployment rates than the rest of the state and nation, and the rate of recovery from the decline in natural resource industries and the Great Recession had been slower. At present, the economic base of all the coastal communities have at least two sectors in common to varying degrees, with some dependence on natural resources (either farming, fishing, or wood products) and tourism. The towns most dependent on tourism and retirement include Seaside, Cannon Beach, Manzanita, Lincoln City, Depoe Bay, and Yachats. This economic emphasis originated with the founding of some of these communities; for others the emphasis evolved after the decline in natural resource dependence. The communities more dependent on natural resources include Astoria, Garibaldi, Newport (all with large fishing sectors), Tillamook (agriculture), Coos Bay/North Bend (wood products and fishing), Port Orford (fishing) and Brookings (fishing). Agriculture remains an important part of the economic base of both Tillamook and Curry Counties. Finally, some coastal communities have a large involvement in both of the more common economic sectors (i.e., tourism and natural resources), but also have a more diverse economic base, such as Newport (government, research, education) and Astoria (government).

<sup>&</sup>lt;sup>13</sup> Florence, Garibaldi, and Astoria were also greatly affected; both Florence and Astoria lost a very large proportion of their economic base.

<sup>&</sup>lt;sup>14</sup> This discussion is about the geographic communities. Certainly, the natural resource occupational communities, and those individuals, were adversely affected across the entire coast. The intent is not to minimize the substantial adverse socioeconomic impacts on these occupations, individuals, and families.

<sup>&</sup>lt;sup>15</sup> The data cited in this report were accessed online, primarily on the ACS website, in 2014 and 2015.

# CHAPTER 2 COASTAL OREGON POPULATION TRENDS

This chapter focuses on general population trends observed along the coast, including population density, past and forecast population growth rates, and migration into and out of coastal counties.

A large proportion of the land in coastal Oregon is owned by the Federal government, the state, forest

products companies, and other tribal or government entities (Figure 1). As is consistent with historic settlement patterns around most coastal towns, the majority of Oregon coastal residents still live near the coastline or in narrow coastal river vallevs. Based on the total amount of land in the region, the Oregon coast is sparsely inhabited. The aggregate density of the five coastal counties (excluding Lane and Douglas Counties) was 31.6 persons per square mile in 2010 (Table 1).<sup>16</sup> While the average density is low, the density within available private land suitable for residential development is more dense than these figures suggest, primarily because timberlands are 94% of the land base (Campbell et al., 2002). For comparison, state density was 39.9 persons per square mile in 2010,<sup>17</sup> and Oregon was 39th in density among all states (Figure 2; US Census 2010). State density has approximately doubled since 1960 (Wilson

# USDA Forest Service Bureau of Land Management State of Oregon Private, other public, tribal V Counties

Figure 1. Land ownership in Western Oregon<sup>1</sup>

<sup>1</sup>Source: Campbell et al., 2002

and Fischetti, 2010). Overall, the coastal population has slowly and steadily increased since the 1930's. Lincoln County has experienced the sharpest growth rate along the coast, more than doubling its population since 1950 (Figure 3).

In 2000, the population of the five coastal counties, plus the communities of Florence, Reedsport, Dunes City, and Winchester Bay, was 200,416 people—about 5.9% of Oregon's total population (Table 2). In 2014 the coastal population was 206,958, which was only 5.2% of Oregon's total population. While the coastal population has continued to slowly grow, it has not matched the population growth rate of the rest of the state.

<sup>&</sup>lt;sup>16</sup> At the time of publication, 2010 data was the most recent available data for this variable.

<sup>&</sup>lt;sup>17</sup> Unless otherwise noted, the demographic data presented in this report are from the American Community Survey (ACS) aggregations for 2010-2014.

#### Table 1. Coastal Counties Density<sup>1</sup>

County	Density
Clatsop	44.7
Tillamook	22.9
Lincoln	47.0
Coos	39.5
Curry	13.7
Oregon	39.9

<sup>1</sup>Source: U.S. Bureau of Census decennial census 2010



#### Figure 2. Oregon Population Density Profile<sup>1</sup>

Source: 2010 U.S. Census



Figure 3. Population Growth in Coastal Counties in 1950 to 2010<sup>12</sup>



Population				
	Year			
Place	2000	2014		
Clatsop	35630	37474		
Tillamook	24262	25342		
Lincoln	44479	46406		
Florence	7263	8506		
Reedsport	4378	4107		
Dunes City	1241	1267		
Win. Bay	488	313		
Coos	62779	62475		
Curry	21137	22335		
Coast	201657	208225		
Oregon	3421399	3970239		
Coast Pop. % of total OR Pop.	5.9%	5.20%		

Table	2.	Coastal	Counties	Ρο	pulation <sup>1</sup>
TUDIC	<u> </u>	ooustat	oounties	10	patation

<sup>1</sup>Source: U.S. Bureau of Census decennial census 2000 and 2010, and American Community Survey (ACS) aggregations for 2010-2014. ACS data for that period are estimates.

The Internal Revenue Service (IRS) Statistics of Income division provides migration data collected from year-to-year address changes on individual income tax returns (Form 1040). When this report was written, the most recent data from this source are for taxes filed in 2013 and 2014 (IRS, 2016). Between the years 2013 and 2014 in all coastal counties, between 6-8% of residents moved to a different county or state. Approximately half of all residents leaving a coastal county moved to another county within Oregon. However, in Tillamook County, a larger percentage (67%) of all residents that moved stayed in Oregon (Table 3). In Clatsop, Coos, and Lincoln Counties, approximately 5% of all residents that left those counties moved to another Oregon coastal county. In Curry County, 18% moved to another coastal county, and this number is 14% for Tillamook County. Data on the county to which an individual relocates is only included in the IRS data if over 20 individuals moved to this same county. Thus the reported proportion of people that moved from one coastal county to another may be artificially low.

Regarding migration into Oregon coastal counties, 41-46% of new Clatsop, Coos and Lincoln Counties residents came from another Oregon county (Table 4). Tillamook County had the largest proportion of new residents coming from Oregon (58%), while Curry County had the lowest proportion (31%). These results indicate that the majority of people moving to Curry County are from other states or countries, which could have an influence on the culture of Curry County communities. Comparatively, Tillamook County experiences a large proportion of new residents from Oregon, which could have less of an impact on the characteristics of communities in Tillamook County.

Using IRS data for migration in Oregon coastal counties may be somewhat misleading because of the large proportion of retirement age residents in these counties. Many lower income retirees do not file a 1040 tax return because many retirees do not reach the income limit required to file taxes, and social security is typically not included as income below certain thresholds. A household that moves to or from a coastal county will not be recorded in this migration data if a 1040 tax form was not filed in 2013 and 2014, thereby recording the change of address.

Origin from	Migration to	Number of Returns
	Total US and Foreign	102,654
Oregon	Total Same State	55,950
	Total Different State	45,755
	Total US	1,178
Clatsop	Total Same State	520
County	Did not Migrate	13,090
	Tillamook County	28
	Total US	1,267
Octor Octor	Total Same State	655
Loos County	Did not Migrate	21,102
	Curry County	28

	Total US	635
Curry County	Total Same State	292
	Did not Migrate	7,861
	Coos County	53
	Total US	1,455
	Total Same State	813
Lincoln County	Did not Migrate	16,223
	Coos County	22
	Tillamook County	22
	Total US	646
	Total Same State	432
Tillamook County	Did not Migrate	8,884
	Clatsop County	32
	Lincoln County	28

#### Table 3. Coastal Counties Outflow<sup>1</sup>

<sup>1</sup> Source: IRS SOI Migration Data 2013-2014

Migration from	Destination	Number of Returns
	Total US and Foreign	113,719
Oregon	Total Same State	55,950
	Total Different State	57,003
Clatsop	Total US	1,250
County	Total Same State	513
Coos County	Total US	1,476
	Total Same State	649
Curry	Total US	781
County	Total Same State	241
Lincoln	Total US	1,579
County	Total Same State	733
Tillamook	Total US	748
County	Total Same State	432

Table 4. Coastal Counties Inflow<sup>1</sup>

<sup>1</sup>Source: IRS SOI Migration Data 2013-2014

The population growth rate for the Oregon coast has mostly occurred as a result of in-migration of both working age adults and retirees, though the retiree population has grown more than other age groups. Lincoln, Curry, and coastal Lane counties have experienced a higher influx of retirees than the other coastal counties. There is an out-migration of young adults searching for education and employment opportunities (Swedeen et al., 2008).

Migration data from 2010 to 2015 in the five coastal counties demonstrate a significant proportion of residents age 20-30 years leaving the coast while middle-aged and elderly people migrated to those counties (Figures 4-8; PRC, 2015a-b; PRC, 2017a-c). This out-migration of youth has resulted in the majority of coastal communities having a lower proportion of people age 18 to 24 years than the state average. Both employment opportunities and the retiree culture observed in many coastal communities may be driving forces sending the younger population inland to the Portland area. Population growth due to births within the coastal region has declined. It is interesting to note that there is also an out-migration from coastal counties of people over the age of 75 years. This could potentially be explained by elderly people moving closer to their families or into retirement homes located in other regions of the state or country. The slow rate of growth, age structure, and migration patterns have a large bearing on the character of the coast's economy (Swedeen et al., 2008).



Figure 4. Age Specific Migration Rates (2000-2010) for Clatsop County and Oregon

Figure 5. Age Specific Migration Rates (2000-2010) for Coos County and Oregon





Figure 6. Age Specific Migration Rates (2000-2010) for Curry County and Oregon







Figure 8. Age Specific Migration Rates (2000-2010) for Tillamook County and Oregon

The Population Research Center at Portland State University is currently analyzing birth, death, and migration rates in each Oregon county to develop population forecasts for the next 50 years.<sup>18</sup> Due to the aging population on the coast, there are a high number of deaths and a decrease in the proportion of women in childbearing years, which results in a reliance on in-migration for population growth.

By 2065/2067, the proportion of residents age 65+ is projected to increase between 3% and 13% in each coastal county (Figures 9-13). Curry County is expected to have the greatest increase in proportion of residents age 65+, while Lincoln County is expected to have the lowest increase. While all counties are forecast to have a decrease in the proportion of residents age 15 to 64 years old, Curry County is expected to see the greatest decrease.

The overall population in Coos County is predicted to increase modestly by 2,500 persons (4%) over the next 50 years (2065; PRC, 2015a), while Curry County is predicted to increase by 4,700 (21%; PRC, 2015b). Clatsop County is forecast to grow by 4,480 persons (12%) by 2067 (PRC, 2017a); Lincoln County is forecast to grow by 12,684 persons (27%; PRC, 2017b); and Tillamook County is projected to grow by 6,676 persons (11%; PRC, 2017c).

<sup>&</sup>lt;sup>18</sup> The reports for Coos and Curry counties were completed in 2015 and therefore forecast population trends from 2015-2065. The reports for Clatsop, Lincoln, and Tillamook counties is currently in its final draft and forecasts population trends from 2017-2067.



Figure 9. Age Structure of the Population (2017, 2035, and 2067) for Clatsop County







Figure 11. Age Structure of the Population (2010, 2035, and 2065) for Curry County







Figure 13. Age Structure of the Population (2017, 2035, and 2067) for Tillamook County

These projections by the Population Research Center are based on birth, death, and migration rates from census data. While these forecasts provide important insights into population changes in Coos and Curry counties, the potential for climate change to affect migration patterns is not taken into account. Oregon, in particular the Willamette Valley, is predicted to be more resilient to the effects of climate change than most places in the nation (Vynne et al., 2011). The abundance of water and suitable farmland combined with mild weather conditions has already begun to draw immigrants, particularly those suffering from the recent California drought. Since Oregon is likely to become a haven for climate refugees as global climate change progresses, management plans to mitigate the impacts from increased population growth and development are necessary (Vynne et al., 2011). Many residents of the I5 corridor currently visit the coast when temperatures are high in the Willamette Valley. However, the possibility that people from across the nation may permanently migrate to the Oregon coast to escape increasing temperatures warrants further study. Most coastal towns are relatively small; even an increase of a few thousand migrants could greatly affect the communities' cultural, social, and economic characteristics.

As reviewed in this chapter, the general population trends on the Oregon coast differ from the rest of the state. Population density on the coast is comparatively low, and the coastal population represents just over 5% of the state's population. Due to the high rate of out-migration of young adults from coastal communities, coastal counties rely on in-migration to sustain their populations. Despite this out-migration of youth, coastal populations are projected to increase over the next fifty years, with a significant proportion of that growth made up of persons older than 65 years. The preponderance of in-migration by older age cohorts creates the potential for significant social, cultural, and economic change.

# CHAPTER 3 COASTAL OREGON EMPLOYMENT INDUSTRIES

The following chapter provides a general overview of employment in the major industries on the Oregon coast. The employment categories used in this report are derived from the North American Industry Classification System (NAICS), the system used by federal agencies to classify business establishments. Some NAICS categories have been grouped where appropriate. The following sectors are discussed in this chapter: natural resources, tourism, retail, finance, insurance, real estate, rental and leasing, city services (construction, transportation, public administration, and education), professional, scientific, management, administrative services, and waste services, other industries, and restoration projects.<sup>1920</sup> Graphic figures further illustrating sectoral employment (pie charts) for each coastal community are in Appendix B.

## **NATURAL RESOURCES**

This section covers the natural resource based economic sectors of agriculture, timber, and commercial and sport fisheries. Post European settlement, coastal economies were predominantly based on the natural resource economic sectors of fishing, farming, and logging. Opportunities in these industries generally have been declining in the last 35 years, though certain sectors are still providing significant employment. The proportion of people employed in natural resource industries on the coast is 59% higher than the rest of the state (3.4% vs. 5.4%; Table 5). Port Orford has the highest proportion of residents employed in natural resource industries due to the importance of the fishing industry in that community.<sup>21</sup>

**Agriculture.** Agriculture in Oregon's coastal areas is part of a lifestyle that contributes diversity to local economies. It also helps provide a buffer to the variable nature of the forestry, fishing, and recreation industries. The agriculture industry has remained consistently strong in Tillamook and Coos counties. Dairy production has been a consistent source of income for some coastal communities since they were founded. The Tillamook Cheese Company, which was founded in 1909 as a dairymen's cooperative, now consists of 150 dairy farms and over 26,000 cows (Brower, PSU). Dairy farming was also important in the development of the Bandon area (Miller et al., 2013). The south coast is now well known for its cranberry production, particularly in the region near Bandon and Port Orford. Each year there are approximately 2,700 acres of cranberries between Coos and Curry counties. Additionally, Oregon's southern coast is known for producing a significant quantity of Easter lily bulbs.

<sup>&</sup>lt;sup>19</sup> Employment data are from the American Community Survey (ACS) aggregations for 2011-2015.

<sup>&</sup>lt;sup>20</sup> Towns with 0% employment in an economic sector are not included in the tables.

<sup>&</sup>lt;sup>21</sup> Since many persons employed in natural resource occupations are independent contractors (e.g., logging operations, deckhands), these Census data tend to underrepresent employment in this sector.

City	Ag., Forestry, Fishing, Hunting, Mining	Population
Oregon	3.4%	3939233
Coast	5.4%	208507
Port Orford	19.7%	1312
Pacific City	12.2%	963
Toledo	7.2%	3469
Netarts	7.1%	958
Bay City	6.6%	1466
Gearhart	6.4%	1462
Newport	5.8%	10101
Garibaldi	5.7%	782
Brookings	4.9%	6376
Gold Beach	4.9%	2346
Waldport	4.2%	2033
Nehalem	4.0%	254
Coos Bay	3.6%	16062
Reedsport	3.5%	4111
Cannon Beach	3.3%	1549
North Bend	3.3%	9583
Tillamook	3.0%	4958
Seaside	2.9%	6483
Wheeler	2.8%	397
Rockaway Beach	2.3%	1227
Astoria	2.2%	9537
Lakeside	1.9%	1539
Warrenton	1.9%	5143
Dunes City	1.7%	1263
Bandon	1.7%	3070
Florence	1.4%	8545
Lincoln City	0.6%	8386

Table 5. Employment in Natural Resource Industries

**Timber Industry.** Timberlands, which are owned by federal, state, and private parties (Figure 1), make up 94% of the coastal land composition (Campbell et al., 2002). Timber harvest was increasing into the 1980s and has since decreased (OFRI, 2012). This decline in timber harvest coincided with a nationwide recession. The U.S. recession that began in 1980 disproportionally impacted Oregon, particularly rural communities such as those found on the coast (Naughton, 2017). Across the U.S., the 1980 recession caused a 3% job loss, and recovery took approximately 2.5 years. Comparatively, the 1980 recession

caused a nearly 12% decrease in jobs in Oregon, and the state took seven years to recover from that recession (Figure 14). Tillamook and Coos counties, in particular, have experienced cyclical patterns in timber harvest, depending upon national demand for fiber and local availability of timber. However, harvest volumes and timber industry employment in these areas have generally been in decline for some time. The decline in the forest products industries has subsequently been exacerbated by federal natural resource policies.





<sup>1</sup>Source: Presentation by George Naughton from Department of Administrative Services.

**Commercial Fisheries.** Commercial fisheries play a significant role in the Oregon coastal economy. In 2014, the onshore landed component of Oregon's commercial fishing industry brought in \$286 million in personal income (TRG, 2015). In addition to direct commercial fishing jobs, a wide variety of other jobs are produced in the fishing industry, including seafood buyers, processors and distributors. Ports located in Astoria, Newport, and Coos Bay bring in the majority of commercial species, while some smaller ports, such as Port Orford, specialize in supplying high-value live rockfish. Economically diverse port cities often sustain other indirect fishing industry employment that contributes to the local economy. Additional employment is generated because commercial fishing businesses rely on fishing-related service businesses such as vessel dry dock facilities, mechanics, welders, refrigeration specialists, machine shops, marine electronic sales and service firms, attorneys and accountants, and marine suppliers. Distant water fishing contributes considerably to the Oregon economy when skippers, crewmen, processor workers, and vessel/permit owners working in distant waters bring income back to the state. In 2014, \$261 million in personal income was brought into Oregon from fishing in areas such as the Bering Sea and North Pacific Ocean (TRG, 2015). A NOAA study of Pacific coastal communities

found the five Oregon communities most dependent on fishing are Astoria, Garibaldi, Newport, Winchester Bay, and Coos Bay (NOAA, 2016). The study ranked Garibaldi and Coos Bay as significantly more dependent on fishing than other Oregon coastal communities. These towns are most vulnerable to economic disruption from changes in the fishing industry and marine resource policies.

**Sport Fisheries**. Sport fishing, crabbing, and clamming are popular on the Oregon coast among both tourists and local residents. Over one million marine finfish fishing trips occurred in 2012 (TRG, 2013). Based on landing totals, charter boat sport fishing was most prevalent in Newport, Depoe Bay, Charleston, and Garibaldi. Based on the total number of trips, private recreational sport fishing was most popular in Brookings, Charleston, and Newport. All combined sport fishing trips generated \$49.5 million in personal income throughout the coastal communities (TRG, 2013). Sport bottom fishing, which represents 13.3% of the total generated sport fishing expenditures, provides consistent income when other seasonal fisheries (e.g., salmon and tuna) are not available.

Recreational fishing is a significant part of coastal economies. There is a direct link between recreational fishing, coastal tourism, and the service industry. Visiting fishers and their families contribute substantially to local economies by purchasing licenses, fishing gear, and boating accessories, as well as food, lodging, and other services.

### TOURISM

Tourism is a key component of the state's economy, and the Oregon coast is a major destination for visitors. Coastal tourism has been steadily increasing through the last 25 years (Table 6). The growth of tourism has served to diversify coastal counties' economic bases, which increases community resilience. As a proportion of total regional employment, there are 56% more people employed in tourism industries (i.e., arts, entertainment, accommodation, food, and recreation) on the coast than in the rest of the state (15.4% vs. 9.9%; Table 7). Nearly one-third of all employment in Cannon Beach, Depoe Bay, and Lincoln City is in these industries.

In 2014, tourism-related expenditures totaled \$1.803 billion and provided 20,940 jobs on the Oregon coast (Travel Oregon, 2015). Tourism expenditures have more than doubled (\$694 million vs. \$1,803 million) since 1991. During that time frame, community incomes have increased by a similar proportion (\$196 million vs. \$504 million), and there are nearly 5,000 more employment positions in the tourism industry (16,090 jobs vs. 20,940 jobs; Dean Runyan Associates, 2015). In addition to lodging expenditures, visitors contribute to local economies by dining at restaurants, renting accommodations, purchasing food, buying gas, shopping, and participating in other forms of recreation and entertainment. The majority of visitor spending is on accommodations and food service, which has created the largest growth in employment opportunities in these industries. These industries also generate the greatest amount of income. Hotels and motels are the most common form of accommodation, with 863 million visitors utilizing these options in 2014. Private homes and vacation homes received just fewer than 150 million visitors combined, and campgrounds hosted 181 million visitors in 2014 (Dean Runyan Associates, 2015).

Oregon coastal tourism is an expanding industry. In most coastal counties, the average annual increase in visitor spending from 1991 to 2014 was between 4-5%, the average annual increase in community income from tourism was between 4-5%, and the average annual increase in employment was between 1-2%. Curry County is the only coastal county with a lower average annual increase in tourism spending and income; both figures are approximately 2%. Curry County is also an anomaly in coastal employment rates, as it has experienced a negative growth rate, with an average annual decrease of -0.7% (Table 6).

County	Spending (\$Millions)	Avg Annual % Change in Spending (91-14)	Earnings (\$Millions)	Avg Annual % Change in Earnings (91-14)	Person Nights (000)	Employ ment	Avg. Annual % Change in Employment (91-14)
Clatsop	516.7	4.5%	140.6	4.3%	3733	5420	1.5%
Coos	253.2	4.3%	66.7	4.4%	2501	3060	0.8%
Curry	123.9	2.1%	41.7	2.2%	1534	1780	-0.7%
Lincoln	507.3	4.8%	133.9	4.6%	4514	5920	1.9%
Tillamook	221.1	4.8%	65.7	5.1%	2535	2160	1.9%

Table 6. Coastal Counties Spending, Earnings and Employment from Tourism in 2014<sup>1</sup>

<sup>1</sup>Source: Dean Runyan Associates 2015.

The proportion of the community economic base devoted to tourism varies considerably among the Oregon coastal communities and between the coast and the state as a whole. The statewide proportion of Oregon residents employed in tourism is roughly 10% (Table 7). In contrast, that employment figure for the coast is more than 50% higher (15.4%). Larger communities ( $\geq$  400 residents) that are very dependent on tourism ( $\geq$  25% of local employment) include Cannon Beach, Manzanita, Depoe Bay, Yachats, and Lincoln City. Communities with a low degree of tourism dependence ( $\leq$  15% of local employment) include Coos Bay, North Bend, Garibaldi, Bay City, Pacific City, Warrenton, Lakeside, and Brookings. Most of this tourism activity is concentrated in the area between Seaside and Manzanita on the North Coast and on the Central Coast between Lincoln City and Florence. Except in the town of Gold Beach (22.5%), tourism is less of an influence on the South Coast.

Table 7.	Employn	nent in	lourism	Industries

City	Arts, Entertain., Accommodation, Food, Rec.	Population
Oregon	9.9%	3939233
Coast	15.4%	208507
Winchester Bay	55.9%	316
Wheeler	35.2%	397
Cannon Beach	32.7%	1549
Manzanita	31.4%	426
Depoe Bay	30.6%	1877
Lincoln City	29.1%	8386
Yachats	25.5%	658
Gearhart	23.2%	1462
Gold Beach	22.5%	2346
Newport	22.2%	10101
Waldport	21.7%	2033
Seaside	19.6%	6483
Toledo	18.1%	3469
Florence	16.8%	8545
Port Orford	15.8%	1312
Dunes City	15.7%	1263
Reedsport	15.7%	4111
Astoria	15.7%	9537
Tillamook	15.7%	4958
Coos Bay	15.0%	16062
Rockaway Beach	14.6%	1227
Warrenton	14.1%	5143
Bandon	14.0%	3070
Nehalem	13.7%	254
North Bend	13.1%	9583
Brookings	12.0%	6376
Lakeside	11.8%	1539
Oceanside	10.2%	338
Bay City	10.0%	1466
Garibaldi	8.1%	782
Pacific City	6.1%	963

The Oregon coast marine environment attracts visitors for many cultural and recreational experiences beyond fishing. The 2013-2017 Oregon Statewide Comprehensive Outdoor Recreation Plan identified participation in ocean and beach recreational activities as Oregon's fourth most popular outdoor recreation activities in 2011 (OPRD, 2013). According to a study conducted by LaFranchi and Daugherty in 2011, half of Oregon's households visited the Oregon coast in 2010. This study found that the majority of people visit the Oregon coast to go to the beach and for scenic enjoyment. Nearly 40% of survey respondents indicated photography was a reason for visiting the coast, and approximately 25% noted wildlife viewing from shore as a reason for visitation. Additional reported activities include tidepooling, collecting non-living resources such as shells, biking, and hiking (Figure 15). Roughly 10% or fewer coastal visitors participated in fishing activities (Rettig, 1989; LaFranchi and Daugherty, 2011).





<sup>1</sup> Activities not reported in this figure with less than one percent are: skim boarding, kayaking, personal watercraft (e.g., jetskis), kite boarding, free diving/snorkeling, SCUBA diving, sail boating, windsurfing, hanggliding/parasailing, spear fishing or diving for abalone, and tow-in surfing. <sup>2</sup> Source: LaFranchi and Daugherty 2011

Tourism on the Oregon coast is seasonal, with approximately one-third of all tourist trips occurring during the summer months (Figure 16). However, there are some coastal activities that draw visitors year-round. A study conducted in 2013 found that 14% of tourists who visit the Oregon coast for marketable trips (defined as all business-leisure trips excluding visits to friends or relatives) state that the primary purpose of their trip is to visit a casino (Longwoods Travel USA, 2014).



Figure 16. Tourism by Season: Oregon State Compared to the Oregon Coast in 2013<sup>1</sup>

<sup>1</sup>Source: Longwoods Travel USA, 2014

Wildlife viewing in Oregon generates more regional economic contributions than recreational hunting and fishing activities combined (Leonard, 2008). Total generated expenditures from wildlife viewing on the coast were nearly \$160 million in 2008. In 2008, travel-generated expenditures for wildlife viewing in Clatsop County were the highest in the state at \$55,481,000. Lincoln County was close behind at \$53,229,000 (Dean Runyan Associates, 2009). More than 375,000 visitors participated in whale watching on the Oregon coast in 2008, resulting in nearly \$1.6 million in direct expenditures, and an additional \$28.2 million in indirect expenditures. This was more than a two-fold increase in direct expenditures over 10 years (O'Connor et al., 2009). LaFranchi and Daugherty (2011) also described the positive economic effects of nonconsumptive uses of coastal resources. Nonconsumptive use of the marine ecosystem is clearly a significant driver of coastal tourism.

## RETAIL

The retail sector is comprised of businesses that typically sell merchandise, generally without transformation, in small quantities to the public (2012 NAICS 44-45 definition). While the tourism sector does not include retail (i.e. grocery stores, clothing stores, etc.), stores are used both by visitors and locals. The coast has a slightly higher proportion of people employed in retail trade than the state (13.5% vs. 12.2%; Table 8). Port Orford, Pacific City, and Bandon all have over 20% of their working populations employed in retail. Lakeside, Gold Beach, and Yachats all have less than 10% of their working population employed in retail.

City	Retail Trade	Population	
Oregon	12.1%	3939233	
Coast	13.5%	208507	
Cape Meares	48.6%	143	
Port Orford	23.9%	1312	
Pacific City	23.8%	963	
Bandon	22.1%	3070	
Toledo	18.6%	3469	
Brookings	17.4%	6376	
Seaside	17.3%	6483	
North Bend	17.2%	9583	
Rockaway Beach	17.1%	1227	
Warrenton	17.0%	5143	
Waldport	16.5%	2033	
Depoe Bay	16.0%	1877	
Lincoln City	15.9%	8386	
Florence	15.3%	8545	
Oceanside	15.0%	338	
Cannon Beach	14.7%	1549	
Astoria	14.5%	9537	
Bay City	13.3%	1466	
Dunes City	13.1%	1263	
Reedsport	13.1%	4111	
Nehalem	12.1%	254	
Gearhart	12.1%	1462	
Netarts	11.3%	958	
Tillamook	11.2%	4958	
Wheeler	11.0%	397	
Coos Bay	10.7%	16062	
Newport	10.6%	10101	
Garibaldi	10.2%	782	
Yachats	9.5%	658	
Gold Beach	8.5%	2346	
Lakeside	8.3%	1539	
Manzanita	8.1%	426	

# Table 8. Employment in Retail Trade

# FINANCE, INSURANCE, AND REAL ESTATE

The finance and insurance sector includes businesses that engage in financial transactions (i.e. creation, liquidation, or change in ownership of financial assets; 2012 NAICS 52 definition). The real estate, rental, and leasing sector primarily involves real estate lessors industries, equipment lessors industries, and lessors of nonfinancial intangible assets (2012 NAICS 53 definition).

The proportion of the coastal population employed in finance, insurance, real estate, rental and leasing industries is 18% lower than the state average (4.7% vs. 5.7%; Table 9). However, some coastal communities have much higher proportions than the state. Seaside, Pacific City, and Cannon Beach all have more than 10% of their working population employed in these industries. These communities all have a significant tourism sector, which may account for their higher rate of employment in the rental and real estate industries.

City City Estate, Real Leasing	Des latio	Rockaway Beach	5.0%	1227	
	Estate, Rental, Leasing	Population	Dunes City	4.8%	1263
			Reedsport	4.8%	4111
Oregon	5.7%	3939233	Tillamook	4.4%	4958
Coast	4.7%	208507	Lakeside	4.3%	1539
Neskowin	60.0% <sup>1</sup>	156	Wheeler	4.1%	397
Nehalem	20.2%	254	Port Orford	3.9%	1312
Seaside	14.4%	6483	North Bend	3.2%	9583
Pacific City	11.6%	963	Bandon	3.0%	3070
Cannon Beach	10.1%	1549	Astoria	2.8%	9537
Yachats	9.5%	658	Warrenton	2.8%	5143
Florence	9.4%	8545	Coos Bay	2.4%	16062
Gearhart	8.5%	1462	Dence Bay	2.1%	1877
Manzanita	8.1%	426	Bay City	2.0%	1466
Waldport	6.8%	2033	Toledo	2.0%	3/,69
Lincoln City	5.7%	8386	Brookings	1.5%	6407
Gold Beach	5.3%	2346	Caribaldi	0.7%	702
Newport	5.3%	10101	Garinardi	U./ 70	102

#### Table 9. Employment in Finance, Insurance, Real Estate, Rental and Leasing Industries

<sup>1</sup>Anomaly probably due to the small population base of this community or an inaccurate ACS estimate.

#### **CITY SERVICES**

Employment industries that primarily benefit the local community are considered city services. These include the employment sectors of construction, transportation, warehousing, utilities, public administration, and education. The construction industry consists of businesses that construct buildings or engineering products (2012 NAICS 23 definition). The transportation and warehousing

sector includes industries that transport passengers and cargo by air, rail, water, road, or pipeline, including scenic tours, and store goods (2012 NAICS 48-49 definition). The public administration sector consists of federal, state, and local government agencies (2012 NAICS 92 definition). Lastly, educational services include schools, colleges, universities, and training centers (2012 NAICS 61 definition). The coast employs approximately the same proportion of people in these industries as the rest of the state (38.1% vs. 37.2%; Table 10).

Netarts is an anomaly with 63.2% of the population employed in these industries. The reason for this discrepancy is that 41.4% of the working population in Netarts is employed in the education sector, which is much higher than most coastal communities. The total working population in Netarts is only 326 people, which translates to 134 residents employed in the education industry. Netarts does not have any schools within its CDP limits, so it is probable that many Tillamook County school teachers live in Netarts and commute a short distance to work in Tillamook or other nearby towns.

Seaside, Pacific City, and Cannon Beach all have low proportions of people working in the city services industries. Since tourism is a larger sector of the economic base for these communities, a larger proportion of their working population is employed in the tourism industry focusing on visitors rather than local residents.

City	City Services	Services Population	
Oregon	37.2%	3939233	
Coast	38.1%	208507	
Langlois	100.0%	162	
Netarts	63.2%	958	
Oceanside	60.5%	338	
Lakeside	49.6%	1539	
Brookings	43.5%	6376	
Coos Bay	43.4%	16062	
Gold Beach	43.2%	2346	
Garibaldi	42.1%	782	
Reedsport	40.7%	4111	
Astoria	40.1%	9537	
Neskowin	40.0%	156	
Bandon	40.0%	3070	
Tillamook	38.5%	4958	
Dunes City	38.4%	1263	
Florence	37.7%	8545	
North Bend	37.6%	9583	

#### Table 10. Employment in City Service Industries<sup>1</sup>

Warrenton	37.4%	5143	
Bay City	36.3%	1466	
Waldport	34.5%	2033	
Rockaway Beach	33.0%	1227	
Toledo	31.4%	3469	
Nehalem	30.7%	254	
Newport	30.7%	10101	
Yachats	30.4%	658	
Depoe Bay	29.8%	1877	
Gearhart	29.7%	1462	
Lincoln City	27.7%	8386	
Seaside	25.2%	6483	
Cape Meares	22.7%	143	
Wheeler	20.7%	397	
Port Orford	20.4%	1312	
Cannon Beach	19.9%	1549	
Pacific City	15.6%	963	
Winchester Bay	11.7%	316	
Manzanita	10.4%	426	

<sup>1</sup>City service industries include the employment sectors of construction, transportation, public administration, and education.
## PROFESSIONAL, SCIENTIFIC, MANAGEMENT, AND ADMINISTRATION

Professional, scientific, and technical services are sectors that require a high degree of expertise and training. Employment opportunities in these categories include legal services, accountants, architects, engineers, computer service specialists, research technicians, and veterinarians (2012 NAICS 54 definition). These sectors are grouped with the management of companies and enterprises sector (NAICS 55) and the administrative, support, waste management, and remediation services sector (NAICS 56).

The coast has proportionally 27% fewer persons employed in the professional, scientific, management, and administration industries than the state (7.7% vs. 10.6%; Table 11). Nearly one-quarter of Pacific City's working population is employed in these industries. North Bend, the coast's third largest community, has 15% of its residents working in these industries.

	Professional,		Gearhart	8.9%	1462
City	Sci., Mgmt.,	Population	Newport	8.9%	10101
	Autiliti, Waste		Cannon Beach	8.2%	1549
Oregon	10.6%	3939233	Coos Bay	8.1%	16062
Coast	7.7%	208507	Waldport	7 5%	2033
Winchester Bay	32.4%	316		7.370	2033
Cape Meares	28.6%	143	Port Orford	7.1%	1312
Pacific City	22.8%	043	Bandon	6.7%	3070
	23.070	/03	Dunes City	6.2%	1263
Manzanita	20.9%	426	Nehalem	5.6%	254
Yachats	15.5%	658	Reedsport	5 / %	/,111
North Bend	14.5%	9583	Keedsport	5.4 /0	4111 51/0
Depoe Bay	14.2%	1877	warrenton	5.2%	5143
l akeside	12.6%	1539	Garibaldi	4.2%	782
	11 /0/	020/	Tillamook	3.7%	4958
LINCOLN LITY	11.4%	8386	Gold Beach	3.2%	2346
Rockaway Beach	11.0%	1227	Wheeler	2.8%	.397
Netarts	10.7%	958	Dreekinge	2.0%	(07/
Seaside	10.2%	6483	Brookings	2.8%	6376
Florence	9.8%	8545	Toledo	2.1%	3469
Actorio	0.00/	05-07	Bay City	1.6%	1466
Astoria	9.2%	7537			

#### Table 11. Employment in Professional, Scientific, Management and Administration Industries

### **OTHER INDUSTRIES**

In addition to the predominant economic sectors previously discussed in this report, there are multiple smaller employment opportunities that contribute to the economic success of coastal towns. There are small manufacturing and service companies located in some coastal towns, which export their products outside the region, thereby contributing to local economic growth. Industries such as boat building and water-transportation occur on the coast. Lincoln County has a growing marine technology economic sector (TRG, 2014). High amenity areas such as the Oregon coast also tend to attract "footloose"

entrepreneurial businesses, economic activities which are not dependent on the specific location's resources for viability. As such, writers, artists, computer hardware and software developers, and other small coastal entrepreneurs sell products outside the coastal area and bring income into regional economies. The cumulative economic contribution of these smaller industry sectors is important along the coast.

The "other" industries included in Table 12 are information, manufacturing, other, and wholesale trade. The information industry produces and distributes information, or provides the means to distribute these products. The main employment opportunities in these sectors are with publishing industries, motion picture and sound recording industries, telecommunications industries, web search portals, data processing industries, and information services industries (2012 NAICS 51 definition). The manufacturing industry includes businesses that transform materials into new products by physical, mechanical, or chemical transformation. Employment in this industry is typically in a factory, plant, or mill (2012 NAICS 31-33 definition). Employment in the other category includes anything that doesn't fit into one of the other NAICS categories including equipment repair, religious activities, advocacy, laundry services, personal care services, death services, and pet care services (2012 NAICS 81 definition). Wholesalers sell merchandise to other businesses, typically out of a warehouse or office, and they do not advertise to the public (2012 NAICS 42 definition). The coast has proportionally 27% fewer persons employed in these other industries than the state (15.3% vs. 21.0%; Table 12). There are only three coastal communities with populations over 1,000 persons that have a higher proportion of people employed in these industries than the state, with Bay City having the highest proportion.

City	Other	Population
Oregon	21.0%	3939233
Coast	15.3%	208507
Bay City	30.1%	1466
Garibaldi	29.0%	782
Wheeler	23.5%	397
Tillamook	23.5%	4958
Warrenton	21.4%	5143
Manzanita	20.9%	426
Toledo	20.6%	3469
Dunes City	20.5%	1263
Brookings	17.7%	6376
Rockaway Beach	17.2%	1227
Reedsport	17.0%	4111
Coos Bay	16.7%	16062
Newport	16.5%	10101
Astoria	15.4%	9537

Oceanside	14.4%	338
Nehalem	13.7%	254
Gold Beach	12.6%	2346
Bandon	12.5%	3070
Lakeside	11.5%	1539
Gearhart	11.4%	1462
Cannon Beach	11.1%	1549
North Bend	11.1%	9583
Seaside	10.3%	6483
Lincoln City	9.7%	8386
Florence	9.6%	8545
Yachats	9.5%	658
Port Orford	9.4%	1312
Waldport	8.8%	2033
Netarts	7.7%	958
Depoe Bay	7.2%	1877
Pacific City	6.8%	963

<sup>1</sup>Other industries include the employment sectors of information, manufacturing, other, and wholesale trade.

### **RESTORATION PROJECTS**

Conservation, protection, and restoration projects have economic benefits, some of which are identifiable and easily measured. For example, agency and contractor labor, materials, and services payments for conservation management and construction projects will be re-spent in communities generating additional economic activity (i.e., a "multiplier" effect). Data about these payments is used with economic input-output models to measure impacts. Other benefits are more tenuous to trace, and economic effects are more difficult to estimate, because they will not have such direct connections to the market place. A growing body of literature describes economic benefits in terms of ecosystem services (c.f., National Research Council, 2004 and Fisher et al., 2009). The natural environment provides ecosystem services that increase individual welfare, but quantifying these services is difficult. Economic benefit studies of conservation and restoration projects generally quantify economic impacts of a defined activity, but only acknowledge the broader social values.

There are several examples of economic benefits analyses for Oregon coastal communities. One Oregon Department of Fish and Wildlife (ODFW) funded study assessed the economic effects in Port Orford that occurred with establishment of the Redfish Rocks Marine Reserve. This study found that ongoing research, planning, and management activities were adding an amount equal to about one-third of the economic benefits of existing commercial and recreational fishing contributions to the local economy (TRG, 2013).

There have been multiple large-scale restoration efforts along the Oregon coast which have contributed to the local economy through increased business activity and contracting employees for labor. Funding was provided by the U.S. Forest Service as part of the American Recovery and Reinvestment Program for restoration in southwestern Oregon around the Rogue River-Siskiyou National Forest. Benefits from this project include new employment opportunities, investment in local communities, enhancement of a natural area for visitor and local enjoyment, and decreased risk of dangerous wildfires. Coos and Curry counties benefited from this restoration project largely through employment from road maintenance projects and crews purchasing supplies, food, and lodging in town (Charnley et al., 2011; Davis et al., 2011).

The Oregon Watershed Enhancement Board (OWEB) is a state agency funded by the Oregon Lottery, federal money, and salmon license plate revenue, that provides grants for restoration projects in natural areas. Since 1999, OWEB has provided funding for 7,900 grants to local volunteer efforts in Oregon. These funds are used for purchasing supplies, developing projects, organizing community groups, spreading awareness, data collection, and workshops for students and adults. Since 1999, Clatsop County has received \$11.3 million in grants, Tillamook County has received \$15.2 million, Lincoln County has received \$17.3 million, Lane County has received \$32.5 million, Douglas County has received \$20.8 million, Coos County has received \$21 million, and Curry County has received \$6.4 million. These grants have been used to restore streams, fish habitat, upland habitat, wetlands, and estuaries (OWEB 2016). For information on specific projects undertaken in coastal Oregon with OWEB funding, refer to Appendix E.

A study conducted at University of Oregon (UO) analyzed expenditures from a random sample of OWEB restoration grants. The study found that for every \$1 million spent on restoration, between 15.7 and 23.8 jobs are created. Putting this into context, \$45 million was invested in the Rogue River-Siskiyou restoration project previously discussed (Charnley et al., 2011). Restoration projects typically have high employment multipliers, thus for every job created directly from the restoration project, 1.7-2.8

additional jobs are generated in other sectors of the economy. These jobs could be additional employment in service industries to provide food, supplies, and lodging to contractors. Additional local economic impacts occur with expenditures by project managers on equipment and material purchases from regional vendors. For example, in all restoration projects analyzed in this report from UO, 100% of quarried rock purchases were made at Oregon-based quarries. Overall, this report determined that an investment of \$1 million in contracted work for Oregon restoration projects results in \$2.1-\$2.4 million in total economic output (Nielsen-Pincus and Moseley, 2010; Nielsen-Pincus and Moseley, 2013).

Protected and restored environments can promote economic development and reduce the need for government intervention in land utilization to protect environments. Funded restoration efforts create employment in coastal communities and increase spending at local businesses. There is a considerable amount of untapped potential for further economic development in this context on the Oregon coast (Stone et al., 2006; Davis et al., 2011). People are attracted by related user benefits (e.g. fishing, hunting, surfing, and wildlife viewing), and these environments may also enhance perceived individual wellbeing or attract visitors.

### CONCLUSION

While natural resource industries were a major component of coastal community economies in the past, a smaller proportion of coastal residents are employed in those industries today. However, some communities still have a high proportion of residents employed in fishing and in the wood products industries, and the total proportion of coastal residents in natural resource industries is higher than the state average.

The Oregon coast is a frequent tourism destination for both Oregon residents and foreign visitors. Tourism is a significant economic sector in many coastal communities, and is continuing to expand, although the seasonality of this industry makes consistent income difficult. In addition, wages for jobs in the tourism industry are typically low. Similar to the natural resource industries, the coast has a higher proportion of employment in the tourism industries than the rest of the state.

The coast has a similar proportion as the state in residents employed in retail, city services, and finance, insurance and real estate. However, the coast has a lower proportion of people employed in professional, scientific, management and administrative positions. These employment opportunities typically require a higher degree of skill and knowledge, and therefore tend to be higher paying jobs. Overall, there is a lack of high income technical jobs on the coast, and more employment opportunities in lower wage and seasonal tourism-related jobs.

# CHAPTER 4 COASTAL OREGON DEMOGRAPHIC TRENDS

The following section of this report will focus on coastal Oregon age and retirement, education and race, and income and poverty. Frequent comparisons with state data will allow relative interpretation of these patterns. Anomalous communities in certain categories will be highlighted throughout the chapter. A final discussion will review some implications of these demographic trends in conjunction with other characteristics of the Oregon coast.

## AGE AND TRANSFER PAYMENTS

A higher proportion of retirement-age persons (65+ years) live on the coast compared to the rest of Oregon (Figure 17). Proportionally, there are 57% more coastal residents aged 65+ in comparison to the average for all state residents combined (23.4% vs. 14.9%; Table 13). Eight coastal communities (population  $\geq$  700) have proportions of retirement-age people exceeding 30% (Table 13), which is 101% higher than the state proportion (30% vs. 14.9%).<sup>22</sup> In Lakeside and Yachats, approximately 40% of their populations are over 65, which is 168% higher than the state (40% vs. 14.9%). Nearly half of Pacific City's population is of retirement-age.

Over half of all coastal communities have a median population age over 50 years old, while the state median is only 38.9 years. Pacific City, Yachats, Lakeside, Netarts, and Dunes City all have a population median age around 60, which is 54% higher than Oregon's median age (60 vs 38.9; Table 13). Small, older communities must draw in new people, most likely more retirees, to prevent the towns' populations from significantly dwindling within the next twenty years. The only cities that reported a median age lower than the state average were Toledo, Warrenton and Tillamook.

City	65+ Years	Median Age	18-24 Years	Population
Oregon	14.9%	38.9	9.3%	3900343
Coast	23.4%	48.8	7.0%	206958
Cape Meares	62.5%	68.2	7.4%	136
Winchester Bay	62.3%	74.3	1.0%	313
Pacific City	47.0%	62.9	2.5%	905
Neskowin	45.6%	64.6	0.0%	147
Lakeside	40.4%	59.3	0.6%	1715
Yachats	39.6%	61.8	3.9%	743
Oceanside	38.7%	55	0.0%	199
Dunes City	37.0%	59.2	4.9%	1267
Florence	36.7%	57.9	2.5%	8498

#### Table 13. Age Demographics

<sup>22</sup> Oregon coastal communities with populations less than 700 persons also typically have a higher proportion of retirement-age persons.

Wheeler	35.0%	51.5	4.6%	349
Manzanita	33.7%	48	0.0%	413
Netarts	33.5%	60.2	7.1%	934
Nehalem	31.9%	52.8	2.7%	263
Bandon	30.4%	57.8	0.0%	3055
Rockaway Beach	30.4%	57.6	6.3%	1197
Waldport	29.5%	54	7.5%	1922
Port Orford	29.4%	53.9	6.0%	1263
Depoe Bay	29.3%	53	9.2%	1622
Reedsport	27.7%	49	8.6%	4107
Brookings	27.1%	52	6.5%	6350
Gold Beach	22.8%	52.4	7.3%	2263
Garibaldi	22.2%	51	4.5%	805
Cannon Beach	21.7%	52.4	11.3%	1542
Coos Bay	21.0%	41.8	9.4%	16022
Seaside	20.4%	44.2	9.0%	6481
Gearhart	20.2%	45.2	6.4%	1592
Newport	20.1%	43.6	7.5%	10045
North Bend	19.3%	40.3	11.9%	9591
Lincoln City	18.9%	42.2	7.1%	7977
Bay City	18.8%	48	5.2%	1428
Langlois	18.1%	49.3	0.0%	237
Astoria	18.0%	42.6	7.2%	9503
Tillamook	12.9%	35.7	7.6%	4957
Toledo	12.8%	35.1	9.7%	3449
Warrenton	11.8%	32.1	7.2%	5089



Figure 17. Age Distribution for Oregon and United States Populations

<sup>1</sup> Source: American Community Survey 2010-2014

During the period from 2004 to 2013, the number of jobs (full and part time) increased almost 6% in the state of Oregon (Table 14). During that same time frame, the number of jobs actually decreased nominally ( $\leq$ 1%) on the coast. This occurred despite the fact that the coastal population grew over that time period. An important reason for this disparity between number of jobs and coastal population growth is illustrated by data related to coastal retirement patterns. As previously mentioned, the coast has a substantially higher proportion of persons of retirement age. Retirement income is derived from investments and transfer payments (e.g., social security).<sup>23</sup> Over half (51%) of personal income on the coast was derived from investments and transfer payments in 2012, which is 31% higher than the state norm (51% vs. 39%), and 46% higher than the national level (51% vs. 35%; Figure 18).

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Oregon	2,138,888	2,200,655	2,262,100	2,310,797	2,301,983	2,202,030	2,172,448	2,202,269	2,221,495	2,265,005
Coast	103,683	106,214	107,869	109,558	108,281	104,131	102,611	101,847	101,335	102,812
Clatsop	22,251	22,806	23,319	24,223	24,593	23,723	23,441	23,324	23,443	23,700
Tillamook	12,886	13,156	13,451	13,751	13,515	13,231	13,173	12,927	12,602	12,962
Lincoln	25,596	26,159	26,572	27,070	26,968	25,967	25,509	25,105	25,113	25,434
Coos	31,862	32,757	33,118	33,036	32,104	30,598	30,096	30,295	29,894	30,289
Curry	11,088	11,336	11,409	11,478	11,101	10,612	10,392	10,196	10,283	10,427

<sup>1</sup>People holding more than one job are counted for each job they hold.

<sup>2</sup>Source: U.S. Bureau of Economic Analysis

<sup>&</sup>lt;sup>23</sup> Transfer payments of social security benefits include SSI (disability) income.



Figure 18. Sources of Personal Income to Coastal Counties, Oregon, and U.S. in 2012<sup>1</sup>

<sup>1</sup>Source: U.S. Bureau of Economic Analysis

The high proportion of retirement-age residents found in most coastal communities has implications for the communities' social structure and economy. Coastal Oregon is significantly more dependent on retirement and social security income than the rest of the state. The majority of coastal communities have at least 25% of their population collecting retirement income compared to the state proportion of 19% (Table 15).<sup>24</sup> In nearly one-quarter of all coastal communities, over 40% of the population is receiving retirement income, which is 112% higher than the state proportion (40% vs. 18.9%). In Pacific City, over half the population collects retirement income, and in Lakeside and Yachats, 46% are receiving retirement income.

The proportion of the coastal population collecting social security income is 43% higher than the state (45.2% vs. 31.6%; Table 16). Only one coastal community, Warrenton, has a slightly lower proportion receiving social security income than the state (29.6% vs. 31.6%). Warrenton is anomalous for the Oregon coast, as it also has the youngest coastal population with a median age of 32.1 years, which is 18% lower than the state (32.1% vs. 38.9%), and 34% lower than the coast (32.1% vs. 48.8%).

<sup>&</sup>lt;sup>24</sup> ACS data separates retirement income from social security income. Retirement income in this context includes income from pensions, survivor income paid to the family of a deceased person, and regular income from a disability pension. Social security includes social security pensions, survivor benefits, permanent disability insurance payments and railroad retirement insurance.

City	W/ Retirement Income	Population
Oregon	18.9%	3900343
Coast	26.0%	206958
Manzanita	52.2%	413
Pacific City	51.1%	905
Winchester Bay	48.9%	313
Neskowin	48.2%	147
Lakeside	46.6%	1715
Langlois	46.5%	237
Yachats	46.4%	743
Cape Meares	42.3%	136
Dunes City	39.1%	1267
Oceanside	34.6%	199
Florence	34.5%	8498
Waldport	33.0%	1922
Garibaldi	31.3%	805
Gearhart	31.3%	1592
Coos Bay	28.9%	16022
Bandon	28.3%	3055

 Table 15. Proportion Receiving Retirement Income

28.0%	263
27.6%	934
27.3%	1428
27.1%	6350
27.1%	2263
26.2%	1197
26.0%	1263
25.9%	6481
25.5%	349
24.8%	1622
22.4%	9591
21.4%	9503
21.1%	5089
20.0%	10045
18.7%	4107
18.0%	7977
15.7%	3449
15.1%	1542
13.3%	4957
	28.0% 27.6% 27.3% 27.1% 27.1% 26.2% 26.2% 26.0% 25.9% 25.5% 24.8% 22.4% 21.4% 21.4% 21.4% 21.1% 20.0% 18.7% 18.0% 15.7% 15.1% 13.3%

City	W/ Social Security	Population
Oregon	31.6%	3900343
Coast	45.2%	206958
Cape Meares	80.8%	136
Pacific City	71.4%	905
Winchester Bay	68.1%	313
Yachats	64.8%	743
Lakeside	63.2%	1715
Oceanside	61.4%	199
Dunes City	61.2%	1267
Manzanita	58.2%	413
Florence	57.8%	8498
Neskowin	56.6%	147
Waldport	55.6%	1922
Reedsport	54.3%	4107
Port Orford	54.1%	1263
Garibaldi	53.3%	805
Netarts	53.0%	934
Rockaway Beach	52.3%	1197

Table 16. Proportion Receiving Social Security

Nehalem	51.0%	263
Depoe Bay	49.5%	1622
Brookings	47.2%	6350
Gold Beach	45.6%	2263
Seaside	45.4%	6481
Wheeler	44.8%	349
Bandon	43.8%	3055
Gearhart	43.7%	1592
Coos Bay	43.3%	16022
Cannon Beach	42.9%	1542
Bay City	41.7%	1428
Newport	38.7%	10045
North Bend	38.2%	9591
Toledo	37.0%	3449
Langlois	36.4%	237
Tillamook	36.3%	4957
Lincoln City	36.1%	7977
Astoria	35.4%	9503
Warrenton	29.6%	5089

## **EDUCATION AND RACE**

The proportion of coastal residents aged 25+ who have graduated from high school is almost identical to the state average (89.4% vs. 89.5%). However, many of the larger coastal communities, including Seaside, Tillamook, and Coos Bay, have slightly lower graduation rates than the state (Table 17). Toledo has the highest proportion of residents aged 25 and older that have not graduated from high school (19.2%), 83% higher than the state average (19.2% vs. 10.5%).

In some small coastal communities (population  $\leq$  700), all persons aged 25 and older have graduated from high school. These communities also tend to have a large number of residents with bachelor's or higher education degrees. While the proportion of residents with high school degrees is similar between the coast and state, the proportion of residents with higher education degrees tends to be much lower in coastal communities. The proportion of coastal residents that have obtained a higher education degree is 29% lower than the state (21.5% vs. 30.1%; Table 18). In some communities, such as Reedsport, Tillamook, and Toledo, less than 15% of the population have a higher education degree, which is less than half of the state average (14.2% vs. 30.1%). The low proportion of higher education graduates living on the coast may be partially due to a lack of jobs that require college degrees. The

proportion of college graduates who are coastal residents could be misleading when considering characteristics of the general working population. Many affluent retirees with higher education degrees retire on the Oregon coast; however, they are not contributing to the workforce.

City	H.S. Graduate or Higher	Population
Oregon	89.50%	3900343
Coast	89.40%	206958
Toledo	80.80%	3449
Langlois	81.60%	237
Reedsport	84.50%	4107
Lincoln City	85.80%	7977
Seaside	87.50%	6481
Port Orford	87.60%	1263
Coos Bay	88.20%	16022
Tillamook	88.20%	4957
Bandon	88.70%	3055
Cannon Beach	89.30%	1542
Waldport	89.70%	1922
Bay City	90.10%	1428
Lakeside	90.40%	1715
Newport	90.60%	10045
Pacific City	90.60%	905
Warrenton	90.70%	5089

Table 17. Proportion Age 25+ with High School Degree

Brookings	91.70%	6350
Gold Beach	91.70%	2263
Nehalem	91.70%	263
Wheeler	91.80%	349
Florence	91.90%	8498
Astoria	92.60%	9503
Yachats	92.60%	743
Garibaldi	92.70%	805
Depoe Bay	93.50%	1622
North Bend	93.80%	9591
Winchester Bay	94.20%	313
Rockaway Beach	95.00%	1197
Netarts	95.10%	934
Gearhart	95.50%	1592
Dunes City	95.80%	1267
Manzanita	96.20%	413
Cape Meares	100.00%	136
Neskowin	100.00%	147
Oceanside	100.00%	199

City	Bachelor's Degree	Dopulation		Seaside	23.20%	6481
City	or Higher	Population		Nehalem	23.90%	263
Oregon	30.10%	3900343		Florence	24.60%	8498
Coast	21.50%	206958		Cape Meares	25.40%	136
Toledo	10.30%	3449		Brookings	25.50%	6350
Lakeside	10.40%	1715		Port Orford	26.60%	1263
Tillamook	12.80%	4957		Bandon	26.70%	3055
Bay City	13.10%	1428		Astoria	28.50%	9503
Garibaldi	13.50%	805		Newport	28.90%	10045
Reedsport	14.20%	4107		Netarts	28.90%	934
Waldport	16.70%	1922		Pacific City	29.20%	905
Warrenton	19.90%	5089		Depoe Bay	33.50%	1622
Langlois	20.00%	237		Gearhart	34.60%	1592
Rockaway Beach	20.00%	1197		Cannon Beach	39.30%	1542
Wheeler	20.40%	349		Winchester Bay	40.50%	313
Coos Bay	20.80%	16022		Yachats	43.60%	743
Lincoln City	21.90%	7977		Manzanita	51.90%	413
Dunes City	22.30%	1267		Oceanside	53.60%	199
North Bend	22.40%	9591		Neskowin	64.10%	147
Gold Beach	22.90%	2263				

Table 18. Proportion Age 25+ with a Bachelor's or Higher Education Degree

Compared to the nation, Oregon does not exhibit much racial diversity, nor does the Oregon coast. The coast has a marginally higher proportion of white residents than the state (90.0% vs. 85.1%; Table 19). In addition, most coastal communities have a lower proportion of residents who identify as Hispanic or Latino than the state average (Table 20). Newport and Tillamook are the only coastal communities with over 10% of their populations identifying as Hispanic or Latino; both of these towns are still lower than the state proportion (12.1%). The coast is nearly representative of the state with reference to the Native American population, while all other minorities (black, Asian, and Pacific Islander) are underrepresented. Some communities, such as Yachats and Cannon Beach, proportionally have over twice as many Native American residents as the state average.

City	Population	White	Black	AmerIndian	Asian	Pac. Islander	Other
Oregon	3900343	88.6%	2.6%	2.9%	5.2%	0.7%	4.2%
Coast	206958	93.4%	1.1%	4.4%	1.8%	0.5%	2.6%
Cape Meares	136	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Langlois	237	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Neskowin	147	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wheeler	349	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Port Orford	1263	99.8%	0.0%	0.9%	0.6%	0.3%	0.0%
Nehalem	263	99.2%	0.0%	0.4%	0.8%	0.0%	0.0%
Garibaldi	805	98.9%	1.0%	1.1%	0.1%	0.0%	0.0%
Pacific City	905	98.5%	1.5%	2.5%	0.0%	0.0%	0.0%
Dunes City	1267	97.5%	1.1%	4.9%	0.6%	0.0%	0.0%
Winchester Bay	313	96.8%	0.0%	3.5%	0.3%	0.0%	0.0%
Depoe Bay	1622	96.6%	0.0%	2.3%	1.4%	0.0%	1.4%
Bandon	3055	96.5%	1.4%	1.3%	0.8%	0.0%	0.0%
Lakeside	1715	96.3%	0.5%	1.5%	0.5%	0.0%	1.7%
Florence	8498	96.2%	0.9%	2.0%	2.2%	0.3%	0.8%
Bay City	1428	96.2%	0.0%	0.3%	2.4%	0.0%	1.9%
Toledo	3449	95.9%	0.0%	3.7%	0.7%	0.6%	3.3%
Gold Beach	2263	95.4%	2.8%	1.5%	2.4%	0.5%	0.8%
Rockaway Beach	1197	95.2%	0.1%	5.5%	0.0%	0.0%	0.0%
Waldport	1922	95.2%	0.4%	4.8%	1.8%	0.5%	0.6%
Gearhart	1592	94.7%	1.1%	0.8%	1.0%	0.0%	2.8%
Warrenton	5089	94.5%	0.6%	4.3%	1.8%	0.0%	2.1%
Cannon Beach	1542	94.4%	1.9%	7.6%	1.4%	0.0%	4.7%
Seaside	6481	94.2%	0.5%	3.9%	1.1%	1.0%	4.9%
Brookings	6350	94.0%	0.5%	3.7%	2.5%	0.0%	5.3%
Netarts	934	93.8%	0.0%	0.0%	2.1%	0.0%	4.1%
Astoria	9503	93.7%	2.2%	1.8%	5.2%	0.1%	2.4%
Reedsport	4107	93.1%	0.0%	5.8%	2.8%	0.8%	1.9%
Tillamook	4957	92.9%	0.3%	1.4%	2.3%	1.5%	4.6%
North Bend	9591	92.6%	0.3%	5.8%	3.1%	0.4%	3.1%

Table 19. Proportion Identified as White, Black, American Indian, Asian, Pacific Islander, or Other<sup>25</sup>

<sup>25</sup> Race alone or in combination with one or more other races

Oceanside	199	90.5%	0.0%	2.5%	0.0%	2.0%	5.0%
Manzanita	413	89.8%	0.0%	0.0%	8.7%	0.2%	1.9%
Newport	10045	89.7%	1.5%	4.4%	2.3%	2.3%	6.4%
Coos Bay	16022	88.7%	4.5%	5.9%	3.4%	1.4%	1.5%
Lincoln City	7977	88.5%	0.4%	4.8%	3.7%	0.2%	5.8%
Yachats	743	88.0%	3.4%	9.8%	0.0%	0.7%	5.8%

Table 20. Proportion Identified as Hispanic or Latino

City	Hispanic/Latino	Population	Bay City	6.2%	1428
Oregon	12.1%	3900343	Depoe Bay	6.3%	1622
Coast	7.1%	206958	North Bend	6.5%	9591
Cape Meares	0.0%	136	Manzanita	6.8%	413
Winchester Bay	0.3%	313	Brookings	7.4%	6350
Nehalem	0.8%	263	Warrenton	7.6%	5089
Dunes City	1.0%	1267	Langlois	8.4%	237
Bandon	1.5%	3055	Reedsport	8.7%	4107
Florence	1.7%	8498	Astoria	9.0%	9503
Gold Beach	2.7%	2263	Oceanside	9.5%	199
Waldport	3.0%	1922	Netarts	9.5%	934
Garibaldi	3.2%	805	Coos Bay	9.6%	16022
Pacific City	3.5%	905	Tillamook	10.7%	4957
Port Orford	4.1%	1263	Cannon Beach	11.0%	1542
Rockaway Beach	4.3%	1197	Newport	11.3%	10045
Gearhart	4.4%	1592	Seaside	12.7%	6481
Lakeside	4.7%	1715	Neskowin	12.9%	147
Wheeler	5.4%	349	Lincoln City	13.5%	7977
Toledo	5.8%	3449	Yachats	13.9%	743

### **INCOME AND POVERTY**<sup>26</sup>

The Oregon coastal unemployment rate has fluctuated with the rest of the state (Figure 19). Unemployment declined from the peak during the Great Recession in 2009 until late 2017, with a small increase into early 2018. From 2015 to the current period, the unemployment rates in Clatsop and Tillamook Counties have been very near the state average. While the trends in unemployment rates in Lincoln, Coos, and Curry Counties also closely track the state unemployment rate, unemployment in those coastal counties has remained consistently higher than the state average since 2010. Unemployment in Coos and Curry Counties has remained higher than the state norm since well before 2000.<sup>27</sup>



#### Figure 19. State and coastal County Unemployment Trends

Source: Oregon Employment Department, downloaded January 8, 2018

Recent growth in employment on the coast has been less than 1%, while employment growth in all other regions of the state has been appreciably higher (Figure 20). Reflecting state-wide trends,

<sup>&</sup>lt;sup>26</sup> In this section, the initial county comparisons use the most recent available data, obtained from the Oregon Employment Department and Portland State University. These data reflect recent employment trends. The separate community data are derived from the Census Bureau ACS data, as are most of the data throughout this report. The ACS data are estimated three year running averages, and will not reflect the most recent changes in the job market. However, the ACS data facilitate community level comparisons, information not reflected in the OED data.

<sup>&</sup>lt;sup>27</sup> Coastal Lane and Douglas Counties are not represented in these data.

unemployment has decreased substantially along the coast since the most recent recession, but the coastal region still appreciably lags behind the rest of the state in overall employment growth.



#### Figure 20. Employment Growth in Oregon

Source: Oregon Employment Department, downloaded January 8, 2018

Reflecting this slower employment growth rate, in late 2017, the unemployment rate on the Oregon coast was 28% higher than state average (5.4% vs. 4.2%; Table 21}. The coastal region has not recovered from the recession as quickly as the rest of the state.

Location	Population <sup>2</sup>	Unemploy. Rate <sup>3</sup>	Est. # Unemployed.
Oregon	4,141,100	4.2%	173,926
Clatsop County	38,820	4.3%	1,669
Tillamook County	26,175	4.5%	1,778
Lincoln County	47,960	4.8%	2,302
Coos County	63,310	5.6%	3,546
Curry County	22,205	6.4%	1,421
Coast Totals <sup>3</sup>	198,470	5.4%	<b>10,716</b> <sup>4</sup>

### Table 21. 2017 Coastal County Unemployment<sup>1, 5</sup>

<sup>1</sup> Source: Oregon Employment Department, downloaded January 8, 2018

<sup>2</sup> Source: Portland State University Population Research Center, downloaded January 8, 2018

<sup>3</sup> OED data from November, 2017

<sup>4</sup> Rounding error (+1)

<sup>5</sup> Excludes coastal Lane and Douglas Counties

Among the coastal communities, some large coastal towns exhibit high unemployment rates (Table 22). North Bend, the third largest city along the Oregon coast with a population of 9,591, has an unemployment rate of 7.3%, 11% higher than the state (7.3% vs. 6.6%). The highest unemployment rate on the coast is found in Toledo at 9.6%, which is 46% higher than the state (9.6% vs. 6.6%). [NOTE: See footnote 26, above, for an explanation of the variance between these data and the data in Table 21.]

# Table 22. Unemployment Rate

City	Unemployment Rate (16+)	Population
Oregon	6.6%	3900343
Coast	5.5%	206958
Toledo	9.6%	3449
Wheeler	8.9%	349
Pacific City	8.6%	905
Reedsport	8.2%	4107
Lakeside	7.5%	1715
North Bend	7.3%	9591
Depoe Bay	6.9%	1622
Bay City	6.8%	1428
Manzanita	6.8%	413
Seaside	6.7%	6481
Lincoln City	6.5%	7977
Yachats	6.1%	743
Tillamook	5.9%	4957
Gearhart	5.8%	1592
Coos Bay	5.7%	16022
Rockaway Beach	5.7%	1197

Waldport	5.6%	1922
Brookings	5.5%	6350
Gold Beach	5.0%	2263
Astoria	4.7%	9503
Florence	4.2%	8498
Garibaldi	4.2%	805
Newport	4.2%	10045
Port Orford	4.2%	1263
Nehalem	4.0%	263
Netarts	3.6%	934
Warrenton	3.5%	5089
Bandon	2.0%	3055
Cannon Beach	1.7%	1542
Dunes City	1.3%	1267
Winchester Bay	1.3%	313
Cape Meares	0.0%	136
Langlois	0.0%	237
Neskowin	0.0%	147
Oceanside	0.0%	199

Even though the coastal unemployment rate is lower than in the recent past, the coast still must deal with poverty issues due to the preponderance of low income jobs. The coastal median household income is \$41,759, 17% lower than the state median (\$41,759 vs. \$50,521; Table 23). Tillamook and Port Orford have median incomes near \$30,000, which is 41% lower than the state as a whole (\$30,000 vs. \$50,521).

City	Median Household Income	Population
Oregon	\$50,521	3900343
Coast	\$41,759	206958
Tillamook	\$29,172	4957
Port Orford	\$30,920	1263
Pacific City	\$31,250	905
Reedsport	\$31,576	4107
Florence	\$32,459	8498
Wheeler	\$32,868	349
Lincoln City	\$35,524	7977
Langlois	\$35,912	237
Bandon	\$36,156	3055
Coos Bay	\$36,360	16022
Garibaldi	\$37,188	805
Waldport	\$38,264	1922
Neskowin	\$38,309	147
Warrenton	\$38,693	5089
Rockaway Beach	\$39,453	1197

#### Table 23. Median Household Income

Newport	\$40,448	10045
Lakeside	\$41,037	1715
Seaside	\$41,037	6481
Brookings	\$41,704	6350
North Bend	\$43,097	9591
Toledo	\$44,034	3449
Yachats	\$44,150	743
Cannon Beach	\$44,423	1542
Depoe Bay	\$45,047	1622
Astoria	\$45,104	9503
Bay City	\$47,303	1428
Nehalem	\$47,500	263
Gold Beach	\$47,903	2263
Manzanita	\$48,036	413
Netarts	\$48,088	934
Gearhart	\$50,179	1592
Cape Meares	\$51,250	136
Dunes City	\$53,333	1267
Winchester Bay	\$56,490	313
Oceanside	\$63,702	199

Total personal income increased in all coastal counties from 2003 to 2012 (Figure 21), with transfer payments accounting for the greatest rate of change in all counties. Per capita income on the coast has lagged behind the state. This income gap has been decreasing in recent years (Figure 22). In 1995, coastal per capita income was 13% less than the state average (\$28,100 vs. \$32,400); but only 9% less than the state average (\$36,900 vs. \$40,400) in 2013. Among the coastal counties, Clatsop County was nearest to the state average, and Curry County had the lowest per capita income.

A simple interpretation of these trends is that the closer parity between coastal and state income has been achieved through retirement income, not earned income. Much of the improvement in average coastal income during this time frame has not greatly affected income among working families, but reflects retirement migration patterns, and thus household income from sources other than earned income.





<sup>1</sup>Adjustment to 2012 dollars made with the GDP price deflator developed by the U.S. Bureau of Economic Analysis. <sup>2</sup>Source: U.S. Bureau of Economic Analysis)



Figure 22. Coast and State Per Capita Personal Income and Coast Total Personal Income 1995 to 2013<sup>12</sup>

<sup>1</sup>Per capita total personal income (thousands) adjusted to 2014 dollars using the GDP price deflator developed by the U.S. Bureau of Economic Analysis. Coast includes Clatsop, Tillamook, Lincoln, Coos, and Curry Counties. <sup>2</sup>Source: U.S. Bureau of Economic Analysis, CA1-3 personal income summary, downloaded March 2015

Per capita earned income on the coast is slightly lower than the state average (Table 24).<sup>28</sup> While the coast's per capita income is only 11% less than the state (\$24,145 vs. \$27,172), many relatively large coastal cities have average per capita incomes much lower than the state. Coos Bay, the largest coastal community with a population of 16,022, reported a per capita income of \$21,335 in 2014, which is 21% lower than the state (\$21,335 vs. \$27,173).

<sup>&</sup>lt;sup>28</sup> The prior discussion of per capita income was based on BEA data for gross regional income per capita, which includes income sources other than personal income. The data used in this discussion (Table 24) were derived from ACS data (aggregations for 2010-2014), and are figures for earned income per capita (a.k.a. "cash income"). Many researchers consider the ACS data more relevant to explication of family income status.

# Table 24. Per Capita Income

City	Per Capita Income	Population
Oregon	\$27,173	3900343
Coast	\$24,145	206958
Langlois	\$11,659	237
Tillamook	\$17,902	4957
Toledo	\$19,729	3449
Port Orford	\$19,942	1263
Rockaway Beach	\$20,658	1197
Lincoln City	\$20,895	7977
Pacific City	\$21,296	905
Coos Bay	\$21,335	16022
Warrenton	\$21,404	5089
Nehalem	\$21,432	263
Bay City	\$21,458	1428
Wheeler	\$21,793	349
Reedsport	\$21,894	4107
North Bend	\$22,324	9591
Manzanita	\$22,680	413
Lakeside	\$22,689	1715

Garibaldi	\$22,841	805
Waldport	\$23,588	1922
Florence	\$24,139	8498
Bandon	\$24,609	3055
Gold Beach	\$25,865	2263
Astoria	\$26,089	9503
Newport	\$26,407	10045
Depoe Bay	\$26,415	1622
Brookings	\$26,786	6350
Netarts	\$27,025	934
Seaside	\$27,127	6481
Gearhart	\$27,234	1592
Winchester Bay	\$28,088	313
Dunes City	\$28,950	1267
Yachats	\$30,804	743
Cannon Beach	\$31,449	1542
Neskowin	\$35,703	147
Cape Meares	\$41,782	136
Oceanside	\$46,089	199

# Table 25. Proportion with Earnings

City	With Earnings	Population
Oregon	75.7%	3900343
Coast	65.2%	206958
Pacific City	31.3%	905
Cape Meares	33.3%	136
Neskowin	37.3%	147
Dunes City	50.0%	1267
Florence	50.0%	8498
Winchester Bay	50.4%	313
Rockaway Beach	52.3%	1197
Lakeside	52.8%	1715
Waldport	52.8%	1922
Manzanita	53.3%	413
Port Orford	53.8%	1263
Yachats	56.8%	743
Reedsport	58.2%	4107
Brookings	59.9%	6350
Bandon	60.2%	3055
Wheeler	62.1%	349

Garibaldi	63.5%	805
Langlois	63.6%	237
Gold Beach	63.8%	2263
Netarts	64.7%	934
Depoe Bay	65.6%	1622
Coos Bay	66.7%	16022
North Bend	66.7%	9591
Cannon Beach	67.0%	1542
Seaside	67.5%	6481
Newport	69.6%	10045
Nehalem	70.0%	263
Lincoln City	71.5%	7977
Bay City	72.2%	1428
Astoria	73.3%	9503
Warrenton	73.5%	5089
Tillamook	74.8%	4957
Gearhart	75.7%	1592
Oceanside	76.4%	199
Toledo	77.5%	3449

City	Mean	Denulation	Wheeler	\$45,794	349
City	Earnings	Population	Rockaway Beach	\$46,414	1197
Oregon	\$67,315	3900343	Netarts	\$46,425	934
Coast	\$52,267	206958	Coos Bay	\$48,617	16022
Langlois	\$17,705	237	Waldport	\$49,417	1922
Port Orford	\$33,692	1263	Gearhart	\$49,500	1592
Manzanita	\$35,612	413	Oceanside	\$49,542	199
Winchester Bay	\$36,125	313	Reedsport	\$50,011	4107
Pacific City	\$37,181	905	Neskowin	\$50,713	147
Lakeside	\$39,522	1715	Astoria	\$51,189	9503
Bandon	\$41,149	3055	Seaside	\$52,259	6481
Lincoln City	\$42,228	7977	Brookings	\$52,282	6350
Garibaldi	\$42,286	805	Bay City	\$54,598	1428
Tillamook	\$42,967	4957	Warrenton	\$57,644	5089
Florence	\$43,342	8498	North Bend	\$58,199	9591
Depoe Bay	\$44,080	1622	Newport	\$59,066	10045
Nehalem	\$44,419	263	Gold Beach	\$61,800	2263
Toledo	\$44,850	3449	Cannon Beach	\$61,841	1542
Yachats	\$45,753	743	Dunes City	\$65,354	1267
		1	Cape Meares	\$75,558	136

Coastal Oregon suffers from higher poverty rates and lower incomes among families with working adults than the rest of the state. The individual poverty rate is proportionally 10% higher along the coast than at the state level (18.3% vs. 16.7%; Table 27). Coos Bay and Newport, the two largest communities along the coast, have poverty rates higher than the state average. In Cannon Beach, Lincoln City, and Reedsport, approximately one-quarter of their populations live in poverty; over one-third of the populations of Tillamook and Port Orford live in poverty.

City	Individuals Below	Population	Seaside	17.5%	6481
	Poverty Level		Florence	17.1%	8498
Oregon	16.7%	3900343	Depoe Bay	16.9%	1622
Coast	18.3%	206958	Gearhart	16.2%	1592
Langlois	39.2%	237	Bandon	15.0%	3055
Tillamook	34.6%	4957	Rockaway	14.004	4405
Port Orford	31.7%	1263	Beach	14.8%	1197
Reedsport	25.3%	4107	North Bend	14.6%	9591
Lincoln City	23.7%	7977	Manzanita	14.3%	413
Cannon Beach	23.3%	1542	Cape Meares	13.2%	136
Coos Bay	21.6%	16022	Yachats	13.1%	743
Lakeside	20.8%	1715	Dunes City	12.8%	1267
Toledo	20.2%	3449	Waldport	12.6%	1922
Astoria	19.9%	9503	Bay City	11.7%	1428
Garibaldi	19.6%	805	Wheeler	10.4%	349
Gold Beach	19.5%	2263	Netarts	10.3%	934
Neskowin	19.0%	147	Brookings	10.0%	6350
Newport	18.5%	10045	Winchester Bay	4.9%	313
Warrenton	18.1%	5089	Oceanside	3.5%	199
Pacific City	17.7%	905	Nehalem	3.0%	263

Table 27. Proportion below Poverty Level

A large proportion of the Oregon coastal population consists of working adults who earn above the national poverty level, but still do not receive sufficient income to afford basic household necessities, such as healthy food, adequate childcare, and insurance. This population is referred to by the acronym ALICE: Asset Limited, Income Constrained, Employed (Hoopes et al., 2015). Many people fall within this category on the Oregon coast due to an abundance of low wage jobs, mainly in the service industries, combined with a comparably high cost of living. Over one-quarter of the population in most coastal towns are ALICE households (Table 28), and this is in addition to the individuals living below the poverty level within those same communities.

Nearly half of all residents of Pacific City are ALICE, which is 104% higher than the state average (47% vs. 23%). When combining the total ALICE proportion (47%) with the total proportion below poverty (17.7%) in Pacific City, we find that 64.7% of Pacific City residents cannot afford basic household needs. While Pacific City is an extreme example, these conditions are prevalent along the Oregon coast.

Though most senior citizens do not fall below the poverty level, many are categorized as ALICE households. This situation provides evidence that government and private benefits are effectively reducing extreme poverty among seniors, but these benefits do not ensure financial stability (Haskins

2011). With the entire baby boom generation reaching retirement age in the next fifteen years, and with 39% of non-retirees nationally not planning or saving for retirement, the number of senior ALICE households will most likely increase (Brickeret al., 2014). Because the coastal population is disproportionately comprised of retirement-age residents, the number of ALICE households on the coast will consequently increase.

City	ALICE	Population	Lincoln City	29%	7977
Oregon	23%	3900343	Manzanita	29%	413
Coast	29%	206958	Tillamook	29%	4957
Cape Meares	NA	136	Depoe Bay	28%	1622
Dunes City	NA	1267	Winchester Bay	28%	313
Langlois	NA	237	North Bend	27%	9591
Wheeler	49%	349	Reedsport	27%	4107
Pacific City	47%	905	Nehalem	26%	263
Garibaldi	39%	805	Seaside	26%	6481
Rockaway Beach	38%	1197	Toledo	26%	3449
Neskowin	37%	147	Astoria	25%	9503
Netarts	37%	934	Gold Beach	25%	2263
Bandon	36%	3055	Lakeside	25%	1715
Florence	36%	8498	Newport	25%	10045
Warrenton	32%	5089	Cannon Beach	22%	1542
Waldport	31%	1922	Brookings	21%	6350
Yachats	31%	743	Gearhart	21%	1592
Bay City	30%	1428	Oceanside	20%	199
Coos Bay	29%	16022	Port Orford	19%	1263
	1	1	1		

Table 28. Proportion below ALICE Threshold<sup>1</sup>

<sup>1</sup>Source: Hoopeset al., 2015 and American Community Survey (ACS) 5-year estimates 2009-2013

Multiple demographic variables indicate that poverty and financial stress are widespread issues affecting working families on the coast. Both at the state and coast level, approximately one household in five qualifies for SNAP (Supplemental Nutrition Assistance Program, commonly referred to as food stamps) benefits. In one-quarter of all coastal communities, 25% or more residents are collecting SNAP benefits (Table 29). This group of communities includes relatively large cities such as Warrenton, Reedsport, Coos Bay, and Tillamook. Tillamook has an exceptionally high proportion of households collecting SNAP benefits, 48% higher than the state proportion (28.3% vs. 19.1%). The need for government assistance in the form of SNAP benefits, combined with the low unemployment rate on the coast, indicates that many working residents struggle to achieve a sufficiently high income to afford coastal living.

City	W/ Food Stamps/SNAP Benefits	Population
Oregon	19.1%	3900343
Coast	20.0%	206958
Langlois	53.5%	237
Port Orford	33.7%	1263
Toledo	32.2%	3449
Tillamook	30.2%	4957
Waldport	28.3%	1922
Coos Bay	28.0%	16022
Wheeler	26.9%	349
Reedsport	24.8%	4107
Warrenton	24.7%	5089
Lincoln City	21.9%	7977
Seaside	21.8%	6481
Gold Beach	21.6%	2263
North Bend	20.1%	9591
Newport	19.8%	10045
Astoria	19.7%	9503

Table 29. Proportion of Households with Food Stamps/SNAP Benefits

18.9%	1715
18.6%	3055
17.6%	8498
17.3%	1542
16.3%	743
16.1%	905
15.7%	805
14.6%	1622
14.5%	1428
12.7%	6350
12.1%	1197
12.0%	934
11.4%	413
11.0%	1267
11.0%	263
9.7%	1592
6.4%	136
0.0%	147
0.0%	313
0.0%	199
	18.9%         18.6%         17.6%         17.3%         16.3%         16.1%         15.7%         14.6%         14.5%         12.7%         12.1%         12.0%         11.4%         11.0%         9.7%         6.4%         0.0%         0.0%

The Gini index is a measure of income inequality, an index which ranges from 0.0 (perfect equality; all earnings equal) to 1.0 (perfect inequality, 1 person receiving all earnings). The Gini index does not measure how affluent or impoverished a community is, but rather how the wealth within that community is distributed. The state Gini index is .4581, and the similar coastal index is .4411. Some less affluent small coastal communities (e.g., Nehalem, Netarts, Pacific City, Oceanside, Langlois) exhibit remarkable income equality (Table 29). In contrast, Cannon Beach and Reedsport both have Gini indices near 0.50

City	Gini Index	Population
Oregon	0.4581	3900343
Coast	0.4411	206958
Cannon Beach	0.5206	1542
Reedsport	0.5033	4107
Port Orford	0.4874	1263
Gold Beach	0.4703	2263
Seaside	0.4695	6481
Newport	0.4687	10045
Neskowin	0.4665	147
Bandon	0.4617	3055
Coos Bay	0.4585	16022
Cape Meares	0.4553	136
Astoria	0.4505	9503
Florence	0.4409	8498
Tillamook	0.4397	4957
North Bend	0.4376	9591
Toledo	0.4209	3449
Rockaway Beach	0.4186	1197

#### Table 29. Coastal Oregon Gini Index

Lakeside	0.4135	1715
Lincoln City	0.4128	7977
Warrenton	0.4083	5089
Dunes City	0.4075	1267
Yachats	0.4012	743
Waldport	0.3976	1922
Garibaldi	0.3921	805
Winchester Bay	0.3901	313
Depoe Bay	0.3894	1622
Gearhart	0.3884	1592
Brookings	0.3883	6350
Wheeler	0.3777	349
Bay City	0.3621	1428
Manzanita	0.3598	413
Pacific City	0.356	905
Netarts	0.3275	934
Nehalem	0.3077	263
Oceanside	0.2901	199
Langlois	0.2205	237

### CONCLUSION

As illustrated throughout this chapter, the fact that coastal Oregon communities typically have a higher proportion of residents over the age of 65 impacts many socioeconomic characteristics of these communities. This large number of retirement-age coastal residents results in a significant proportion of the coastal population receiving retirement and/or social security income, and a lower proportion of residents with earned income. For those that do earn an income, salaries tend to be quite low due to the types of employment opportunities. These factors have contributed to a situation where a large number of coastal households live in poverty or with insufficient incomes. In reviewing the income data, it is clear that certain coastal communities are much more impacted by poverty than others. Highly impacted coastal communities include Tillamook, Port Orford, Lincoln City, Toledo, and Coos Bay.

# CHAPTER 5 COASTAL OREGON HOUSING

Coastal Oregon is a popular destination both for vacations and for retirement. Families often purchase vacation homes on the coast to visit and/or rent out throughout the year. Some owners also purchase these coastal vacation homes with the intent to use the homes as their permanent residence during retirement. Given these coastal home ownership trends, there are a large number of vacant homes on the coast, with many of these houses owned by non-residents.

During 2010, 9% of all houses in Oregon were vacant<sup>29</sup> and 3% of all homes were vacant second homes<sup>30</sup>. In comparison, 24% of all houses on the Oregon coast were vacant, and 16% of all homes were vacant second homes (Table 30).<sup>31</sup> The impact of this large proportion of vacant housing is particularly evident in tourism-based towns. In Rockaway Beach, 55% of all homes were vacant second homes; 54% in Cannon Beach; and 50% in Gearhart. This high investment rate in second homes throughout the coast has significant impacts on both housing affordability and availability. Should a substantial portion of these investors retire to their second homes during the next decade, the cultural, social, and political dynamics of many coastal communities will be greatly affected.

<sup>&</sup>lt;sup>29</sup> A housing unit is vacant if no one is living in it at the time of the interview, the occupants are temporarily absent, or the house is occupied by persons with a usual residence elsewhere (Census housing definition).

<sup>&</sup>lt;sup>30</sup> The vacant second home rate was calculated by dividing the number of homes classified as vacant for seasonal, recreational, or occasional use by the total number of homes. Houses classified as vacant for seasonal, recreational, or occasional use are typically referred to as vacation homes and are intended for occasional use throughout the year (Census housing definition).

<sup>&</sup>lt;sup>31</sup> At the time of publication, 2010 data were the most recent available data for this variable.

City	Vacant 2 <sup>nd</sup>	Vacant	Popu-	Dunes City	18.2%	27.9%	1267
	Home Rate	Rate	lation	Winchester Bay	18.1%	27.0%	313
Oregon	3.3%	9.3%	3900343	Newport	13.8%	21.4%	10045
Coast	15.9%	23.5%	206958	Bay City	10.8%	16.0%	1428
Neskowin	75.4%	84.7%	147	Bandon	10.6%	21.2%	3055
Manzanita	72.0%	75.5%	413	Waldport	10.4%	18.6%	1922
Cape Meares	62.4%	69.1%	136	Port Orford	10.2%	21.4%	1263
Oceanside	60.1%	70.5%	199	Lakeside	9.0%	16.6%	1715
Rockaway Beach	55.5%	63.7%	1197	Gold Boach	7.0%	19.1%	2263
Cannon Beach	54.1%	58.1%	1542	Elerence	7.4/0	17.170	0/00
Gearhart	49.9%	55.2%	1592	Prockings	/.3/0	1/.2/0	(250
Pacific City	46.1%	51.8%	905	Brookings	0.7%	14.0%	0300
Netarts	44.0%	52.8%	934	Langlois	5.5%	11.0%	237
Yachats	40.0%	50.4%	743	Warrenton	5.0%	11.3%	5089
			7.40	Astoria	4.6%	13.9%	9503
Lincoln City	29.5%	39.5%	1911	Reedsport	2.8%	11.7%	4107
Seaside	28.1%	36.7%	6481	Toledo	1.8%	9.7%	3449
Depoe Bay	26.3%	38.3%	1622	Coos Bay	1.4%	7.9%	16022
Wheeler	20.8%	31.5%	349	Tillamook	0.8%	9.4%	4957
Nehalem	20.0%	25.2%	263	North Bend	0.7%	7.6%	9591
Garibaldi	19.5%	26.7%	805				

Table 30. Vacant Second Home Rate and Overall Vacant Rate<sup>12</sup>

<sup>1</sup>Source: Decennial Census 2010

<sup>2</sup>Vacant Second Home Rate = Number vacant seasonal, recreational, or occasional use / total housing units

Among Oregon coastal communities, expensive housing is often located in towns with high vacancy rates. Oregon's median value of an owner-occupied house is \$234,100. The median housing value in Cannon Beach is \$466,900; in Yachats, this value is \$351,100; in Pacific City, it is \$328,900 (Table 31). While the vacant second home rate for Oregon is only 3%, this rate is significantly higher in the aforementioned communities. In Cannon Beach, the vacant second home rate in is 54.1%; in Yachats, it is 40%; in Pacific City, it is 46.1%. Often small communities that rely heavily on tourism have a housing market greatly influenced by vacation homes, many of which are owned by Portland residents. The increased housing costs associated with the second home market interact with the preponderance of low paying service jobs in tourism dependent towns to create housing affordability issues.

City	Median Value	Population	
Oregon	\$234,100	3900343	
Coast	\$208,162	206958	
Neskowin	\$572,500	147	
Cannon Beach	\$466,900	1542	
Manzanita	\$420,000	413	
Yachats	\$351,100	743	
Oceanside	\$347,100	199	
Pacific City	\$328,900	905	
Gearhart	\$308,100	1592	
Cape Meares	\$300,000	136	
Seaside	\$285,900	6481	
Dunes City	\$283,000	1267	
Depoe Bay	\$277,900	1622	
Brookings	\$244,100	6350	
Astoria	\$242,600	9503	
Nehalem	\$238,100	263	
Netarts	\$231,700	934	
Winchester Bay	\$224,200	313	

Table 31. Median Value of Owner-Occupied Homes

Newport	\$221,000	10045
Lincoln City	\$212,700	7977
Warrenton	\$208,100	5089
Wheeler	\$208,000	349
Waldport	\$190,600	1922
Florence	\$188,300	8498
Bay City	\$187,800	1428
Bandon	\$184,500	3055
Rockaway Beach	\$178,000	1197
Port Orford	\$174,300	1263
Gold Beach	\$173,300	2263
North Bend	\$168,200	9591
Tillamook	\$166,300	4957
Garibaldi	\$162,500	805
Coos Bay	\$162,300	16022
Toledo	\$162,100	3449
Lakeside	\$150,000	1715
Reedsport	\$146,700	4107
Langlois	\$109,100	237

As defined by the U.S. Department of Housing and Urban Development (HUD 2013), affordable housing is housing that a family or individual can afford for less than 30% of their income. Since the United States Housing Act of 1937, the federal benchmark has been that a household spending more than 30% of their income on housing was presumed to be unable to afford typical nondiscretionary household expenses (Schwartz and Wilson, 2008). This is particularly true of low income households. In census data, there are two categories of people represented in the housing affordability indices, those who rent and those who own their homes. The proportion of homeowners facing a housing burden<sup>32</sup> in Pacific City is 58%; in Depoe Bay, it is 45%; and in Gearhart, it is 43% (Table 32). These data indicate that nearly half of all homeowners in those communities are paying well over 30% of their income in housing costs. An even higher proportion of renters face a housing burden along the coast. In Pacific City, the housing burden for renters is 100%, in Depoe Bay it is 53%, and in Gearhart it is 63% (Table 32). The combination of insufficient income and expensive housing leads households to forgo necessities such as health insurance or healthy foods (Hoopes et al., 2015).

<sup>&</sup>lt;sup>32</sup> An Oregon household that pays 35% or more of their income on housing costs is defined as a burdened household in census data.

# Table 32. Housing Affordability<sup>1</sup>

City	Housing H Burden: B % Owners %	Housing	Housing Burden: Popu- % Renters lation	Yachats	34%	57%	743
		Burden: % Renters		Brookings	33%	62%	6350
	over 30%	over 30%		Coos Bay	oos Bay 33%	54%	16022
Oregon	31% <sup>2</sup>	45% <sup>2</sup>	3900343	Florence	33%	46%	8498
Coast	58%	54% <sup>3</sup>	206958	Rockaway	33%	52%	1197
Саре	NA	NA	136	Beach		0 / 0/	4845
Meares				Lakeside	32%	34%	1715
Langlois	NA	NA	237	Tillamook	32%	54%	4957
Pacific City	58%	100%	905	Warrenton	32%	56%	5089
Nehalem	50%	13%	263	Garibaldi	31%	66%	805
Depoe Bay	45%	53%	1622	Astoria	30%	46%	9503
Gearhart	43%	63%	1592	Cannon	30%	69%	1542
Bandon	41%	54%	3055	Beach			
Seaside	41%	53%	6481	Manzanita	30%	57%	413
Toledo	40%	49%	3449	Bay City	28%	44%	1428
Neskowin	39%	18%	147	Newport	27%	43%	10045
Gold Beach	38%	/// 0/0	2263	Waldport	26%	46%	1922
Dunce City	200/	44 /0	12/7	North Bend	23%	42%	9591
	30 70	0470	1207	Oceanside	22%	0%	199
Wheeler	37%	27%	349	Notarte	21%	52%	02/.
Port Orford	36%	74%	1263	Winchester	ΖΙ/0	03 /0	734
Lincoln City	35%	51%	7977	Bay	8%	94%	313
Reedsport	34%	50%	4107				

<sup>1</sup>Source: Hoopes et al., 2015 and American Community Survey (ACS) 5-year estimates 2009-2013. <sup>2</sup>Housing burden indicates when a household spends greater than 35% of their income on housing.

<sup>3</sup> Data unavailable for Curry County.

# CHAPTER 6 COMPARISON BETWEEN COAST AND STATE

The communities lining the Oregon coast have many unique socioeconomic attributes that differentiate them from the rest of the state. While these differences have been highlighted throughout this report, this chapter focuses on summarizing the key points of difference.

One of the greatest differences between Oregon and coastal Oregon is the age of residents, which in turn affects multiple other town characteristics. The median age for Oregon residents is 38.9 years, while the median age for coastal residents is 48.8 years, a nearly ten year difference. The proportion of people age 65 and older is 57% higher on the coast (23.4% vs. 14.9%). This high number of retirement-age persons results in a significant number of coastal residents drawing from social security and/or receiving retirement income. Due to the large number of residents receiving retirement benefits, the proportion of the population with earned income is 14% lower on the coast (65.2% vs. 75.7%). The Oregon coast illustrates how community age not only affects the social and cultural aspects of a town, but also influences employment and income characteristics of the local economy.

While the proportion of people age 25 and older that have graduated from high school is nearly identical on the coast and in Oregon, the proportion with a higher education degree is 29% lower on the coast (21.5% vs. 30.1%). The low number of higher education graduates on the coast may relate to the lack of jobs in higher-paying management, professional, and science positions. The coast has 27% fewer persons employed in these industries than the state (7.7% vs. 10.6%). In contrast, employment in traditional tourism industries, which are typically lower-paying, hourly wage jobs, is higher on the coast. Coastal Oregon has 56% more persons employed in the arts, entertainment, recreation, accommodation, and food sectors (15.4% vs. 9.9%), and modestly more persons employed in retail trade (13.5% vs. 12.1%). With the seasonal nature of tourism on the coast (travel data show far more tourists visiting in the summer months), many tourism-dependent positions are seasonal or provide fewer hours in the off-season. The combination of less educated residents and a greater number of tourism-related jobs contributes to the lower median household earned income on the coast compared to the state (\$41,759 vs. \$50,521, 17% less income). Since many coastal residents are retired and not actively employed, a more accurate comparison to portray coastal living conditions would be mean household income is 22% lower on the coast (\$52,267 vs. \$67,315) than statewide.

While some coastal communities experience high poverty rates, the coast as a whole only has about 10% more poverty than the state (18.3% vs. 16.7%). However, in addition to having a higher number of residents living in poverty, the coast also has 26% more residents defined as ALICE (Asset Limited, Income Constrained, Employed; 29% vs. 23%). These residents have jobs, but are still unable to afford basic household necessities. When looking at the ALICE population in conjunction with the coastal population in poverty, the differences between the coast and the rest of Oregon are even more striking.

Another marked difference between the coast and the state is the proportion of vacant homes and vacant second homes. The vacancy rate on the coast is 153% higher than the state (23.5% vs. 9.3%), and the vacant second home rate on the coast is 382% higher than the state (15.9% vs. 3.3%). Wealthier inland residents purchase vacation homes on the coast, which has driven up housing costs in popular tourism destination communities. Towns with numerous vacation homes often employ a significant number of people in the tourism industry to accommodate the visitor populations. The combination of

numerous vacation homes and high employment in the tourism sector creates an environment in some coastal communities where the working poor cannot afford to live in the town where they are employed.

Though not all coastal communities have a large portion of the local economic base in tourism, most do experience large numbers of visitors each year. This focus on tourism combined with an older population on the coast has resulted in socioeconomic conditions significantly different from the rest of the state. As tourism efforts are expanding, particularly on the south coast, the impacts will increase throughout the region in the future.

# CHAPTER 7 COMPARISON BETWEEN COASTAL COMMUNITIES

Coastal Oregon differs from the rest of the state in multiple aspects; however, communities along the coast also vary greatly from each other. The following discussion will outline some of the predominant differences between coastal communities, using communities on the extreme ends of the spectrum to emphasize differences. For statistical purposes, only communities with greater than 1,500 persons are included.<sup>33</sup>

## POPULATION

While the majority of coastal towns have a significant number of retired residents, some communities are comprised of a much younger population (Table 33). Most coastal communities have median ages in the forties and fifties, but three towns, Warrenton, Tillamook, and Toledo have median ages in the thirties. As would be expected, the proportion of residents age 65 and older is positively correlated to the median age of a community (r=0.93) and negatively correlated with the proportion of residents age 18 to 24 years (r=-0.62). The proportion of residents age 65 and older is also correlated to the proportion of residents receiving retirement income (r=0.78) and social security (r=0.92). Communities with greater retirement and social security income are likely to have significantly different economies than those with a larger working population.

Lakeside has the highest proportion of residents over the age of 65, the highest median age, and the second lowest proportion of residents between the ages of 18 and 24 years. Over 40% of Lakeside residents are over the age of 65, with 46.6% receiving retirement income, and 63.2% collecting social security. These statistics indicate that approximately half of the Lakeside population is retired, and thus no longer contributing to the workforce. In contrast, only 11.8% of Warrenton residents are of retirement age, 21.2% are receiving retirement income, and 29.6% are collecting social security. The median age in Warrenton is only 32.1 years, which is the lowest on the coast. This variance in community demographics creates unique social characteristics, income, and expenditure patterns within each community.

<sup>&</sup>lt;sup>33</sup> Statistical comparisons among the coastal communities using correlations were performed. Only variables with moderate or strong correlation coefficients (r) were rank ordered and included in the summary tables presented in this chapter. A strong relationship is indicated by a correlation coefficient of  $\pm$  0.5 to 1.0. A moderate relationship is indicated by a correlation coefficient of  $\pm$  0.3 to 0.5.

City	Age 65+	Med. Age	18-24 Yrs.	Retirement Income	Social Security
Lakeside	1 (40.4%)	1 (59.3)	2 (0.6%)	1 (46.6%)	1 (63.2%)
Florence	2 (36.7%)	2 (57.9)	3 (2.5%)	2 (34.5%)	2 (57.8%)
Bandon	3 (30.4%)	3 (57.8)	1 (0.0%)	6 (28.3%)	9 (43.8%)
Waldport	4 (29.5%)	4 (54.0)	10 (7.5%)	3 (33.0%)	3 (55.6%)
Depoe Bay	5 (29.3%)	5 (53.0)	15 (9.2%)	10 (24.8%)	5 (49.5%)
Reedsport	6 (27.7%)	9 (49.0)	13 (8.6%)	15 (18.7%)	4 (54.3%)
Brookings	7 (27.1%)	8 (52.0)	5 (6.5%)	7 (27.1%)	6 (47.2%)
Gold Beach	8 (22.8%)	6 (52.4)	9 (7.3%)	8 (27.1%)	7 (45.6%)
Cannon Beach	9 (21.7%)	7 (52.4)	18 (11.3%)	18 (15.1%)	12 (42.9%)
Coos Bay	10 (21.0%)	15 (41.8)	16 (9.4%)	5 (28.9%)	11 (43.3%)
Seaside	11 (20.4%)	11 (44.2)	14 (9.0%)	9 (25.9%)	8 (45.4%)
Gearhart	12 (20.2%)	10 (45.2)	4 (6.4%)	4 (31.3%)	10 (43.7%)
Newport	13 (20.1%)	12 (43.6)	11 (7.5%)	14 (20.0%)	13 (38.7%)
North Bend	14 (19.3%)	16 (40.3)	19 (11.9%)	11 (22.4%)	14 (38.2%)
Lincoln City	15 (18.9%)	14 (42.2)	6 (7.1%)	16 (18.0%)	17 (36.1%)
Astoria	16 (18.0%)	13 (42.6)	7 (7.2%)	12 (21.4%)	18 (35.4%)
Tillamook	17 (12.9%)	17 (35.7)	12 (7.6%)	19 (13.3%)	16 (36.3%)
Toledo	18 (12.8%)	18 (35.1)	17 (9.7%)	17 (15.7%)	15 (37.0%)
Warrenton	19 (11.8%)	19 (32.1)	8 (7.2%)	13 (21.1%)	19 (29.6%)

 Table 33. Population Trends Summary Table

## **EMPLOYMENT**

Higher education degrees commonly lead to greater professional development and higher paying job opportunities. Education varies across coastal communities, with greater variation in the proportion of residents that have completed higher education degrees than the proportion of residents that have completed high school. The proportion of residents that have completed high school ranges from 80.8% in Toledo to 95.5% in Gearhart, whereas the proportion that have completed a Bachelor's degree or higher ranges from 10.3% in Toledo to 39.3% in Cannon Beach (Table 34). As previously discussed, Cannon Beach is an affluent, tourism-based community that attracts wealthy retirees and second-home owners. These retirees and second-home owners often tend to be more educated, thus the high proportion of Cannon Beach residents with a college or graduate degree. Toledo is one of the youngest coastal communities with low proportions of residents receiving retirement income or social security. Fewer affluent retirees are drawn to Toledo, and the town has a lower median age, which probably contributes to the lower level of education among the residents.

Somewhat predictably, the proportion of residents age 25 and older that have completed high school positively correlates with the proportion that have earned a higher education degree (r=0.58). In Gearhart, over 95% of the residents are high school graduates, and 34.6% went on to achieve a higher education degree. In contrast, only 84.5% of Reedsport residents completed high school and just 14.2%
completed a higher degree. There is a negative correlation between the proportion of Hispanic or Latino residents and the proportion of residents that have graduated from high school (r=-0.31). Lincoln City has the highest proportion of Hispanic and Latino residents (13.5%), and one of the lowest high school graduate proportions at 85.8%.

The proportions of residents with high school degrees and with higher education degrees both correlate with the proportion employed in professional, management, science, administration, and waste industries (r=0.43; r=0.31). In communities with a more educated population, there tend to be more residents employed in those sectors that typically require greater professional development and education. Less intuitively, the proportion with higher education degrees also positively correlates with the proportion of residents employed in arts, entertainment, recreation, accommodation, and food (r=0.57). However, in a tourism destination, local amenities and tourism demand may explain both patterns. Tourism-dependent communities have amenity characteristics that often prompt wealthier, educated residents to retire in that location. These communities also sustain greater tourism demands, as reflected in community entertainment, lodging, and food service employment data.

There is a strong negative correlation between proportion of residents with a higher education degree and the proportion employed in city services (r=-0.52). City services is primarily comprised of the proportion employed in education. Coastal residents who are more highly educated retirees typically do not have children in the elementary through high school range, and therefore would not need education services. In Cannon Beach, a highly educated community, only 7.7% of the population is employed in the education sector. In contrast, in Reedsport, a community with a low proportion of high school graduates and higher educated residents, 24.3% of the population is employed in the education sector.

Not surprisingly, a higher proportion of highly educated residents positively correlates with higher mean household earnings (r=0.39). This correlation holds true in the Gearhart and Toledo communities compared earlier. Gearhart proportionately has nearly three times as many people with higher education degrees than Toledo, and Gearhart residents also have higher average household earned incomes. Coastal communities that attract people with higher educational attainment tend to be more affluent and economically diverse towns with professional employment opportunities, an older population, a large tourism industry, and fewer residents employed in city services, particularly education.

Table 34. Employment Trends Summary Table

City	Mean Household Earnings	Profes., Sci., Mgmt., Admin., Waste	City Services	Arts, Entertain., Rec., Accom.,Food	%H.S. grad	%Bachelor Degree	%Hispanic/ Latino
Cannon Beach	1 (\$61,841)	10 (8.2%)	19 (19.9%)	1 (32.7%)	12 (89.3%)	1 (39.3%)	4 (11%)
Gold Beach	2 (\$61,800)	17 (3.2%)	4 (43.2%)	5 (22.5%)	7 (91.7%)	10 (22.9%)	17 (2.7%)
Newport	3 (\$59,066)	8 (8.9%)	14 (30.7%)	6 (22.2%)	9 (90.6%)	4 (28.9%)	3 (11.3%)
North Bend	4 (\$58,199)	1 (14.5%)	10 (37.6%)	17 (13.1%)	2 (93.8%)	11 (22.4%)	11 (6.5%)
Warrenton	5 (\$57,644)	15 (5.2%)	11 (37.4%)	15 (14.1%)	8 (90.7%)	14 (19.9%)	9 (7.6%)
Brookings	6 (\$52,282)	18 (2.8%)	2 (43.5%)	18 (12%)	6 (91.7%)	7 (25.5%)	10 (7.4%)
Seaside	7 (\$52,259)	5 (10.2%)	18 (25.2%)	8 (19.6%)	16 (87.5%)	9 (23.2%)	2 (12.7%)
Astoria	8 (\$51,189)	7 (9.2%)	6 (40.1%)	12 (15.7%)	4 (92.6%)	5 (28.5%)	7 (9%)
Reedsport	9 (\$50,011)	14 (5.4%)	5 (40.7%)	11 (15.7%)	18 (84.5%)	16 (14.2%)	8 (8.7%)
Gearhart	10 (\$49,500)	9 (8.9%)	16 (29.7%)	4 (23.2%)	1 (95.5%)	2 (34.6%)	15 (4.4%)
Waldport	11 (\$49,417)	12 (7.5%)	12 (34.5%)	7 (21.7%)	11 (89.7%)	15 (16.7%)	16 (3%)
Coos Bay	12 (\$48,617)	11 (8.1%)	3 (43.4%)	14 (15%)	14 (88.2%)	13 (20.8%)	6 (9.6%)
Toledo	13 (\$44,850)	19 (2.1%)	13 (31.4%)	9 (18.1%)	19 (80.8%)	19 (10.3%)	13 (5.8%)
Depoe Bay	14 (\$44,080)	2 (14.2%)	15 (29.8%)	2 (30.6%)	3 (93.5%)	3 (33.5%)	12 (6.3%)
Florence	15 (\$43,342)	6 (9.8%)	9 (37.7%)	10 (16.8%)	5 (91.9%)	8 (24.6%)	18 (1.7%)
Tillamook	16 (\$42,967)	16 (3.7%)	8 (38.5%)	13 (15.7%)	15 (88.2%)	17 (12.8%)	5 (10.7%)
Lincoln City	17 (\$42,228)	4 (11.4%)	17 (27.7%)	3 (29.1%)	17 (85.8%)	12 (21.9%)	1 (13.5%)
Bandon	18 (\$41,149)	13 (6.7%)	7 (40%)	16 (14%)	13 (88.7%)	6 (26.7%)	19 (1.5%)
Lakeside	19 (\$39,522)	3 (12.6%)	1 (49.6%)	19 (11.8%)	10 (90.4%)	18 (10.4%)	14 (4.7%)

#### HOUSING STOCK AND AFFORDABILITY

Coastal housing costs and availability are greatly affected by absentee ownership, which is prevalent in some coastal towns, particularly in the more tourism dependent communities (Table 35). In Cannon Beach, 58.1% of the housing stock is vacant, with 54.1% of the total housing stock being second homes<sup>34</sup>. Comparatively, in North Bend 7.6% of the houses are vacant with only 0.7% of the housing stock used as second homes. These numbers demonstrate the difference in the number of second homes between a tourism-dependent town and a community with an economy based on natural resources and local consumption.

Vacant housing rate and vacant second home rate within a community are both strongly correlated with median house value (r=0.99; r=0.84). The proportion of a community employed in the tourism sector (arts, entertainment, recreation, accommodation, and food) is also positively correlated to the vacant second home rate (r=0.76), and to the median house value (r=0.66). Tourism-based towns tend to have more vacation homes and higher house values. A strong vacation home real estate market tends to drive up housing prices, which leads to housing affordability issues when combined with low earned income employment patterns. One can expect that a large proportion of these vacant homes are owned by an older age cohort, and a substantial proportion of those people will reach retirement within the next decade. It is unknown whether they will retire to these second homes, or whether these homes are investment properties. However, should even a third of these vacant homes become owner-occupied by retirees, the implications for coastal communities are profound.

<sup>&</sup>lt;sup>34</sup> The vacant second home rate was calculated by dividing the number of homes classified as vacant for seasonal, recreational, or occasional use by the total number of homes. Houses classified as vacant for seasonal, recreational, or occasional use are typically referred to as vacation homes and are intended for occasional use throughout the year (Census housing definition).

City	Median House Value	Vacant 2nd Home Rate	Vacant Rate
Cannon Beach	1 (\$466,900)	1 (54.1%)	1 (58.1%)
Gearhart	2 (\$308,100)	2 (49.9%)	2 (55.2%)
Seaside	3 (\$285,900)	4 (28.1%)	5 (36.7%)
Depoe Bay	4 (\$277,900)	5 (26.3%)	4 (38.3%)
Brookings	5 (\$244,100)	12 (6.9%)	12 (14.6%)
Astoria	6 (\$242,600)	14 (4.6%)	13 (13.9%)
Newport	7 (\$221,000)	6 (13.8%)	6 (21.4%)
Lincoln City	8 (\$212,700)	3 (29.5%)	3 (39.5%)
Warrenton	9 (\$208,100)	13 (5.0%)	15 (11.3%)
Waldport	10 (\$190,600)	8 (10.4%)	9 (18.6%)
Florence	11 (\$188,300)	11 (7.3%)	10 (17.2%)
Bandon	12 (\$184,500)	7 (10.6%)	7 (21.2%)
Gold Beach	13 (\$173,300)	10 (7.4%)	8 (19.1%)
North Bend	14 (\$168,200)	19 (0.7%)	19 (7.6%)
Tillamook	15 (\$166,300)	18 (0.8%)	17 (9.4%)
Coos Bay	16 (\$162,300)	17 (1.4%)	18 (7.9%)
Toledo	17 (\$162,100)	16 (1.8%)	16 (9.7%)
Lakeside	18 (\$150,000)	9 (9.0%)	11 (16.6%)
Reedsport	19 (\$146,700)	15 (2.8%)	14 (11.7%)

Table 35. Housing Stock Summary Table

Among coastal communities, the median household income is positively correlated with the median house value (r=0.35; Table 36). This outcome could be expected since those with greater income typically purchase more expensive homes. However, residents who cannot afford to purchase homes must rent, and median house value is also strongly correlated with renter housing burden (r=0.70). Residents in these lower-income households are more likely to struggle with rent and household expenses.

In Cannon Beach, where the median house value is \$466,900, 70% of the residents who live in rental housing are paying more than 30% of their income for rent alone. With 54% of the housing stock consisting of vacant second homes, the housing situation in Cannon Beach illustrates how residents' housing costs are impacted when affluent nonresidents purchase second homes on the coast. Gearhart is another example of a coastal community with high housing costs, a high vacant second home rate, and high renter housing burden. Many Cannon Beach and Gearhart residents working in the available low-paying tourism-based jobs while renting a house cannot afford the house payments and basic household necessities. These residents often live in ALICE households. The proportion of the population defined as ALICE is inversely correlated with the median household income (r=-0.40), as would be expected. As median income in a town decreases, more working residents are unable to afford their basic needs such as health and child care. Despite being fully employed, the ALICE population still struggles to afford basic necessities.

Table	36.	Affor	dability	Summary	Table
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City	Median House Value	Renter Housing Burden	ALICE	Median Household Income
Reedsport	1 (\$146,700)	11 (50%)	9 (27%)	2 (\$31,576)
Lakeside	2 (\$150,000)	19 (34%)	16 (25%)	11 (\$41,037)
Toledo	3 (\$162,100)	12 (49%)	12 (26%)	14 (\$44,034)
Coos Bay	4 (\$162,300)	6 (54%)	5 (29%)	6 (\$36,360)
Tillamook	5 (\$166,300)	7 (54%)	6 (29%)	1 (\$29,172)
North Bend	6 (\$168,200)	18 (42%)	10 (27%)	13 (\$43,097)
Gold Beach	7 (\$173,300)	16 (44%)	14 (25%)	18 (\$47,903)
Bandon	8 (\$184,500)	5 (54%)	1 (36%)	5 (\$36,156)
Florence	9 (\$188,300)	13 (46%)	2 (36%)	3 (\$32,459)
Waldport	10 (\$190,600)	14 (46%)	4 (31%)	7 (\$38,264)
Warrenton	11 (\$208,100)	4 (56%)	3 (32%)	8 (\$38,693)
Lincoln City	12 (\$212,700)	10 (51%)	7 (29%)	4 (\$35,524)
Newport	13 (\$221,000)	17 (43%)	15 (25%)	9 (\$40,448)
Astoria	14 (\$242,600)	15 (46%)	13 (25%)	17 (\$45,104)
Brookings	15 (\$244,100)	3 (62%)	19 (21%)	12 (\$41,704)
Depoe Bay	16 (\$277,900)	8 (53%)	8 (28%)	16 (\$45,057)
Seaside	17 (\$285,900)	9 (53%)	11 (26%)	10 (\$41,037)
Gearhart	18 (\$308,100)	2 (63%)	18 (21%)	19 (\$50,179)
Cannon Beach	19 (\$466,900)	1 (69%)	17 (22%)	15 (\$44,423)

## POVERTY

Poverty is prevalent along the Oregon coast and is inversely correlated with the proportion of residents with high school degrees (r=-0.43; Table 37), and with the proportion of higher education degrees (r=-0.31). Those with higher educational attainment tend to receive higher incomes and therefore avoid poverty. Poverty is also positively correlated with the Gini index (r=0.41). Communities with higher income inequality are likely to have more residents living in poverty. Finally, poverty is positively correlated with the proportion of Hispanic/Latino residents (r=0.48), and negatively correlated with the proportion of white residents (r=-0.31). Tillamook is one of the communities with the greatest amount of poverty on the Oregon coast. The poverty rate in Tillamook is over twice as high as the poverty rate in Gearhart. In Tillamook, over 10% of the population identifies as Hispanic or Latino and the high school graduate proportion is 88.2%. In contrast, Gearhart has proportionally half as many Hispanic/Latino residents age 25+ have completed high school.

As would be expected, the proportion of a population in poverty is also positively correlated to the proportion receiving Supplemental Nutrition Assistance Program (SNAP) benefits (i.e., "food stamps"; r=0.48). In communities where a significant amount of the population is receiving SNAP benefits, there are fewer high school graduates (r=0.72). In turn, the proportion of high school graduates in a

community is positively correlated with per capita income (r=0.48). Coastal residents that did not earn a high school diploma or GED are more likely to be employed in lower-paying jobs, thus decreasing the town's per-capita income. Returning to the Tillamook and Gearhart populations, we can observe the correlation between SNAP benefits and per capita income. Over 30% of the Tillamook population receives SNAP benefits and the per capita income is the lowest on the coast at \$17,902. In Gearhart less than 10% of the population receives SNAP benefits, and the per capita income is \$27,234. In towns with better educated residents, the residents are more likely to have higher paying jobs, and thus avoid poverty and the need for SNAP benefits.

City	Poverty	Per Capita Income	With SNAP Benefits	%H.S. Grad	%Hispanic/ Latino	Gini Index
Tillamook	1 (34.6%)	1 (\$17,902)	2 (30.2%)	5 (88.2%)	5 (10.7%)	6 (0.4397)
Reedsport	2 (25.3%)	6 (\$21,894)	5 (24.8%)	2 (84.5%)	8 (8.7%)	9 (0.5033)
Lincoln City	3 (23.7%)	3 (\$20,895)	7 (21.9%)	3 (85.8%)	1 (13.5%)	7 (0.4128)
Cannon Beach	4 (23.3%)	19 (\$31,449)	16 (17.3%)	8 (89.3%)	4 (11.0%)	17 (0.5206)
Coos Bay	5 (21.6%)	4 (\$21,335)	4 (28.0%)	6 (88.2%)	6 (9.6%)	5 (0.4585)
Lakeside	6 (20.8%)	8 (\$22,689)	13 (18.9%)	10 (90.4%)	14 (4.7%)	16 (0.4135)
Toledo	7 (20.2%)	2 (\$19,729)	1 (32.2%)	1 (80.8%)	13 (5.8%)	12 (0.4209)
Astoria	8 (19.9%)	13 (\$26,089)	12 (19.7%)	16 (92.6%)	7 (9.0%)	13 (0.4505)
Gold Beach	9 (19.5%)	12 (\$25,865)	9 (21.6%)	13 (91.7%)	17 (2.7%)	14 (0.4703)
Newport	10 (18.5%)	14 (\$26,407)	11 (19.8%)	11 (90.6%)	3 (11.3%)	15 (0.4687)
Warrenton	11 (18.1%)	5 (\$21,404)	6 (24.7%)	12 (90.7%)	9 (7.6%)	3 (0.4083)
Seaside	12 (17.5%)	17 (\$27,127)	8 (21.8%)	4 (87.5%)	2 (12.7%)	11 (0.4695)
Florence	13 (17.1%)	10 (\$24,139)	15 (17.6%)	15 (91.9%)	18 (1.7%)	2 (0.4409)
Depoe Bay	14 (16.9%)	15 (\$26,415)	17 (14.6%)	17 (93.5%)	12 (6.3%)	8 (0.3894)
Gearhart	15 (16.2%)	18 (\$27,234)	19 (9.7%)	19 (95.5%)	15 (4.4%)	18 (0.3884)
Bandon	16 (15.0%)	11 (\$24,609)	14 (18.6%)	7 (88.7%)	19 (1.5%)	1 (0.4617)
North Bend	17 (14.6%)	7 (\$22,324)	10 (20.1%)	18 (93.8%)	11 (6.5%)	10 (0.4376)
Waldport	18 (12.6%)	9 (\$23,588)	3 (28.3%)	9 (89.7%)	16 (3.0%)	4 (0.3976)
Brookings	19 (10.0%)	16 (\$26,786)	18 (12.7%)	14 (91.7%)	10 (7.4%)	19 (0.3883)

#### Table 37. Poverty Summary Table

# CONCLUSION

This report focuses on the socioeconomic differences between the Oregon coast and the state, and also between Oregon coastal communities. The historic lack of easy transportation between towns, in conjunction with the varying natural resources available at each location, resulted in unique coastal communities developing. As transportation opportunities improved, the influence of urban proximity has become more pronounced. These various influences have resulted in some very distinct differences among the Oregon coastal communities.

While the coast has continued to grow, the coastal population is still only approximately 5% of Oregon's population. This is a strikingly low proportion when compared to the coastal communities in neighboring coastal states. In the recent past, the retiree population has grown more than other age groups, and there is an out-migration of young adults, contributing further to the aging coastal population. This trend is expected to continue in all coastal counties for the next fifty years. The high proportion of retirees on the coast impacts the economic conditions by bringing in a large amount of retirement income and by creating a smaller workforce of younger residents with families.

Originally people were drawn to the coast for natural resource opportunities such as fishing and timber. Natural resource opportunities have since decreased, and now tourism is increasingly important. However, the tourism industry typically employs people in low-paying, seasonal jobs. In many tourismbased communities there is a persistent issue of lower household earned income, which results in poverty among working families. There are currently efforts to increase tourism on the coast, particularly on the south coast. At the present time, however, there is a low unemployment rate on the coast, so increasing tourism jobs will likely not improve the living conditions of many working, poor families. Consistent employment with higher wages is necessary to decrease poverty.

Coastal housing stocks are limited by available land, which is limited by geography, state planning policy, and land ownership patterns. Towns with a tourism-based economy typically have more expensive homes, though most working in the tourism industries are making low wages. The above trends regarding residents' income and housing affordability are exacerbated when an exceptionally large proportion of available houses are second homes. A common term for these trends is gentrification, whereby ex-urban, affluent populations move into amenity rich rural areas, and drive up housing values. As retirement patterns accelerate over the next decade, these demographic patterns will likely become more pronounced. How the trends will impact the region over the next decade is an open question, one which requires careful consideration. The public policy implications are numerous, and relevant across many agencies and entities at all levels of government. There is a very real possibility that coastal Oregon will become essentially two communities, separated by a gulf of income and home ownership inequality.

Table 39. Oregon Pop	oulation and Ho	ousing Cha	racteristic	s in Recent	Years (Sou	urce: 2010	U.S. Census a	and 2010-201	.4 A	CS).					
	Population Characteristics Hou										using Chara	acteristics			
	2014									2	010				
County/City	Population	Under 18	18-64 yrs	65 and over	Median Age	White Share	Education 25+ H.S.	Individual Poverty Rate		Average House- hold Size	Housing Units	Occupied Rate	Vacant Rate	Renter Occu- pied Rate	Vacant Second Home Rate
Oregon	3900343	16.10%	69%	14.90%	38.9	85.10%	89.50%	16.70%		2.47	1675562	90.70%	9.30%	34.30%	3.30%
Coast	206958	18%	58.66%	23.35%	48.8	90.01%	89.38%	18.25%		2.23	121301	76.46%	23.54%	34.69%	15.90%
Astoria	9503	18.90%	63.10%	18%	42.6	88.50%	92.60%	19.90%		2.15	4980	86.10%	13.90%	45.00%	4.60%
Bandon	3055	12.50%	57.10%	30.40%	57.8	96.50%	88.70%	15.00%		2.01	1860	78.80%	21.20%	36.50%	10.60%
Bay City	1428	21.10%	60.10%	18.80%	48	95.40%	90.10%	11.70%		2.36	650	84.00%	16.00%	21.10%	10.80%
Brookings	6350	12.90%	60%	27.10%	52	87.90%	91.70%	10.00%		2.26	3183	85.40%	14.60%	38.90%	6.90%
Cannon Beach	1542	11.20%	67.10%	21.70%	52.4	84.80%	89.30%	23.30%		2.07	1812	41.90%	58.10%	17.60%	54.10%
Cape Meares	136	0%	37.50%	62.50%	68.2	100%	100.00%	13.20%		1.77	181	30.90%	69.10%	5.00%	62.40%
Coos Bay	16022	20.70%	58.30%	21%	41.8	84.40%	88.20%	21.60%		2.27	6879	92.10%	7.90%	42.20%	1.40%
Depoe Bay	1622	8.10%	62.60%	29.30%	53	95.30%	93.50%	16.90%		1.96	1158	61.70%	38.30%	20.90%	26.30%
Dunes City	1267	12.90%	50.10%	37%	59.2	93.40%	95.80%	12.80%		2.14	845	72.10%	27.90%	10.10%	18.20%
Florence	8498	12.60%	50.70%	36.70%	57.9	94%	91.90%	17.10%		1.98	5103	82.80%	17.20%	31.60%	7.30%
Garibaldi	805	17.30%	60.50%	22.20%	51	97.80%	92.70%	19.60%		1.99	524	73.30%	26.70%	21.40%	19.50%
Gearhart	1592	22.70%	57.10%	20.20%	45.2	94.30%	95.50%	16.20%		2.25	1450	44.80%	55.20%	11.20%	49.90%
Gold Beach	2263	14.60%	62.60%	22.80%	52.4	92.60%	91.70%	19.50%		2.05	1322	80.90%	19.10%	33.00%	7.40%
Lakeside	1715	15.30%	44.30%	40.40%	59.3	95.80%	90.40%	20.80%		2.08	967	83.40%	16.60%	16.60%	9.00%
Langlois	237	21.90%	60%	18.10%	49.3	100%	81.60%	39.20%		1.82	109	89.00%	11.00%	23.90%	5.50%
Lincoln City	7977	23.30%	57.80%	18.90%	42.2	85.30%	85.80%	23.70%		2.14	6025	60.50%	39.50%	32.50%	29.50%
Manzanita	413	16.90%	49.40%	33.70%	48	89.10%	96.20%	14.30%		1.89	1285	24.50%	75.50%	6.50%	72.00%
Nehalem	263	14.40%	53.70%	31.90%	52.8	98.90%	91.70%	3.00%		2.34	155	74.80%	25.20%	20.60%	20.00%
Neskowin	147	3.40%	51%	45.60%	64.6	100%	100.00%	19.00%		1.89	464	15.30%	84.70%	3.70%	75.40%
Netarts	934	10.60%	55.90%	33.50%	60.2	93.80%	95.10%	10.30%		2.04	775	47.20%	52.80%	14.60%	44.00%
Newport	10045	19.60%	60.30%	20.10%	43.6	85%	90.60%	18.50%		2.22	5540	78.60%	21.40%	39.30%	13.80%
North Bend	9591	23.20%	57.50%	19.30%	40.3	87.80%	93.80%	14.60%		2.33	4450	92.40%	7.60%	41.80%	0.70%
Oceanside	199	9%	52.30%	38.70%	55	90.50%	100.00%	3.50%		1.89	647	29.50%	70.50%	6.00%	60.10%
Pacific City	905	5.40%	47.60%	47%	62.9	95.90%	90.60%	17.70%		2.04	705	48.20%	51.80%	11.80%	46.10%
Port Orford	1263	17.90%	52.70%	29.40%	53.9	98.60%	87.60%	31.70%		1.86	767	78.60%	21.40%	25.80%	10.20%
Reedsport	4107	18.50%	53.80%	27.70%	49	89.50%	84.50%	25.30%		2.11	2207	88.30%	11.70%	32.20%	2.80%
Rockaway Beach	1197	14.10%	55.50%	30.40%	57.6	94.40%	95.00%	14.80%		1.97	1823	36.30%	63.70%	11.70%	55.50%
Seaside	6481	20.20%	59.40%	20.40%	44.2	88.60%	87.50%	17.50%		2.16	4487	63.30%	36.70%	35.10%	28.10%
Tillamook	4957	25.30%	61.80%	12.90%	35.7	90.50%	88.20%	34.60%		2.41	2248	90.60%	9.40%	52.70%	0.80%
Toledo	3449	25.20%	62%	12.80%	35.1	92.30%	80.80%	20.20%		2.6	1474	90.30%	9.70%	36.40%	1.80%
Waldport	1922	13.50%	57%	29.50%	54	92.10%	89.70%	12.60%		2.08	1196	81.40%	18.60%	28.20%	10.40%

Warrenton	5089	29.20%	59%	11.80%	32.1	91.40%	90.70%	18.10%	2.45	2196	88.70%	11.30%	35.10%	5.00%
Wheeler	349	15.20%	49.80%	35%	51.5	100%	91.80%	10.40%	1.87	289	68.50%	31.50%	29.10%	20.80%
Winchester Bay	313	0.30%	37.40%	62.30%	74.3	96.50%	94.20%	4.90%	1.88	270	73.00%	27.00%	22.60%	18.10%
Yachats	743	8.70%	51.70%	39.60%	61.8	80.30%	92.60%	13.10%	1.72	807	49.60%	50.40%	18.60%	40.00%

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## APPENDIX A CANNON BEACH CASE STUDY

# **CANNON BEACH CASE STUDY**

In this chapter, Cannon Beach is discussed as a case study to connect the previous chapters on employment industries, demographic trends, and housing. The purpose is to illustrate how socioeconomic community characteristics interact and impact each other.

Cannon Beach, with a population of 1,542, is heavily reliant on tourism. Nearly one-third of the working population with earned income is employed in the tourism sector, the highest proportion employed in that sector among all Oregon coastal towns (with populations greater than 400 residents). Compared to both the rest of the coast and the state, Cannon Beach also has approximately double the proportion of people employed in real estate. This situation is indicative of the second home housing demand in that community, a town with 54% of the housing stock devoted to second homes and a 58% vacancy rate. Cannon Beach has a much lower proportion of the working class employed in city service occupations that serve residents, such as public administration and education. Only 20% of Cannon Beach's working population is employed in these industries, compared to 38% of the working population on the coast and 37% across the entire state. These economic sector employment data for the community highlight that Cannon Beach is a town largely occupied by and catered to visitors or second home owners, not locals.

Cannon Beach has a higher median age than the rest of the coast (52 years vs. 49 years). However, Cannon Beach also has a lower proportion of residents age 65+ and a higher proportion of residents age 18-24. These data suggest that Cannon Beach has an older, but larger working population than most other coastal communities. The median age and proportion in retirement age is still higher in Cannon Beach than statewide. However, the proportion between 18-24 years is also higher in Cannon Beach than in Oregon. Compared to the state, this low proportion of Cannon Beach residents in retirement is reflected in the low proportion receiving retirement income. Only 15% of Cannon Beach residents receive retirement income while this number is 26% coastwide and 19% statewide. Given the large proportion of second homes in the housing stock, a key consideration for the community will be whether these houses become owner occupied retirement homes as the baby boomer generation retires over the next decade.

The proportion of residents with high school diplomas in Cannon Beach is similar to both the state and the coast. The proportion with a higher education degree in Cannon Beach is nearly double the coastwide proportion (39.3% vs. 21.5%), and 30% higher than the statewide proportion (39.3% vs. 30.1%). As will be discussed subsequently in more detail, Cannon Beach is an affluent community. Higher salary positions are typically held by employees with higher education degrees, therefore one would expect Cannon Beach to have a more educated population.

Cannon Beach has a strikingly low unemployment rate at just 2%. This is 69% lower than the coast rate (1.7% vs. 5.5%), and 74% lower than the state (1.7% vs. 6.6%). Few residents could afford to live in Cannon Beach without employment options. The per capita income in Cannon Beach is 30% higher than the coast (\$31,449 vs. \$24,145) and 16% higher than the state (\$31,449 vs. \$27,173). Ironically, the town of Cannon Beach also has a high poverty rate. The individual poverty rate is 27% higher than the coast (23.3% vs. 18.3%), and 40% higher than the state average (23.3% vs. 16.7%). As would be expected given these circumstances, Cannon Beach exhibits less income equality, as measured by the Gini index, than

the state average (0.5206 vs. 0.4581).<sup>35</sup> There is an income gap between the more affluent, likely more educated residents, and the less affluent residents, many of whom are probably employed in the lower wage tourism sector.

The housing vacancy rates underline the extent to which Cannon Beach is dependent on out-of-town visitors. Over half of the houses in Cannon Beach are classified as second homes, which is 240% higher than the coast (54.1% vs. 15.9%), and 1,539% higher than the state (54.1% vs. 3.3%). Furthermore, the median owner-occupied house value in Cannon Beach is \$466,900, which is nearly double the state median home value (\$466,900 vs. \$234,100), and 115% higher than the coast median (\$466,900 vs. \$208,162). Cannon Beach has been successfully marketed as a premier tourism destination on the Oregon coast, which has increased real estate demand and housing costs. Due to these factors, many locals working in the tourism industry and other low-paying industries cannot afford to purchase a house in Cannon Beach. These residents instead choose to rent. The housing burden for homeowners is relatively low compared to the rest of the coast (30%) because those are typically the residents that can afford to buy these high-priced homes. Conversely, the housing burden for renters is one of the highest on the coast (69%). Despite low unemployment in Cannon Beach, families still cannot afford to purchase basic household necessities and pay their rent each month. These data provide an example where the financial stresses for many working families in this tourism dependent community are quite significant. Clearly, affordable local housing for working families is a concern.

While the Cannon Beach example is an extreme, the interactions between poverty, low household income among working families, and high average housing costs are stressors across nearly all of the coastal communities. Cannon Beach was selected to illustrate this dynamic because it is one of the more heavily tourism dependent towns, with a strong second home real estate market, and the impacts from this tourism-based economy are more evident in this community. Many coastal communities with tourism as a key component of their economic base probably experience similar effects.

<sup>&</sup>lt;sup>35</sup> The Gini index for Cannon Beach was significantly higher (0.6320) in 2012. This dramatic change in two years was not investigated for this report. It may be explained by improvement in tourism income, census sampling error, or other events.

**APPENDIX B** COASTAL COMMUNITY EMPLOYMENT CHARTS

#### **Employment Charts by Community**

To illustrate the economic base of the larger coastal communities, this appendix contains pie charts that display the proportion of the working population in each coastal community employed in each economic sector. Pie charts were only created for communities with populations greater than 500 persons. For specific proportions, refer to table 5 and tables 7-12 in chapter 3.













## APPENDIX C NOAA COMMUNITY PROFILES

## **Community Profiles**

A report produced by NOAA (Norman et al., 2007) contains profiles of Oregon, Washington, and California communities with a strong commercial fishing economic sector. These profiles provide information on the economic, social, demographic, historic, and governmental characteristics of the communities on west coast. The majority of information used in these profiles is drawn from early-2000 data. Nineteen of the 35 Oregon coastal communities discussed in this report were profiled. The full report can be found here:

https://www.nwfsc.noaa.gov/assets/25/499\_01082008\_153910\_CommunityProfilesTM85WebFinalSA.pdf.

For ease of accessibility, the link to the NOAA coastal community profile for each Oregon community that is also included in this report is posted below.

#### Astoria

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/As toria\_OR.pdf

#### Bandon

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/B andon\_OR.pdf

### Brookings

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/Br ookings\_OR.pdf

## Coos Bay

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/Co osBay\_OR.pdf

#### **Depoe Bay**

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/D epoe\_Bay\_OR.pdf

#### Florence

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/FL orence\_OR.pdf

#### Garibaldi

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/Ga ribaldi\_OR.pdf

#### Gold Beach

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/Go ld\_Beach\_OR.pdf

#### Newport

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/N ewport\_OR.pdf

#### North Bend

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/N orthBend\_OR.pdf

#### **Pacific City**

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/Pa cific\_City\_OR.pdf

#### **Port Orford**

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/Po rtOrford\_OR.pdf

#### Reedsport

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/Reedsport\_OR.pdf

#### **Rockaway Beach**

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/R ockaway\_Beach\_OR.pdf

#### Seaside

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/Se aside\_OR.pdf

#### Tillamook

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/Til lamook\_OR.pdf

#### Toledo

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/To ledo\_OR.pdf

#### Warrenton

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/W arrenton\_OR.pdf

#### Winchester Bay

https://www.nwfsc.noaa.gov/research/divisions/cb/ecosystem/humandim/communityprofiles/Oregon/WinchesterBay\_OR.pdf

## **APPENDIX D** NOAA SOCIOECONOMIC INDICATORS

## **NOAA Socioeconomic Indicators**

The NOAA Human Dimensions team is currently working on a series of reports involving social indicators of all coastal communities in the U.S. The final results for Alaska and the West Coast are not yet published. However, a map is available that allows the user to search any coastal community and find the relative ranking (high, medium or low) of several social indicators for that community. Rankings are relative to all communities in the index, therefore each Oregon coastal community is being compared to all coastal communities nationwide. A future publication with numerical indices and regional comparisons will be useful. A link to the Social Indicator Map can be found here: http://www.st.nmfs.noaa.gov/humandimensions/social-indicators/map.

The social indicators on the web site are placed within four categories: social vulnerability; gentrification pressures; sea level rise risk; and fishing engagement and reliance. The definitions of each category and the variables within each category are from the NOAA website indicator definitions page found here: <a href="http://www.st.nmfs.noaa.gov/humandimensions/social-indicators/ind-categories">http://www.st.nmfs.noaa.gov/humandimensions/social-indicators/ind-categories</a>.

For ease of accessibility, the social indicators for each Oregon coastal community discussed in this report are posted below.

# Social Vulnerability Indices (social factors that can shape either an individual or community's ability to adapt to change):

Labor force characterizes the strength and stability of the labor force and employment opportunities that may exist. A high rank means likely fewer employment opportunities and a more vulnerable population.

Labor force indices are <u>high</u> in the following communities: Bandon, Bay City, Cape Meares, Dunes City, Florence, Lakeside, Manzanita, Nehalem, Neskowin, Oceanside, Port Orford, Reedsport, Rockaway Beach, Waldport, Wheeler, Winchester Bay, Yachats

Labor force indices are <u>medium/high</u> in the following communities: Brookings, Coos Bay, Depoe Bay, Garibaldi, Lincoln City, Netarts, Pacific City

Labor force indices are <u>medium</u> in the following communities: Astoria, Cannon Beach, Gearhart, Gold Beach, Newport, North Bend, Toledo

Labor force indices are <u>low</u> in the following communities: Seaside, Tillamook, Warrenton

Housing characteristics is a measure of infrastructure vulnerability and includes factors that indicate housing that may be vulnerable to coastal hazards. A high rank means a more vulnerable infrastructure and a more vulnerable population. On the other hand, the opposite interpretation might be that more affordable housing could be less vulnerability for some populations.

Housing characteristics indices are <u>high</u> in the following communities: Bandon, Coos Bay, Florence, Gold Beach, Lakeside, Reedsport, Rockaway Beach, Waldport, Wheeler Housing characteristics indices are <u>medium/high</u> in the following communities: Astoria, Bay City, Brookings, Cannon Beach, Depoe Bay, Dunes City, Garibaldi, Lincoln City, Nehalem, Netarts, Newport, North Bend, Oceanside, Pacific City, Port Orford, Seaside, Tillamook, Toledo, Warrenton

Housing characteristics indices are <u>medium</u> in the following communities: Gearhart, Yachats Housing characteristics indices are <u>low</u> in the following communities: None

Poverty is a commonly used indicator of vulnerable populations. A high rank indicates a high rate of poverty and a more vulnerable population.

Poverty index is <u>high</u> in the following communities: Lincoln City, Rockaway Beach, Seaside, Tillamook, Toledo

Poverty index is <u>medium/high</u> in the following communities: Bay City, Cannon Beach, Garibaldi, North Bend, Pacific City, Port Orford, Reedsport, Waldport

Poverty index is <u>medium</u> in the following communities: Astoria, Bandon, Coos Bay, Gold Beach, Lakeside, Newport

Poverty index is <u>low</u> in the following communities: Brookings, Depoe Bay, Dunes City, Florence, Gearhart, Manzanita, Nehalem, Netarts, Warrenton, Wheeler, Yachats

Population composition shows the presence of populations who are traditionally considered more vulnerable due to circumstances often associated with low incomes and fewer resources. A high rank indicates a more vulnerable population.

Population composition indices are <u>high</u> in the following communities: None Population composition indices are <u>medium</u> in the following communities: Cannon Beach, Lincoln City, Tillamook

Population composition indices are <u>low</u> in the following communities: Astoria, Bandon, Bay City, Brookings, Cape Meares, Coos Bay, Depoe Bay, Dunes City, Florence, Garibaldi, Gearhart, Gold Beach, Lakeside, Manzanita, Nehalem, Neskowin, Netarts, Newport, North Bend, Oceanside, Pacific City, Port Orford, Reedsport, Rockaway Beach, Seaside, Toledo, Waldport, Warrenton, Wheeler, Winchester Bay, Yachats

Personal disruption represents factors that disrupt a community member's ability to respond to change because of personal circumstances affecting family life or educational levels or propensity to be affected by poverty. A high rank indicates more personal disruption and a more vulnerable population.

Personal disruption indices are <u>high</u> in the following communities: Lakeside Personal disruption indices are <u>medium/high</u> in the following communities: Garibaldi, Lincoln

City, North Bend, Pacific City, Reedsport, Toledo

Personal disruption indices are <u>medium</u> in the following communities: Bandon, Cannon Beach, Coos Bay, Gold Beach, Newport, Port Orford, Rockaway Beach, Seaside, Tillamook, Waldport, Warrenton, Wheeler

Personal disruption indices are <u>low</u> in the following communities: Astoria, Bay City, Brookings, Cape Meares, Depoe Bay, Dunes City, Florence, Gearhart, Manzanita, Nehalem, Neskowin, Netarts, Oceanside, Winchester Bay, Yachats

# Gentrification Pressure Indices (factors that over time may indicate a threat to the viability of a commercial or recreational working waterfront, including infrastructure):

Housing Disruption represents factors that indicate a fluctuating housing market where some displacement may occur due to rising home values and rents. A high rank means more vulnerability for those in need of affordable housing and a population more vulnerable to gentrification.

Housing disruption indices are <u>high</u> in the following communities: None Housing disruption indices are <u>medium/high</u> in the following communities: Port Orford Housing disruption indices are <u>medium</u> in the following communities: North Bend, Oceanside Housing disruption indices are <u>low</u> in the following communities: Astoria, Bandon, Bay City, Brookings, Cannon Beach, Coos Bay, Depoe Bay, Dunes City, Florence, Garibaldi, Gearhart, Gold Beach, Lakeside, Lincoln City, Manzanita, Nehalem, Netarts, Newport, Pacific City, Reedsport, Rockaway Beach, Seaside, Tillamook, Toledo, Waldport, Warrenton, Wheeler, Yachats

Retiree migration characterizes areas with a higher concentration of retirees and elderly people in the population. A high rank indicates a population more vulnerable to gentrification as retirees seek out the amenities of coastal living.

Retiree migration indices are <u>high</u> in the following communities: Cape Meares, Dunes City, Florence, Garibaldi, Lakeside, Manzanita, Nehalem, Neskowin, Netarts, Oceanside, Port Orford, Reedsport, Rockaway Beach, Wheeler, Winchester Bay, Yachats

- Retiree migration indices are <u>medium/high</u> in the following communities: Bandon, Bay City, Brookings, Coos Bay, Gearhart, Waldport
- Retiree migration indices are <u>medium</u> in the following communities: Astoria, Cannon Beach, Depoe Bay, Gold Beach, Lincoln City, Newport, North Bend, Pacific City
- Retiree migration indices are <u>low</u> in the following communities: Seaside, Tillamook, Toledo, Warrenton

Urban sprawl describes areas experiencing gentrification through increasing population and higher costs of living. A high rank indicates a population more vulnerable to gentrification.

Urban sprawl indices are high in the following communities: None

Urban sprawl indices are <u>medium</u> in the following communities: None

Urban sprawl indices are <u>low</u> in the following communities: Astoria, Bandon, Bay City,

Brookings, Cannon Beach, Cape Meares, Coos Bay, Depoe Bay, Dunes City, Florence, Garibaldi,

Gearhart, Gold Beach, Lakeside, Lincoln City, Manzanita, Nehalem, Neskowin, Netarts, Newport,

North Bend, Oceanside, Pacific City, Port Orford, Reedsport, Rockaway Beach, Seaside,

Tillamook, Toledo, Waldport, Warrenton, Wheeler, Winchester Bay, Yachats

#### Sea Level Rise Index:

Inundation risk signifies the overall risk of inundation from sea level rise from one foot level to six foot level projections over the next ~90 years. The indicator represents the possibility of inundation based upon the combined projections at each stage of sea level rise and could vary depending upon future circumstances. A high rank indicates a community more vulnerable to sea level rise.

Inundation risk indices are <u>high</u> in the following communities: Warrenton Inundation risk indices are <u>medium</u> in the following communities: Bandon, Coos Bay Inundation risk indices are <u>low</u> in the following communities: Astoria, Bay City, Brookings, Cannon Beach, Cape Meares, Depoe Bay, Dunes City, Florence, Garibaldi, Gearhart, Gold Beach, Lakeside, Lincoln City, Manzanita, Nehalem, Neskowin, Netarts, Newport, North Bend, Oceanside, Pacific City, Port Orford, Reedsport, Rockaway Beach, Seaside, Tillamook, Toledo, Waldport, Wheeler, Winchester Bay, Yachats

#### Fishing Engagement and Reliance Indices (level of dependence of commercial fishing):

Commercial fishing engagement measures the presence of commercial fishing through fishing activity as shown through permits and vessel landings. A high rank indicates more engagement.

Commercial fishing engagement indices are <u>high</u> in the following communities: Astoria, Brookings, Coos Bay, Newport, Winchester Bay

Commercial fishing engagement indices are <u>medium/high</u> in the following communities:

Florence, Garibaldi, Pacific City, Port Orford, Tillamook

Commercial fishing engagement indices are <u>medium</u> in the following communities: Bandon, Depoe Bay, Gearhart, Gold Beach, Seaside, Waldport

Commercial fishing engagement indices are <u>low</u> in the following communities: Bay City, Cannon Beach, Cape Meares, Dunes City, Lakeside, Lincoln City, Manzanita, Nehalem, Neskowin, Netarts, North Bend, Oceanside, Reedsport, Rockaway Beach, Toledo, Warrenton, Wheeler, Yachats

Commercial fishing reliance measures the presence of commercial fishing in relation to the population of a community through fishing activity. A high rank indicates more reliance.

Commercial fishing reliance indices are <u>high</u> in the following communities: Garibaldi, Winchester Bay

Commercial fishing reliance indices are <u>medium/high</u> in the following communities: Newport, Pacific City, Port Orford

Commercial fishing reliance indices are <u>medium</u> in the following communities: Astoria, Brookings, Cannon Beach, Coos Bay, Depoe Bay, Florence, Gearhart, Gold Beach, Nehalem, Netarts, Tillamook, Waldport

Commercial fishing reliance indices are <u>low</u> in the following communities: Bay City, Cape Meares, Dunes City, Lakeside, Lincoln City, Manzanita, Neskowin, North Bend, Oceanside, Reedsport, Rockaway Beach, Seaside, Toledo, Warrenton, Wheeler, Yachats **APPENDIX E** OREGON WATERSHED ENHANCEMENT BOARD COASTAL RESTORATION PROJECTS
## **OWEB Coastal Restoration Projects**

Interactive map of all watershed restoration projects funded by the Oregon Watershed Enhancement Board (OWEB) from 1997 to present including links to full reports for each project: <u>http://oe.oregonexplorer.info/RestorationTool/</u>

Oregon Plan for Salmon and Watersheds 2013-2015 Biennial Report: <a href="http://www.oregon.gov/OPSW/docs/br/OPSW-BR-2013-15.pdf">http://www.oregon.gov/OPSW/docs/br/OPSW-BR-2013-15.pdf</a>

OWEB's Investments by County from 1999 to 2015 – fact sheets: http://www.oregon.gov/OWEB/Pages/County\_Investments.aspx

# APPENDIX F OREGON COASTAL COMMUNITY HISTORIC TIMELINES

# **Community Timelines**

The following historic time lines were compiled from a review of the *Images of America Series*, published by Arcadia Publishing of Charleston, South Carolina. These books are primarily written by local historians or historical societies. The relevant sources for each of these timelines are contained in the bibliographic citations from Chapter 1. While the emphasis of these books is on a photographic history of the communities drawing from local archives, these books still provide considerable insight into the history and the evolution of the local economies of these coastal Oregon communities. The purpose herein was not to compile an exhaustive history of these communities, but rather to understand, in a general context, what influences drove settlement and economic development on the Oregon coast.

### Astoria

Aboriginal: Chinook, N of river, Clatsop, south

- 1792: Capt. Robt. Gray crossed the bar on Columbia Rediviva
- 1793: Alexander Mackenzie crossed the continent to Bella Coola
- 1805–06: Lewis and Clarke at Fort Clatsop
- 1811: Thompson, first to descend the entire Columbia, just ahead of Astor's Overland Expedition, but Americans were already at Astoria
- 1811 12; first white settlement; fur trading outpost at Astoria
- 1813 Reverted to British control as Fort George
- 1818: treaty meant joint occupancy
- 1825: Hudson Bay Company west HQ established at Fort Vancouver (WA); Thompson (first to descend the entire Columbia)
- 1834: Lee established first mission in the Willamette
- 1836: first steamship
- 1844: county government
- 1846: Oregon Territory treaty resolved ownership; still just 10 houses
- 1846: bar pilots; commerce increasing on Columbia
- 1847: first P.O. west of Rockies; result of the Organic Act creating the territory
- 1852: customs house
- 1850s: Simpson steam saw mill sent to Astoria
- 1850-80's: #1 fishing and #2 logging increased; German and Scandinavian emigrants (22 canneries by 1880s)
- Period also saw growth of ship building
- 1860: popn. 500; 1900: 8,000; 1940: 10,389; 1945 nearly double w/ military; 1950: 12, 331, declined since; 2000: 9,813; 2016: 9,802
- 1889: older RR south to Seaside and Tillamook, started Seaside tourism with steamers to Portland
- 1898: first transcontinental railroad connection through Portland

#### Seaside

- Aboriginal; Clatsop
- 1851-63: Gearhart settlement; dairy and farms
- 1850: first boarding house
- 1871: Seaside House, first resort on the coast with steamer access (RR magnate Holloday)
- 1875: 400 guests
- 1889: rail access to Astoria

1880: 75; 1890: 87; 1900: 191

1899: town incorporated

1900: had both a cannery and a sawmill; port at Gearhart

1908: board walk

1920s: float plane tourism

## Cannon Beach

Aboriginal: Tillamook; 1806:2200; 1949: 200

- 1841: Area around Gearhart was settled by missionaries as an agricultural area, Clatsop Plains. Poorer, sandy soils in the area prompted others to move to Tillamook. Valleys in western Oregon were prairies due to Indian cultural burning
- 1851: Gearhart family homestead included Cannon Beach

1871: James Austin Hotel (Logan and Walsh)

- 1890: town laid out and organized as a tourism venture
- 1890: dirt toll road along Elk Creek; stage to Seaside at rail terminus

1892: Elk Creek Hotel

1893: Hug Point Trail, a trail at tide line

1936: Hwy. 26

## Garibaldi/Tillamook

Aboriginal: Killamuck tribe; southern edge of Salish tribes

- Geology note: Headlands were ancient hard igneous rock. Upthrust sedimentary Coast Range eroded, and headlands defined direction of river flows between each, creating rivers with bays. Each river became the corridor of agriculture, and then the towns
- 1579: Drake rumored to visit area
- 1788: Captain Gray sailed by, reported on difficult crossing into Tillamook Bay
- Early settlers were farmers; river salmon fishing was an occasional sideline
- 1848: Trask settlement
- 1851: first white resident in Garibaldi was marooned ship's cook and carpenter; became furniture maker
- Squaw Town at Miami River; Killamuck widows from fishing and logging accidents. Miami River remained tribal land well into recent history
- Settlers crossed Neahkahnie Indian Trail to Tillamook to gain better farmland
- 1851 (54?): Morning Star built to transport dairy products to Portland
- 1867:Bayley Hotel at Garibaldi Beach along the route between the Necarney Trails and Clatsop Plaines; granted title in 1869

- 1870: Bayley appointed first postmaster, named the location
- 1870: Smith Mill Cannery at Hobsonville (now a ghost town); converted to sawmill; economic vagaries, mostly in S.F., meant boom/bust cycles
- 1891: Tillamook incorporated
- 1893: piles driven to provide deeper moorage around Garibaldi (?)
- 1894: first cheese factory
- 1896: first school at Hobson
- Prior to 1900, area residents lived at Hobsonville or Squaw Town. Natives' permanent home was on the Grande Ronde Reservation. Settlers mostly bypassed Garibaldi since they were farmers, not fishers
- 1909: Tillamook County Creamery Association
- 1918 Cummins-Mobley Mill at Garibaldi, later upgraded to Whitney Mill which had rail line up the Kilchis River
- Garibaldi became a company town (1920 1935)
- Sessions Boatyard at Bay City, built many boats during WWI
- 1906: Bayocean Resort founded
- Early Barview area was tourism destination (Bayocean Resort) before 1915 storm
- 1907: First hospital at Bay City
- 1909: Bayocean post office; by 1914 Bayocean had a population of 2000 (1600 lots). Primary economic base was tourism via steamship from Portland, but there was a cannery. No roads until 1928, past the peak. Many lots were never built upon.
- 1910: first Port of Tillamook Bay commission (port at Bay City); followed by requests for jetty construction
- 1910: Bay City incorporated; major ship building in WWI
- 1911: RR completed to the valley at Hillsboro

Already large mills at Hobsonville and Wheeler on the Nehalem. Hobsonville was east Garibaldi area.

- 1911: Port of Bayocean
- 1915: storm wiped out town of Barview
- 1917: half of COE proposal jetties built on N side of bay; initiates erosion of the sand spit. Serious storms began to take out buildings
- 1918: Cummins-Mobley Mill in Garibaldi
- 1921: Whitney Mill takes over from Cumins-Mobley
- Whitney built spur RR up the Kilchis
- 1926: Hayes Oyster Farm, destroyed with the final breach of the Bayocean spit in 1952
- 1932: first of Bayocean serious damage (1932, 1939, 1942, 1948, 1952)
- 1946: Garibaldi incorporated
- Original Tillamook port facilities were federal projects

1940s to 1950s: seine netting gradually eliminated salmon fishing in the rivers

- 1950s: Bay City port had few boats and Hayes Oysters; moorage was shallow following erosion from the Tillamook Burn (forest fires in 40s and 50s)
- Garibaldi population peaked around 1500 in 1950 with two sawmills

Tourism: 1.6 M visitors/year to Tillamook

- 1971-74: South jetty finally built
- Mid-1970s: Old Mill Resort planned. Marina was very popular in the 1970s; now an RV park.

1970s: fishing boomed in Garibaldi, even as Bay City declined further

# **Pacific City**

1845: Champoeg fire devastated small coastal tribe of Nestuggas; depleted by disease 1830-41.

1854: settlers arrive to establish farms and dairies; many arrived via steamer; S end of plains (?)

- Woods (north Pacific City) became trading and steam travel center; farmers were part-time river fishermen
- 1886: cannery on Nestucca River

1893-95: town platted then moved (Maloney)

- 1895: Sea View Hotel for Willamette visitors, then other buildings and campground
- 1927: river fishery depleted and closed by legislature; beginning beach launch dory era

Dories peaked in 1970s with \$1000 hauls/day common

# Lincoln City

Aboriginal: Tillamook at Salmon River

1804-49: natives decimated

- 1855: coast reservation established at Salmon River
- 1850s: military road along Salmon River
- 1887: area is privatized; Dawes Act 1894 made Tillamook and Siletz Tribes private landowners
- 1890: First whites along Siletz Bay and Rose Lodge. All early settlement was agricultural under Homestead Act(s) into late 19<sup>th</sup> century, many Finns, especially lured by steamship marketing. Farms and dairies.
- 1890s: logging, rafts to Toledo or Columbia

1896: cannery at Siletz

1896: Kernville sawmill

Settlement was along rivers, hence trading center at Taft

Most roads came late in 1900 to 1920s; lacked even prior RR access

1920s: car camping increasing

1925: Nelscott started for tourism and second homes
1926: Sunset Investment Co. at Depoe Bay, tourism but also developed commercial fishing
1928: Highway completed; tourism surged
Otis: sports fishers from Portland
Neotsu: Devils Lake camping and tourism
1933: Lincoln Beach
1965: cities merged

#### Newport

Aboriginal: Yaconas, decimated by disease

1855: center of coast reservation, established after the Rogue River Wars; 4000 natives, 20 tribes

- 1861(ish): oyster harvest commenced
- 1866: central Newport area opened to settlement
- 1866: immediate claims staked by area soldiers (Case Bayfront), trappers, oystermen (Winant, Olsson E of Case; built camping area and cottages), and farmers (Nye W of Case)
- 1866 (?): Bensell sawmill
- 1866: Case built Ocean House hotel and named town Newport (Bayfront area) after the Rhode Island ocean resort
- 1867: Bayfront had 2 stores, 2 hotels (Ocean House and Bayview), 2 saloons, restaurant, 2 fish packing plants, meat market
- Some early tourists came for liquor access; many coast towns including Yaquina City and in the valley were dry; tourism increased significantly when the railroad was completed in 1884.
- 1868: first school
- 1869: shipping line formed, serving #1 San Francisco and #2 Portland
- 1870: first lighthouse
- Fishing was always a constant part of the economy
- Nye Beach was popular early destination
- 1875: some N and S areas of reservation opened for settlement
- 1876: Yaquina City built
- 1880: native oysters depleted
- 1880: 269; 1890: 1,159 (population)
- 1881: south jetty built
- 1882: Newport incorporated
- 1884: rail line built only to Yaquina City (a rival town)
- 1890s: camping at Nye Beach without extensive development

- 1892: Siletz reservation land allotted to 551 remaining natives
- 1893: Lincoln County formed; seat at Toledo
- 1893: large Monterey Hotel built Agate Beach (isolated location at the time)
- 1894: balance of reservation opened to settlement
- 1895: Thomas Agate and Curio Shop at Nye Beach
- 1896: US Lifesaving Station established at South Beach
- 1898: Summer Education Association at Nye Beach; Irwin Hotel (Dr. Thos. Condon ran geology classes)
- 1900: tourism and shipping were mainstays, followed by fishing. There was several boom/bust cycles with depletions of oysters, halibut, salmon
- Beach tourism at Nye Beach really developed after about 1900
- Land transportation N and S remained an issue until Roosevelt Highway (1920s) and bridge (1936)

## Florence

Aboriginal: Siuslaw; tribe moved to Siletz in 1876 when land opened for settlement

1826: first fur traders

1846: fire from Yaquina to Umpqua

- Early 1870s: settlement pressure from timber, fishermen, and homesteaders
- 1876: land opened for settlement (available to Siuslaws also; W bank of N Fork, near current casino)
- 1876: Morse land claim; became the town site
- 1876-ish: Moody's store first commercial venture
- 1877: first pioneers were homesteaders, settled on upriver creeks
- 1877: Duncan arrived with cannery and saw mill equipment
- 1878: Morse brothers on N Fork
- 1879: Haring homestead on N Fork; became a dairy
- Developers (Hurd and Kyle) soon built stores, canneries, sawmills
- 1880s: exports via ocean to San Francisco and Astoria lumber, salmon, dairy, hides
- 1883: Morris Hotel (converted house); later another separate building at the ferry
- 1884: Meyer and Kyle Mercantile
- 1885: first steam saw mill at Acme.
- 1885: Mapleton Eugene Road completed
- 1886: Kyle cannery
- 1888: first post office
- 1890: first newspaper

Huge fishing industry; gillnetting and seining led to overfishing and were eventually outlawed (SB 282, 1927?) 1893: north jetty 1893: town incorporated Access: stage from Eugene to Mapleton, then river boat; S via beach route to Gardiner; N closed until 1920s 1908: first Rhododendron Festival 1915 – railroad arrives (slightly upriver at Acme) 1929: highway S built 1932: highway N to Yachats 1936: bridge opened Post WWII: ocean fishing grew 1970s: fishing declined 1980s: wood products declined 2004: last saw mill closed

## Reedsport

Aboriginal: Umpqua, a band of the Coquille

- 1808: La Valle's Sea Otter wreck and trek all the way to Red River, LA
- 1828: Jedediah Smith expedition searching for Umpqua route to Willamette; party massacred
- 1850: First bar crossing and plats for future towns laid out; one purpose was to supply gold miners heading south
- Scottsburg, upriver on south side; first settlement
- 1850: Umpqua City, 2 miles N of mouth; Wells Fargo, hotel, and general store
- 1854: Coquille ceded land to US and agreed to move to Siletz
- 1856: Fort Umpqua at S end of Siletz Reservation
- 1854: 5000 residents and 25 businesses in Scottsburg
- 1850s: Simpson steam saw mill sent to Umpqua
- Umpqua River canyon was considered impassable; only river other than Columbia that cuts through the Coast Range
- 1857: Umpqua River Lighthouse
- 1862: Great Flood; ruined the original lighthouse
- 1870: A.W. Reed is Simpson employee at Gardiner mill
- 1879: five schooners service Gardiner to San Francisco
- 1880: 12 MBF at Simpson Gardiner mill

- Gardiner was commercial, industrial, and shipping center of the area during the steamboat era. Logging and fishing were the economic base.
- 1891: Life Saving Station established
- Reedsport was small community on stilts above the marsh. A.W. Reed opened a cannery; became town namesake. Fishing and logging were the economic base of the entire region after the gold rush.
- 1912: first store in town
- 1913 to 1916: Railroad construction brought 100's of workers to town, fed development
- 1916: Southern Pacific completed from Willamette down Siuslaw, past Siltcoos, then on to Coos Bay via Reedsport (bypassed Gardiner). Then Reedsport eclipsed Gardiner in importance
- 1927: Reedsport filled in the swamp.
- Key to area: gold rush, commerce, river & ocean transport, outstanding fish and timber, then rail transportation; town's decline centered on these same factors failing
- Randolph, Waldo, Dardanelles, Elizabethtown, and Sailor's Diggings: All southern Oregon mining towns that became ghost towns. County government was as important as a good mill site, coal mine, or wagon road crossing in helping to anchor a community.

#### North Bend & Coos Bay

Aboriginal: Coos, matriarchal tribe, generally peaceful coexistence, but still touched by Rogue River War

- 1824, 1836: measles and smallpox decimate the native populations
- 1852: white settlement commenced after Captain Lincoln wreck
- 1852: gold discovered at Whiskey Run Creek on the beach (N of Bandon); Luse arrives
- 1853: water powered saw mill at Coquille River
- 1853: Empire City laid out (Harris w/ Coos Bay Commercial Corp.); log mill started
- 1853: Coos County established; county seat at Empire City; town of Marshfield established; first post office at Elkhorn
- 1854: Volunteer militia (mostly miners) attacked the Lower Coquille
- 1854: Flanagan and Rogers begin coal mining at Newport (Libby); many successful mines followed (eventually 74 mines)
- 1854: Beach Route first county road; Marshfield to Ten Mile Creek
- 1855: 30 houses in Empire City; Luse sawmill production 10,000 BF / day
- 1855: Eastport coal mine opened
- Luse sawmill and shipyard in Empire City
- 1855: Empire Treaty, not passed or honored, but settlers moved in regardless
- 1855: Simpson purchase north bend from Aiken for mill town (just for his operations)

- 1856: Coos are forcibly removed to Ft. Umpqua, then Yachats. Some Coos returned when the reservation closed (1870s)
- 1856: Simpson steam sawmill, second on bay after Luse
- 1858: Empire post office
- 1850s: dairy farming developed
- 1858: Simpson adds shipyards (Gardiner and North Bend) with others in WA
- 1850s: Simpson shipyards build trade/coal vessels (total 56)
- 1860: Simpson goes dry; Empire City still wet
- 1860: first salmon fishery (Flanagan); many canneries by 1880s
- 1860s: Coal waned, but mill provided supplies for Simpson retail stores in S.F. Bay Area (Simpson's base).
- 1862: first school house
- 1868: Blanco Hotel; 1870: Central Hotel; both catered to travelers and businessmen, not miners and loggers
- 1871: first post office; Coos Bay Wagon Road up the Umpqua to valley at Roseburg
- 1874: Coos Bay Military Road was an upgrade
- 1874: Marshfield incorporated
- 1882: Luse mill property bought, new large mill and wharf built
- 1885: Coquille incorporated
- 1885: first cranberry farm started
- 1887: South jetty built on the Coquille at Bandon
- 1888: Porter Mill at Yarrow built
- 1890: Yarrow platted, but failed
- Late 19<sup>th</sup> century: Bandon had a commercial district, saw mill, shipyard, and woolen mill.
- 1891: East Marshfield established; later Eastside, merged with Coos Bay in 1983
- 1892: Coos Bay Creamery established
- 1893: Railroad linked Coos Bay to interior forests for log transport
- 1899: Younger Louis Simpson (son) moves to North Bend, intent on development
- 1901: N jetty Coos River
- 1902: Simpson purchases Yarrow and Porter Mill (S of town)
- 1902: Bangor community addition platted
- 1903: Simpson shipyard torn down
- 1903: North Bend incorporated (former Yarrow site); Simpson mayor
- 1903: Hotel North Bend
- 1903: Kruse and Banks shipyard opens; North Bend Manufacturing windows and doors

1904: Menasha Corp. purchased mill at Empire, starts operations in area

1906: first hospital

1906: A.W. Meyers department store

- 1907: town well developed with telegraph and electricity, several blocks long; brewery opened
- 1907-08: Simpson house built at Shore Acres
- 1908: Smith Mill established, largest employer until 1951 when eclipsed by Weyerhaeuser
- 1908: Porter Mill gas and electric
- 1909: Port of Coos Bay established; largest and deepest port between San Francisco and Puget Sound
- 1909: high school built
- 1912: local auto manufacturers Gorst and King; Gorst went into aviation in 1925; company eventually merged with others in the PNW and became UAL
- 1912: Port of Bandon established
- 1913: Willamette Pacific RR construction started
- 1916: first trains ended isolation and dependence on ocean travel
- 1917-18: ship building boom during WWI
- 1920s: construction boom period followed rail access, brought in tourism; ended in 1926 when Porter Mill burned and closed
- 1920s: fishing flourished as gasoline engines allowed more ocean fishing
- 1921: auto camp at North Bend city park
- 1921: auto ferry added across Coos bay to link sections of Roosevelt Highway
- 1923: Beaver Hill mine closed; town vanished; coal was no longer viable due to fuel oil availability
- 1935-7: pilchard (sardine) fishery thrived, then collapsed
- 1936: current bridge opened
- 1942: state purchased Shores Acres from Simpson for a park
- 1944: Marshfield renamed Coos Bay; old district is downtown area
- 1945: Kruse shipyard closed
- 1945 to 1950s: Weyerhaeuser expanded and Port of Coos Bay [temporarily] became the world's largest exporter of lumber
- 1950: Weyerhaeuser demolished the Old Town (Simpson) Mill
- 1953: Rail passenger service ends
- 1965: Empire merged with Coos Bay
- 1979-80: forest harvests declined and most mills closed
- 1984: Confederated Tribes of Coos, Lower Umpqua and Siuslaw recognized
- 1988: Weyerhaeuser mill closed

1995: casino built

2003: Weyerhaeuser paper mill closed down

- 2005: Menasha Corp. shut down
- Summary: Mines, mills, shippards, shipping (deep water port!), fishing and farming; eventually wood products international export

### Bandon

Aboriginal: Nasomah may be oldest inhabited area of coast; Miluk speaking tribes

- 1851: T'Vault Massacre was precipitated by miners' behaviors
- 1851: Casey Campaign attacked Nasomah villages
- 1852-53: Whiskey Run gold rush
- 1853: Volunteer militia companies attacked the Chetco
- 1854: Packwood's miners' massacre of Nasomah
- 1855: Nasomah surrender; Port Orford (Lowe's militia) massacre of escapees
- 1856: Coos and Coquille removed to reservation
- Soon there were some 200 farms in Coquille Valley
- 1870: Hall's isthmus divide (Coquille to Coos) tramway moving 600 tons for Empire City export; located approximately at modern Hwy 42 route
- 1873: Bennett purchased land at mouth and planned to develop Bandon (the Irish town is namesake)
- 1874: Michler's canal proposal (Grant's presidency; Michler had served as engineer under Grant in 1864)
- 1874: Rosa's store at mouth
- 1875: Parker's sawmill was developed along lower Coquille; needed a port on that river, not an upriver canal
- 1875: Myrtle Point developed
- 1878: Parker starts building jetty
- 1878: first salmon export
- 1880: federal river mouth jetties commence [public investment in Bandon was extensive, with jetties, lighthouse and lifesaving station, all to encourage development of the town]
- 1880s: dairy farmers started producing cheese in area (about 185 farms by 1950s)
- 1883: St. Mary's Catholic Church
- 1885: first cannery in area
- 1885: McFarlin cranberries started
- 1890: Pershbaker sawmill built at Prosper
- 1891: Lifesaving station finished
- 1893: woolen mill built

1896: first lighthouse built

- 1898: Bandon Woolen Mill served by many ranches to south and east in valley
- Turn of the century: Pacific Hotel is oldest, exports of salmon, timber (Moore Lumber mill was economic mainstay of town), creameries, and shipbuilding make for a busy sea port; Old Town area was on pilings over mudflats
- 1900: Gallier Hotel (9000 guests by 1912!); tourism continued to grow; many from S.F. Bay area. Draws were beach, recreational cruises, sport fishing, and later golf
- 1905: Cody sawmill built, burned 1909, then rebuilt as the Moore Lumber Company. Ran 3 shifts during the 1950s
- 1907: steam powered electricity
- Early 1900s: Bandon Natatorium (salt water pool and resort)
- 1910: Perry Box Factory
- 1919: Nestle plant built
- 1923-24: Roosevelt Hwy built at Bandon, but isolated until Coos and Rogue River bridges completed
- 1927: Bandon Cheese Company (bought 2000 and closed by Tillamook in 2002)
- 1927: Westmore Golf Course
- 1936: entire town burned
- 1999: Bandon Dunes Golf Resort; #1 golf resort, 2011
- Side note: 2012 Face Rock Creamery opened to continue Bandon cheese tradition
- Basically Bandon has a history similar to Coos Bay, but is more recent, and early development was very dependent on early federal investment. More prime farm land led to an agricultural heritage.

## Port Orford (North Curry)

Aboriginal: Quah-to-mahs

- 1828: Jedediah Smith camped at Sixes River
- 1850: Donation Land Claim Act
- 1851: town founded (Capt. Tichenor) as mining settlement; surrounding area settlers were dairies and provided mining camps with food, nine men at Battle Rock fought natives
- 1851: blockhouse at the headlands w/ 60 men; became Tichenor home in 1852
- 1851: Fort Orford, preceded Fort Umpqua (?)
- 1852: one sawmill, three hotels, eight stores, two saloons, 14 structures in fort; about 1000 (?) residents
- Other settlements in county were mining camps up the various rivers, especially around Sixes River with about 150 miners; gold mining continued into the 1920s
- 1853-4: Tichenor sawmill exported cedar to San Francisco; several mills followed throughout region

- 1854: Langlois settled at Floras Creek; beginning of numerous dairies in the area between 1854 and 1888. By late 1890s, Dairyville (Langlois) was a thriving town. Area had good pastures, so cattle ranches developed, exporting to Roseburg or Crescent City
- 1855: Curry County formed; Port Orford was the county seat
- 1855: first post office
- 1856: mines failed; town population was down to only a few families
- 1859: county seat moved to Ellensburg (Gold Beach)
- 1859: Knapp arrived; worked in hotels
- 1868: fire destroyed town
- 1870: Cape Blanco Lighthouse
- 1870: Sutton, original newsman arrived
- 1870: sawmill at Hubbard Creek
- 1874: Windsor Store and Hotel (really just boarding house)
- 1882: PJ Lindberg arrived; built numerous local houses that still stand
- 1892: Christ Church Episcopal built by Lindberg
- 1893: first creameries constructed; many survived into the 1950s
- 1894: 23 school districts, 16 teachers, and 370 students in Curry County
- 1888: Nygren Hotel
- Commercial ocean fishing started in the 20<sup>th</sup> century
- 1907: Lakeport at Floras Lake platted; eventually grew to about 400 people. Based on the claim that a canal could be maintained through the dunes to the ocean, creating a shelter port on the lake. Failed 8 years later when surveys indicated the lake was higher than the ocean. A typical story of speculation
- 1910: first bank in Curry County at Port Orford; town was a small village after the 1868 fire
- 1911: Port commission formed; declared illegal as there was no harbor. Commission reformed, came and went, but there was always an initiative for federal help with jetties, etc. (federal harbor survey 1924; local plans rejected in 1926). Locals built and rebuilt dock several times
- 1920s: cedar exported to Japan; town recovered from the fire and building continued
- 1923: lumber shipping peaked
- 1924: Port Orford Auto Court, still stands
- 1932: with bridge over the Rogue at Gold Beach, Roosevelt Highway finally connected town with rest of coast, but there was never a rail connection. Isolation and difficult harbor were always issues for the town
- 1930s: Trans-Pacific Lumber Company largest in area
- 1934: Coast Guard at headlands; did not last, building destroyed in 1970s. There were 500 steps from the residences to boathouse!

- 1934: Gable, owner of Inman Mining, Trans-Pacific, and 4 other businesses (leveraged), built dock of rock, destroyed in early 1936
- 1935: town incorporated
- 1935: Gable frustrated with lack of state or federal assistance helped instigate the State of Jefferson movement; from Curry County to N CA; movement peaked just before the war
- 1938: dock rebuilt; operated as a cannery for 15 years
- 1940: another cannery at base of dock operated until 1970s
- 1956: Port Commission reformed and bought dock; used for lumber shipping until 1960; fishing has persisted to present
- 1940s: lily farms developed
- 2009: all Langlois schools closed

### Gold Beach (South Curry)

Aboriginal: Tolowa tribe, of Athabascan origin

- First interactions peaceful, before the Oregon Trail and the Gold Rush; Vancouver anchored at Cape Blanco with peaceful visits
- 1827: Ogden expedition (fur traders) were peaceful
- 1834: Laframboise party killed 11 inland Rogue natives
- 1834: Young party murdered and buried several more natives; graves were found by local tribe
- 1835: attack on trading party was revenge (one man, Geo. Gay, survived)
- 1837: cattle drive attacked; Gay was killed
- 1846: Applegate developed southern alternative to the Oregon Trail down the Rogue, crossing Cascades north of Ashland
- 1846: 90 to 100 wagons and 450 to 500 settlers but conflicts avoided
- 1847: Whitman Massacre and Cayuse War
- 1848: miners began passing through in numbers
- 1850: miners attacked; Lane's treaty with Takelma Indians guaranteed native safety and settlers' passage.
- 1851: miners camp at Bear Creek
- 1852: 28 land claims by whites in Rogue Valley
- 1850s: Ellensburg established (didn't become Gold Beach until 1890)
- 1853: Ellensburg post office
- 1855: Army began to protect Indians from white attacks; white mob attacked village, killing 27 natives Takelma near Table Rock
- 1855: natives attacked white settlers in revenge; killing same number

- First whites on coast after the random early fur traders were gold miners on the black sand beaches, then they moved upriver. Large scale sluice mining destroyed river banks; miners antagonistic toward natives, leading to the 1856 Rouge River War
- 1855: Battle of Hungry Hill was largest of war; 200 natives and more than 300 whiles involved. Natives, on higher ground across a ravine, won the battle. Battle site was located in 2012 (Tveskov)
- 1856: natives attacked Army at Fort Lane; reinforcement arrived
- June, 1856: Indians surrendered and sent to reservation at Table Rock
- Some Takelma returned to their village near Table Rock and were attacked by whites, killing 23. This native group then attacked settlers along river until finally defeated at Big Bend
- 1856: other natives killed 30 settlers in Gold Beach; some white settlers/miners took refuge in Miners' Fort at the mouth of river
- 1856: large part of native tribes sent to the Siletz Reservation; balance of natives at Table Rock were sent to Grande Ronde reservation for their own protection
- 1850s to 60s: Early settlers without ports rowed out to meet ships; first trade was farm products
- Somewhat later commercial logging started, and around Three Sisters/Frankport/Corbin a tram was built to deeper water for shipping; area ran out tan oak, bound for San Francisco. Town disappeared with end of tan oak stands.
- 1870: first courthouse

Marial was another early town, now defunct.

- 1890: cannery and other businesses on N bank of river at Ellensburg (renamed Gold Beach that year)
- 1895: Hume moved to S side of river and platted Wedderburn. He owned sawmill, salmon and pea canneries, newspapers, store, race track, hotel, saloon, small ship yard, tug boat, extensive marshes and farm land. Exported his products to San Francisco
- Agness was at the confluence of Illinois and Rogue Rivers, small town for trading, upriver port, home of many Native Americans. Wedderburn (Hume) Trading Company was first store; then post office in 1890

Mail came by mule train over the mountains to Grants Pass; well into the 20<sup>th</sup> century

- Early 1900s: Agness Hotel
- 1911: public school was elementary, library and the high school. At this time, Gold Beach was a tiny farm town with pastures right off main street.
- 1906: Hume's fish hatchery at Indian Creek, still exists
- 1912: first bank; at this time, the town had 2 hotels, courthouse and the bank
- Early 1900s: Brookings was even smaller

Jetties built

- 1920-ish: First ships enter river; too shallow for much commerce
- 1920s: Antler Hotel, Brookings
- Small community at old Ophir, bypassed by highway, moved to new highway, unincorporated. Another former town was the community of Pistol River

- 1930s: Adolphson plywood mill up Elk River
- 1932: Rogue River bridge completed
- 1942: 9/9 Japanese plane fire bombs forest in Curry County near Brookings; 10/5 same Japanese sub sinks tanker near Cape Blanco
- Numerous lodges built along Roosevelt Hwy and at beaches or creeks Sunset Inn in Gold Beach, Raymond's Lodge, others in Agness.
- Post WWII: canneries closed
- 1950s: Crook/Betts mill in Neshika Beach
- Later: large plywood mill on N bank; all now closed
- At the heyday, there were 102 sawmills in Curry County; there is now only one in Brookings
- Current economic base: tourism in sport fishing and jet boats, RV's and lodging
- Familiar patterns of salmon canneries based on river seining, wood products, early travelers were loggers. Several small towns developed around creameries, canneries, mills, and retail stores in crossroads locations. Then sport fishing and tourism increased after the demise of commercial river seining post WWII.

#### Brookings

- 1908: Founded as a company mill town
- 1914: RR served Brooking saw mills, up Chetco three miles and south to N CA @ Smith River. C & O Lumber Mill exported to SF
- 1980s: After mills mostly collapsed, Brookings became a retirement community with some commuters to N CA jobs. Entire area is over 13,000

### Additional notes:

- After Astoria ceded to the British in 1813, they took over the trading posts in Oregon Country. At the end of War of 1812 (Treaty of Ghent, 1814), this was status. Then the first joint occupation agreement of 1818 left question ambiguous. Border permanently set at 49th parallel in 1846.
- 1830's first settlers follow the Oregon Trail (blazed by the Overland Astor Expedition to avoid the Blackfeet); mostly traders and missionaries, made it far as the Snake. Then in 1840, a few made it into the Willamette Valley. First large wagon train was 1843; led by Marcus Whitman, the "Great Migration" about 1000 American settlers. The Applegate (southern) route opened to pursue the gold rush about 1848/9.
- Whitman Mission, 1836 to 1847 (first wagons to Oregon Trail); became emigrant stop 1843-45; then bypassed. Massacre by Cayuse precipitated the formal declaration of the Oregon Territory. Cayuse eventually became part of the Umatilla Reservation
- 1834: Lee mission in Willamette
- 1843: Provisional Government of Oregon
- 1848: Territory of Oregon incorporated, immediately followed the final border agreement with the British and the impact of the Whitman Massacre. One important aspect of the Organic Act was imposition of the Northwest Ordinance of 1787, when emphasized fair dealing with aboriginal land claims. This had an influence on the negotiations for reservations in the PNW.
- 1850: Oregon Donation Land Claim Act; deeds to follow survey, after which the Willamette Meridian and the E/W Baseline intersected near Portland.
- 1853-55: Army authorized to construct roads to the Umpqua mouth for access to CA and OR gold rush

1853: Washington Territory established

Important Point: the system of reservations did briefly slow land claims on the coast.

Other sources:

Accessed 11/7/17 http://bluebook.state.or.us/default.htm

NOAA coastal community profiles

Wikipedia

Across the Plains in 1844 by Catherine Sager Pringle