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TECHNICAL MEMORANDUM #4

October 1, 2025 Project# 27003.045

To: Thomas Guevara Jr, Oregon Department of Transportation (ODOT)
Anthony Pagano and Ryan Baxter, City of Gold Beach

From: Susan Wright, PE; Amy Griffiths, PE; Eza Gaigalas; and Sam Godon

RE: TM#4: Existing and Future No-Build Transportation Conditions
Gold Beach US 101 Community Connections Plan

Key Findings

This section summarizes the key findings from the existing and future transportation conditions analysis, including the existing transportation inventory, the existing and future year traffic operations analysis, the crash analysis, and the multimodal analysis.

EXISTING TRANSPORTATION SYSTEM INVENTORY

A review of aerial and spatially available data was conducted to evaluate the existing roadway facilities and to support the operations and multimodal analyses. The following bullets summarize key findings.

- US 101 in the study area is located within a Local Cascadia Earthquake and Tsunami evacuation area.
- US 101 through Gold Beach is designated as a Reduction Review Route (RRR) and therefore must align with Oregon Highway Plan (OHP) policy 1C and ORS 366.215.
- The pavement condition along the majority of US 101 in the study area is in poor condition.
- There are gaps in the sidewalk network on the east side of the roadway north of Harbor Way and on both sides of the roadway south of Kerber Drive. The existing sidewalks do not meet the recommended design standards for their designated Urban Context, as outlined in the ODOT Highway Design Manual (HDM).
- There is a lack of dedicated bicycle facilities along the majority of the corridor. The existing bicycle facilities and roadway shoulders do not meet the recommended design standards for their designated Urban Context, as outlined in the ODOT Highway Design Manual (HDM).

OPERATIONS ANALYSIS

Count data was collected in August and September 2024 and then factored into existing (2025) and future (2045) summer peak and non-summer peak hours according to the methodology presented in Technical Memorandum (TM)#3: Analysis Methodology Memorandum. The following bullets summarize key findings.

- Based on the Statewide Integrated Model (SWIM), growth rates are low in the study area. A total of 15% growth in traffic volumes is assumed between existing and future conditions. The low projected growth rate results in minimal forecast degradation of future operations or increased queueing.
- All intersections meet their mobility standard in the existing (2025) summer peak and non-summer peak hours.
- All intersections meet their mobility standard in the future (2045) summer peak and non-summer peak hours.
- There were no movements at signalized intersections where the 95th percentile queue length along US 101 exceeded the available storage in the Existing 2025 Summer Peak scenario.
- There were no movements at signalized intersections where the 95th percentile queue length along US 101 exceeded the available storage in the Future 2045 Summer Peak scenario.
- Although the analysis indicated that adequate storage is available for typical conditions, city staff have indicated that queues can frequently be longer and block additional driveways and side streets. This includes occasional queuing blocking fire truck and emergency vehicle egress at 5th Place. This feedback suggests that there are long delays and long queues during peak summer days and special events that may not be fully reflected in the data analysis.

CRASH ANALYSIS

The most recent five years of available crash data (January 1, 2019 to December 31, 2023) were reviewed to identify safety deficiencies. The following bullets summarize key findings.

- There are no intersections along the study corridor that exceed ODOT's 90th percentile crash rates.
- The intersection of US 101 / 3rd Street had 5 crashes; the offset between 3rd Street and McKay's Market could be a contributing factor to crashes at this location. This location is still below the threshold crash values.
- The segment crash rate for the segment of US 101 through the study area is lower than the ODOT average crash rate for similarly classified roadway segments.
- There are no sites along the corridor that are on ODOT's 2023 Safety Priority Index System (SPIS) list.
- There were no reported fatal crashes along US 101 during the study period. There was one reported serious injury crash at the US 101 / Hunter Creek intersection. The crash causes sited inattention and failure to yield the right-of-way to oncoming traffic by the turning vehicle.
- There were no reported crashes along the corridor involving a pedestrian, bicyclists, or other active transportation users.

MULTIMODAL ANALYSIS

Pedestrian Level of Traffic Stress (PLTS) and Bicycle Level of Traffic Stress (BLTS) analyses were conducted based on a review of spatially available data and aerial measurements conducted in Google Earth. According to ODOT's Analysis Procedures Manual, BLTS is a measure of traffic stress quantifies the perceived safety issue of being in close proximity to vehicles whether on a spacing distance or speed basis. PLTS is a methodology to measure the amount of pressure or stress experienced by pedestrians and other sidewalk users. The following bullets summarize key findings.

- The PLTS score along US 101 is PLTS 3 and PLTS 4 due to the lack of sidewalks or inadequate buffer width for the roadway context.
- The BLTS score ranges from BLTS 2 to BLTS 4 along the US 101 corridor in the study area. At the northern end, where there is a three-lane cross section and striped bike lanes, the score is BLTS 2.
- As the roadway expands to a five-lane cross section at Harbor Way the BLTS increases to BLTS 3. Where there are no bike lanes and higher volumes and speeds, the BLTS increases to BLTS 4. As bike lanes are terminated near Moore Street, the BLTS score increases to 3 and 4, reflecting conditions where bicycles must share the travel lane.
- The BLTS score ranges from BLTS 1 to BLTS 3 on the side streets depending on their average daily traffic (ADT).
- At the Public Advisory Committee (PAC) meeting, PAC members mentioned that they feel people avoid walking and biking along US 101 because it does not feel safe for many users.
- According to the ATNI, US 101 through Gold Beach has high pedestrian risk factor scores, indicating the segment has safety concerns for non-motorized users. The ATNI also assigns high pedestrian prioritization scores along US 101 through Gold Beach, indicating need for improvements.

Introduction

This memorandum summarizes the existing and future conditions inventory and analysis assessment in the Study Area as part of the Gold Beach US 101 Community Connections Plan. It outlines the findings from that assessment and provides a baseline understanding of the 20-year transportation needs and deficiencies. The Plan aims to address transportation needs for people driving, walking, biking, and taking transit within Gold Beach.

Information summarized in this memorandum was obtained and assembled using available Geographic Information System (GIS) data, traffic counts, and crash data provided or produced by the City of Gold Beach, Curry County, and ODOT.

Study Area

The study area encompasses US 101 and adjacent city streets from Jerry's Flat Road to Hunter Creek Loop in Gold Beach, Oregon. The analysis includes operational analysis at key locations throughout the study area and a multimodal analysis along US 101 and potential parallel routes. The study area and study intersections are illustrated in Figure 1.

Figure 1

Study Area
Gold Beach, OR

Existing Transportation System Inventory

The existing transportation system inventory evaluates current land uses and population estimates within the study area to understand the types of lands, natural resources, and environmental barriers that the transportation system interacts with as well as the demographic cross section of community members relying on it. The inventory also assesses the current characteristics of the transportation network to understand how it is serving its users today.

LANDS AND POPULATION

Land use is a key factor in developing a functional transportation system; the amount of land planned for development, the types of land uses, and how they relate to each other have a direct relationship to the anticipated demands for the transportation system. This section identifies the zoning designations that help define land use within the study area.

Land Use

This section identifies the zoning map designations that help define land use, major trip generators, and natural resources in Gold Beach.

ZONING

The City of Gold Beach and Curry County's Zoning Ordinance identifies general land use designations that direct zoning, subdivision standards, and guiding policies for development. The Curry County zoning districts categorize areas located outside city limits but within Gold Beach's UGB. The City and County zoning districts are summarized in Table 1 and illustrated in Figure 2 The County zoning designations include only the categories that are relevant to the study area. The zoning provides an indication of the type and intensity of land uses that can be expected within the 2045 planning horizon. The zoning in the study area is primarily residential and commercial.

Table 1. City of Gold Beach and Curry County Zoning Summary

Category	City Designations	County Designations
Residential	■ Residential (R)	■ Residential-One (R-1) ■ Residential-Two (R-2)
Commercial	■ Commercial (4-C)	■ Rural Commercial (RC) ■ Light Commercial (C-1) ■ Heavy Commercial (C-2)
Industrial	■ Industrial (5-I)	■ None identified in the study area
Marine	■ Marine Activity (6-MA)	■ None identified in the study area
Public Facilities	■ Public Facilities (7-PF)	■ Public Facilities (PF)
Specialty		■ Forestry Grazing (FG) ■ Beaches and Dunes Conservation (CON)

MAJOR TRIP GENERATORS

Major trip generators that generate multimodal traffic within the study area are shown in Figure 3. These activity centers will be integrated into considerations to improve multimodal access to these destinations for people living in, working in, or visiting Gold Beach. Destinations that generate consistent local multimodal trips include Curry General Hospital, Gold Beach Junior/Senior High School, Riley Creek Elementary School, Curry Public Library, Curry County Fairgrounds, and Collier H Buffington Memorial Park. The Curry County Fair typically occurs in late July every year and attracts a large number of visitors. Additionally, the segment of US 101 from Moore Street to 11th Street features a medium building density of commercial land use, which also contributes to trip generation in the study area. Beyond this segment, the building density of commercial land use decreases, resulting in lower trip generation.

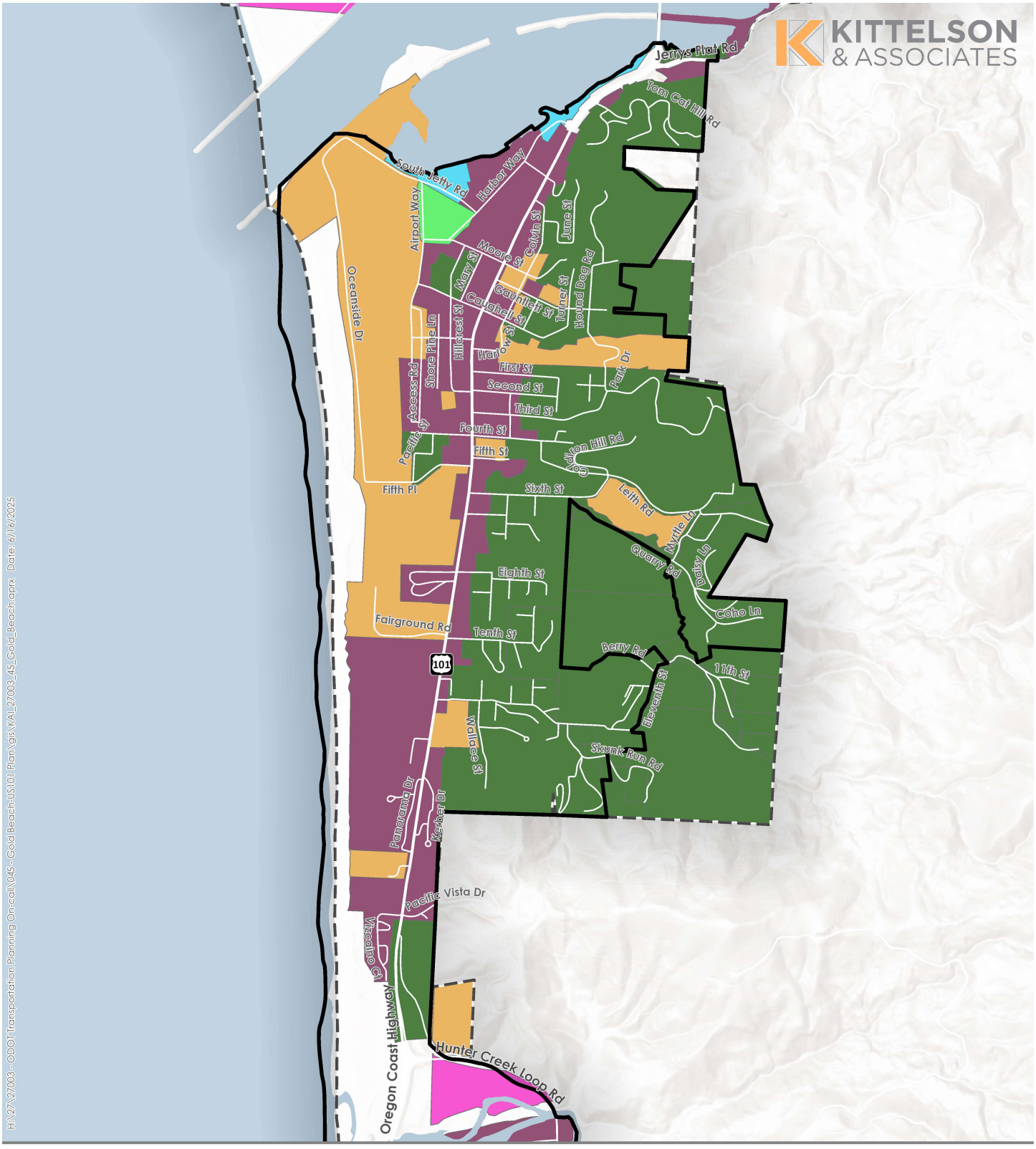


Figure 2

Zoning
Gold Beach, OR

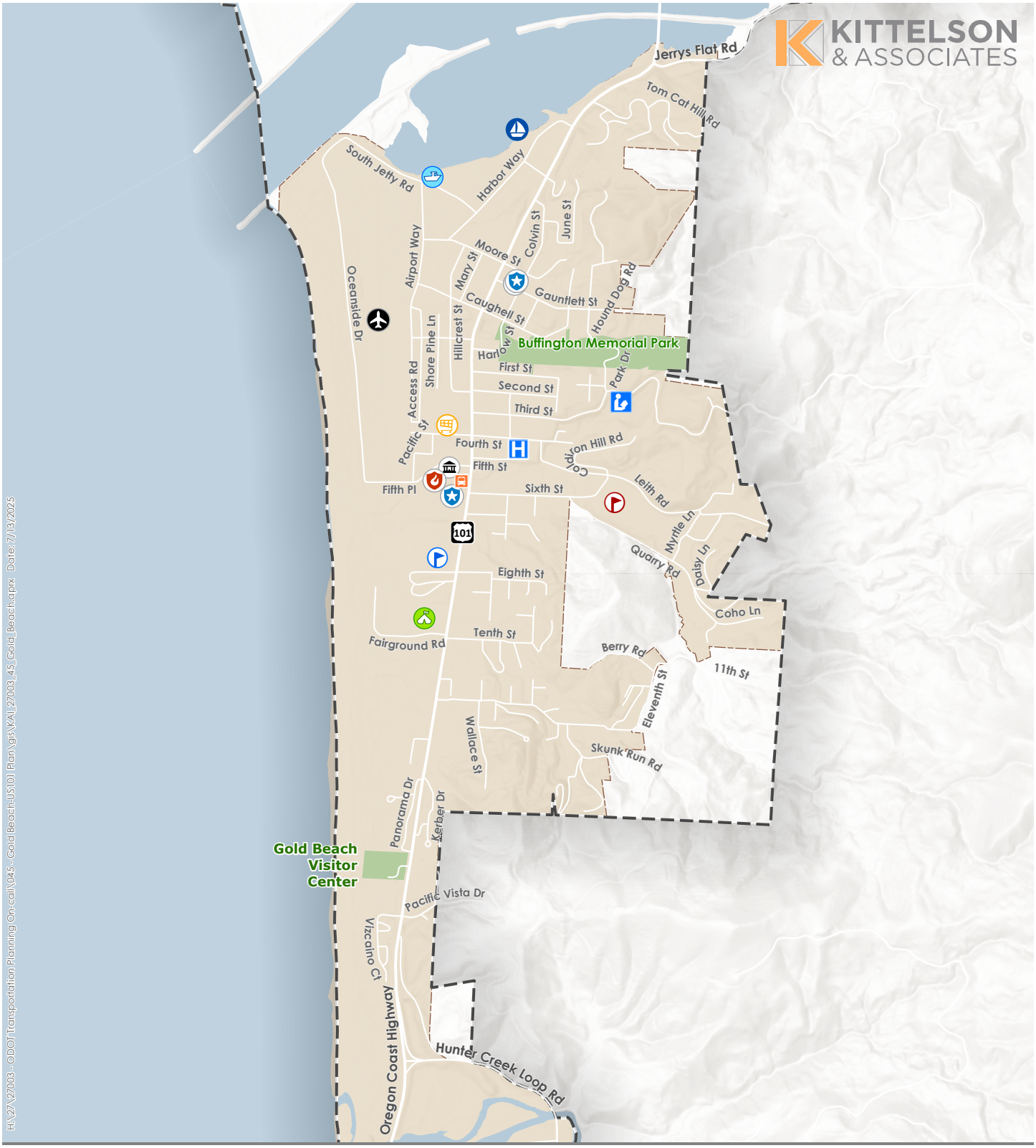


Figure 3

Major Trip Generators
Gold Beach, OR

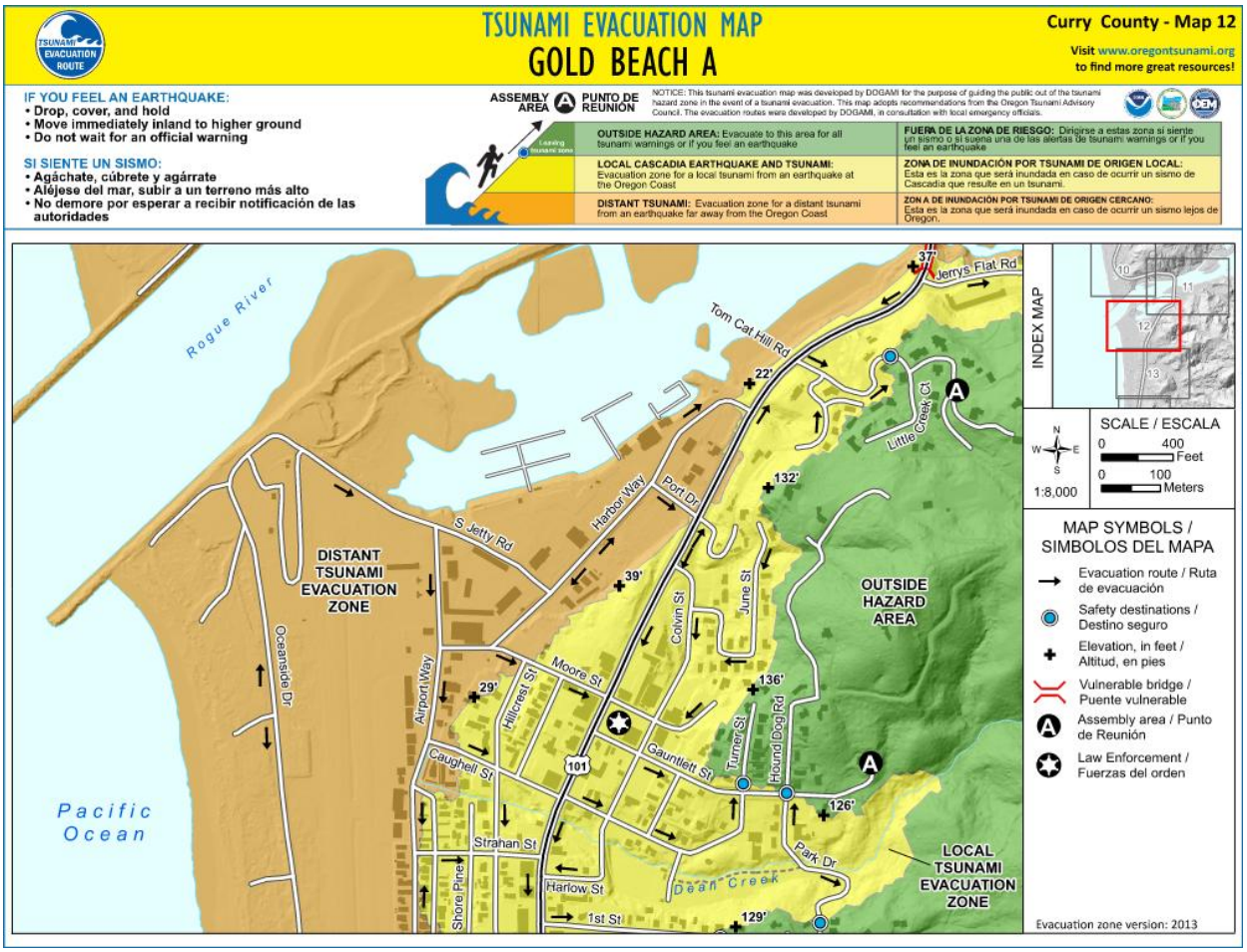
NATURAL RESOURCES AND ENVIRONMENTAL BARRIERS

The following natural resources and hazards lie within the study area. Creating a transportation system that is sensitive to natural resources and resilient to hazards is important to this plan.

Tsunami Evacuation

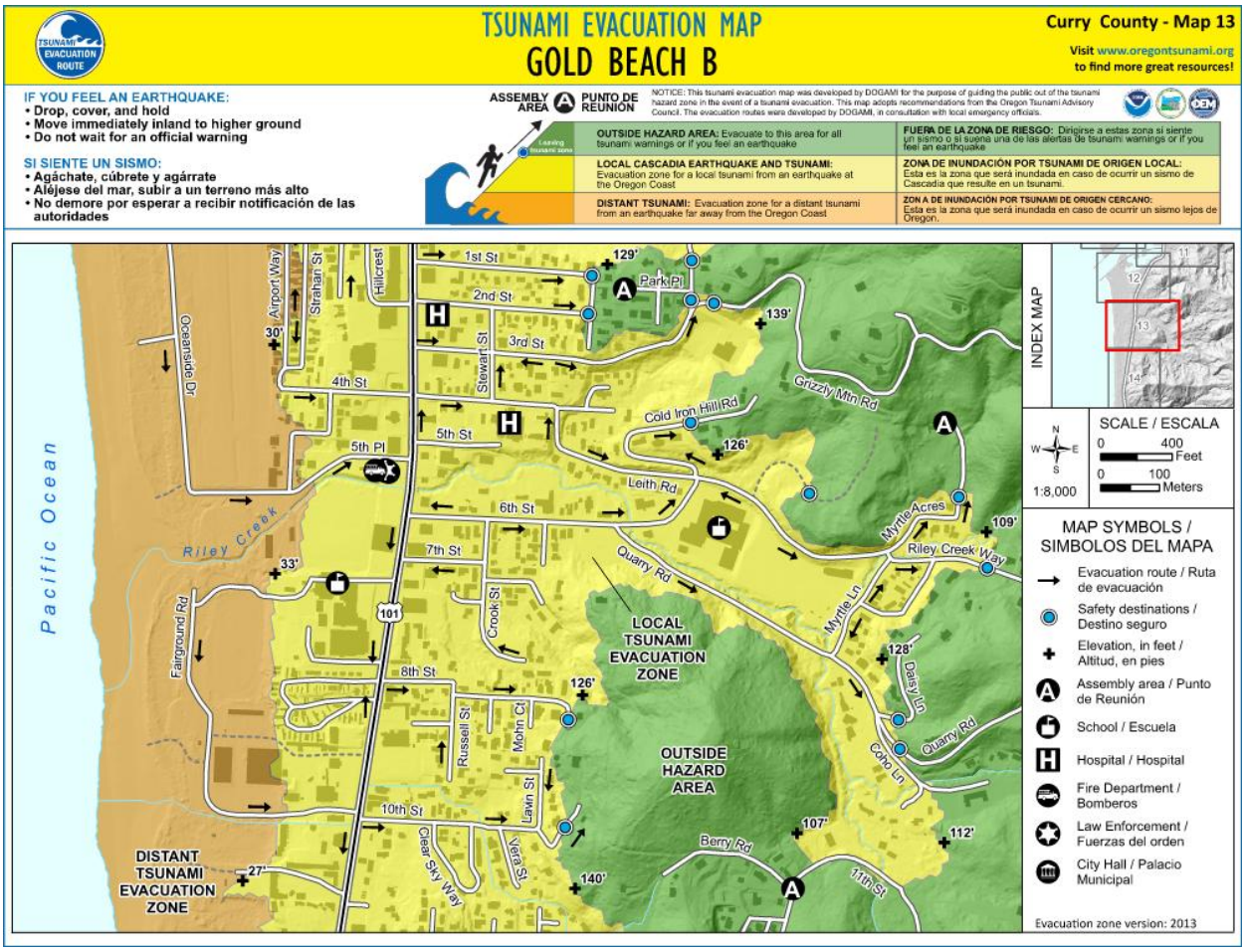
The City of Gold Beach is in a tsunami evacuation zone. Exhibit 1A to Exhibit 1C shows the tsunami evacuation zones for the study area. The assembly areas, or the safety destinations indicated in blue dots, are up Tom Cat Hill Road, Gauntlett Street, Myrtle Acres, 11th Street, and the Rogue Cemetery.

Exhibit 1A. Tsunami Evacuation Map from Jerry's Flat Road to 1st Street



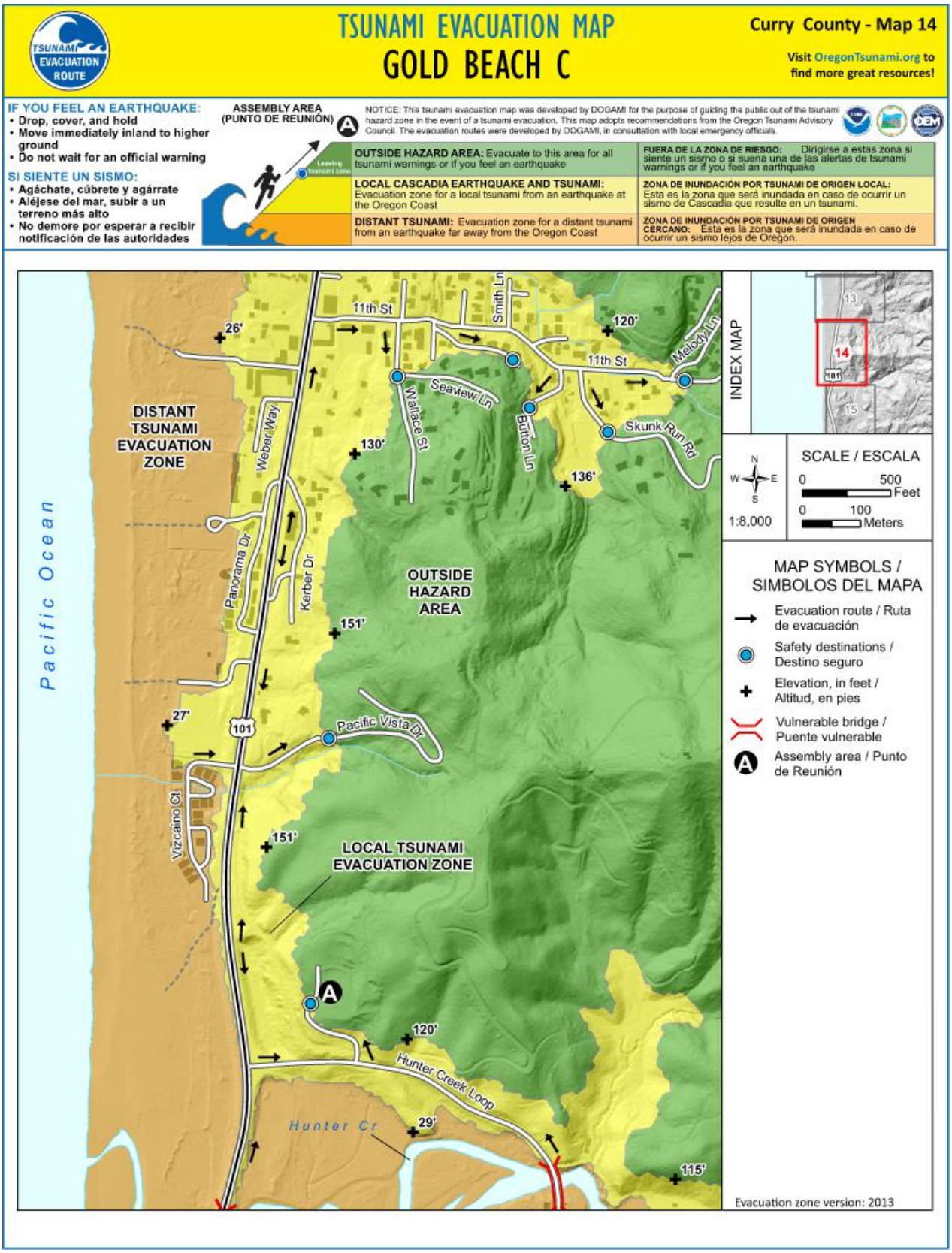
Source: Oregon Department of Geology and Mineral Industries

Exhibit 1B. Tsunami Evacuation Map from 1st Street to 10th Street



Source: Oregon Department of Geology and Mineral Industries

Exhibit 1C. Tsunami Evacuation Map from 11th Street to Hunter Creek Loop



Source: Oregon Department of Geology and Mineral Industries

Unstable Slopes

ODOT TransGIS identifies three unstable slopes along the US 101 corridor within the study area. Two of these slopes are near the intersection of Jerry's Flat Road, while the third is located between the intersections of Port Drive and Moore Street. The PMT indicated that a landslide recently occurred from the bluff on the east side of US 101, between Harbor Way and Port Drive. The unstable slopes are shown in Exhibit 2 with green plus signs indicating unstable slopes below the roadway and red plus signs indicating unstable slopes above the roadway.

Wetlands

There are two small wetland areas near the US 101 corridor shown on ODOT TransGIS. The first one, covering approximately 1,600 square feet, is located at the northeast corner of the intersection of Tom Cat Hill Road and US 101. The second wetland, with an area of about 5,500 square feet, is situated between Caughell Street and Strahan Street on the west side of US 101. These wetlands are mapped in Exhibit 2 in blue.

Coastal Hazard Site

The area surrounding the US 101 and Hunter Creek Loop intersection has been designated as a US 101 Priority Coastal Hazard Site with a vulnerability index score of 0.45 shown on ODOT TransGIS. This area is in a flood hazard zone due to Hunter Creek being located to the south.

Biological Resources

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consulting (IPaC) tool was used to determine potential presence of species listed under the Endangered Species Act (ESA) as threatened or endangered species within or near the study area. Threatened and endangered species that are known or expected to be within the study area include Pacific Marten (Martes Caurina; threatened), Marbled Murrelet (Brachyramphus marmoratus; threatened), Northern Spotted Owl (Strix occidentalis caurina; threatened), Western Snowy Plover (Charadrius nivosus nivosus; threatened), Olive Ridley Sea Turtle (Lepidochelys olivacea; threatened), and Western Lily (Lilium occidentale; endangered).), There is no designated critical habitat within the study area.

There are two fish barriers along the US 101 corridor identified on ODOT TransGIS. The first is a culvert between Caughell Street and Strahan Street on the west side of US 101, while the second is a culvert at the crossing of Riley Creek between 5th Place and 6th Street. There are no fish habitats within the study area. However, the closest fish habitats are located just north and south of the study area, in the Rogue River and Hunter Creek.

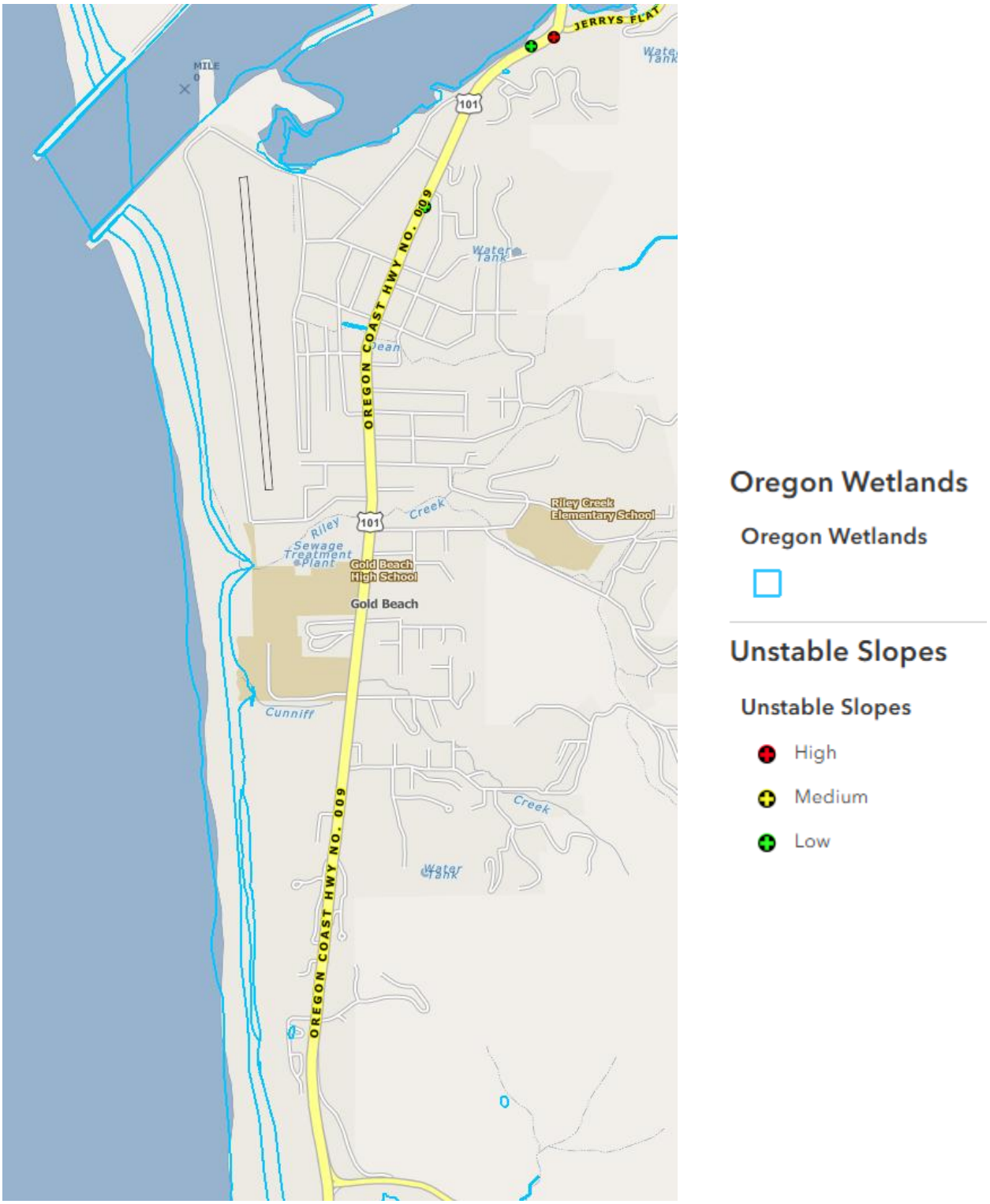
Historic Resources

The Oregon State Historic Preservation Office (SHPO) Historic Sites Database shows numerous resources within the study area as seen in Exhibit 3. Most of them are listed as not eligible/non-contributing but there are several that are eligible/contributing. Three of the sites are listed on the National Register of Historic Places (NRHP) including the Mary D. Hume, a sunken ship near the port; Gold Beach Ranger Station; and the Rogue River Bridge.

Scenic Views

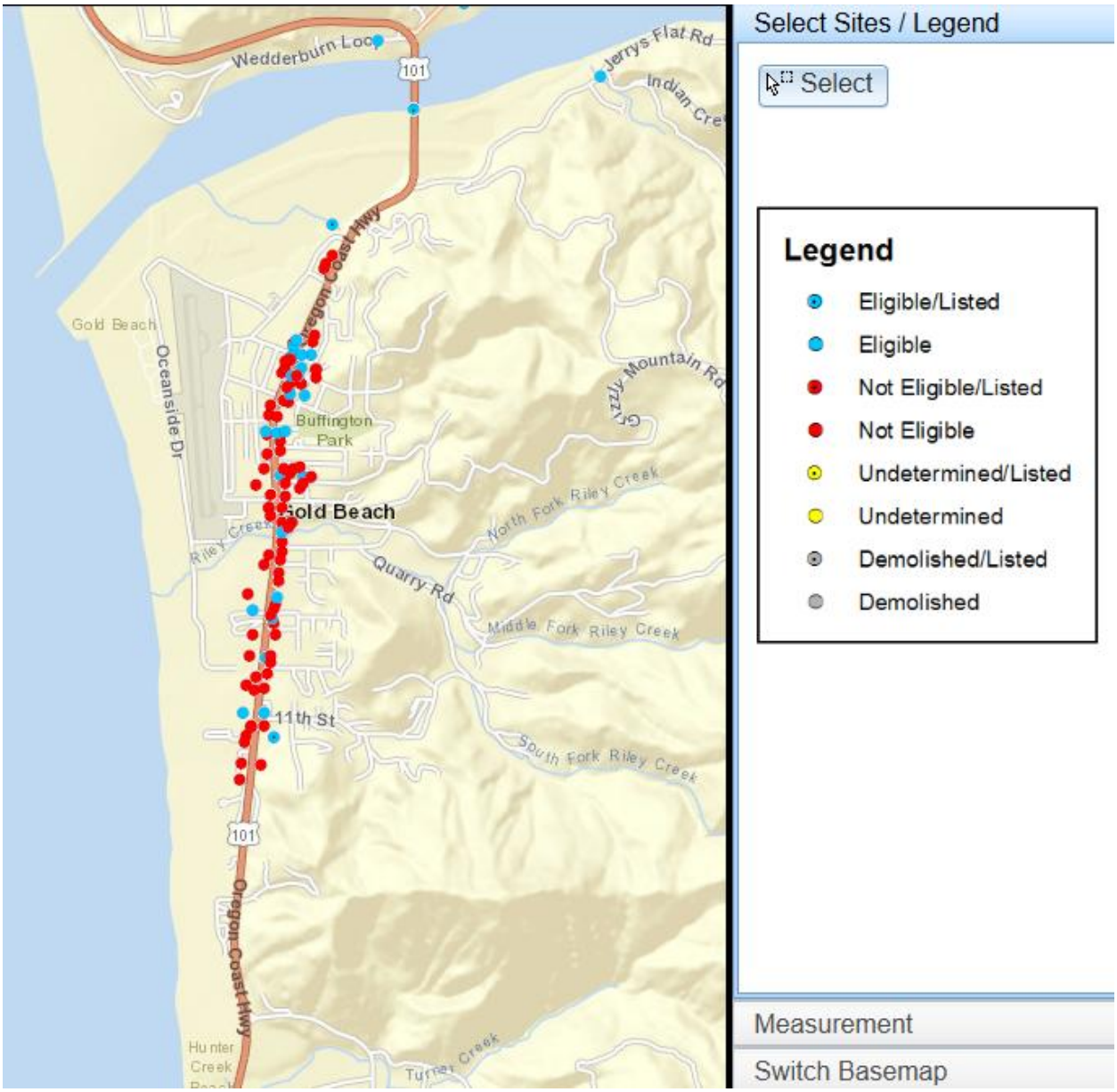
US 101 is designated as an All-American Road by the U.S. Department of Transportation's Federal Highway Administration which means that it meets criteria for at least two intrinsic qualities that are nationally significant and has one-of-a-kind features that do not exist elsewhere. Kissing Rock is a designated scenic view by the Oregon Shore State Recreation Area located just south of Hunter Creek Bridge.

Exhibit 2. Unstable Slopes and Wetland Locations



Source: Oregon Department of Transportation TransGIS

Exhibit 3. Historic Sites Map



Source: Oregon State Historic Preservation Office Historic Sites Database Map

Population Demographics

The City of Gold Beach has a population of approximately 2,500 people[1]. The community is made up of people of all ages, abilities, and incomes with various transportation needs.

Certain populations are statistically more likely to be "transportation disadvantaged" with limited ability to provide their own transportation or requiring use of public transportation. These populations generally include people who are disabled, youth (under 18), seniors (65 or older), with Limited English Proficiency (LEP), living under the federal poverty level, who are non-white, and households without access to a

[1] Source: Portland State Research Center 2024 Certified Population Estimate

vehicle. ODOT uses a Transportation Disadvantaged Index (TDI) to calculate a score for each Census block group in Oregon, illustrated in Figure 4.

The ODOT TDI data shows that potential transportation-disadvantaged populations are concentrated in specific areas to the west of US 101. It is noted however that the accuracy of this data is limited due to the large census tracts. Future transportation planning should specifically consider how to enhance services for these areas and populations.

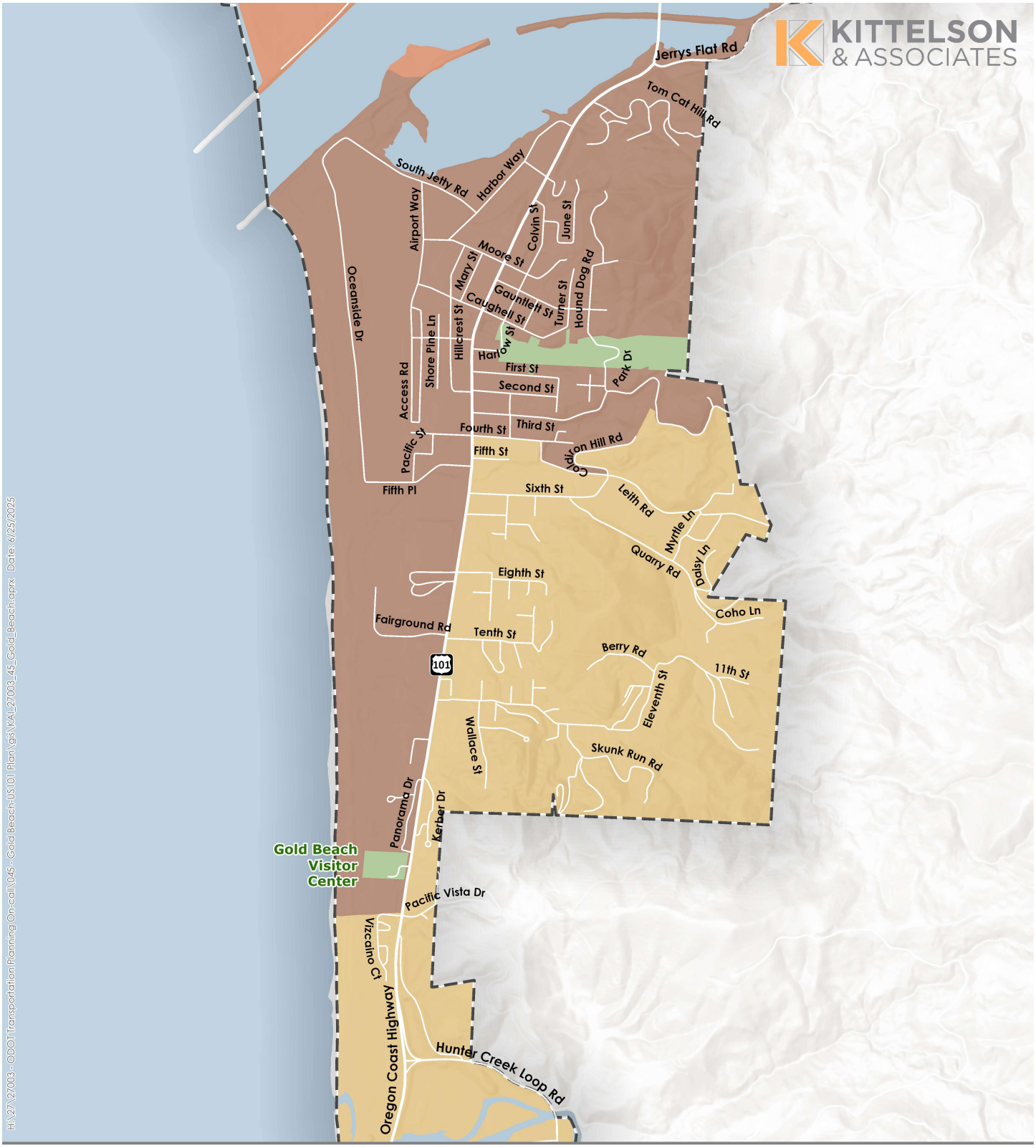


Figure 4

Potential Transportation Disadvantaged Populations Gold Beach, OR

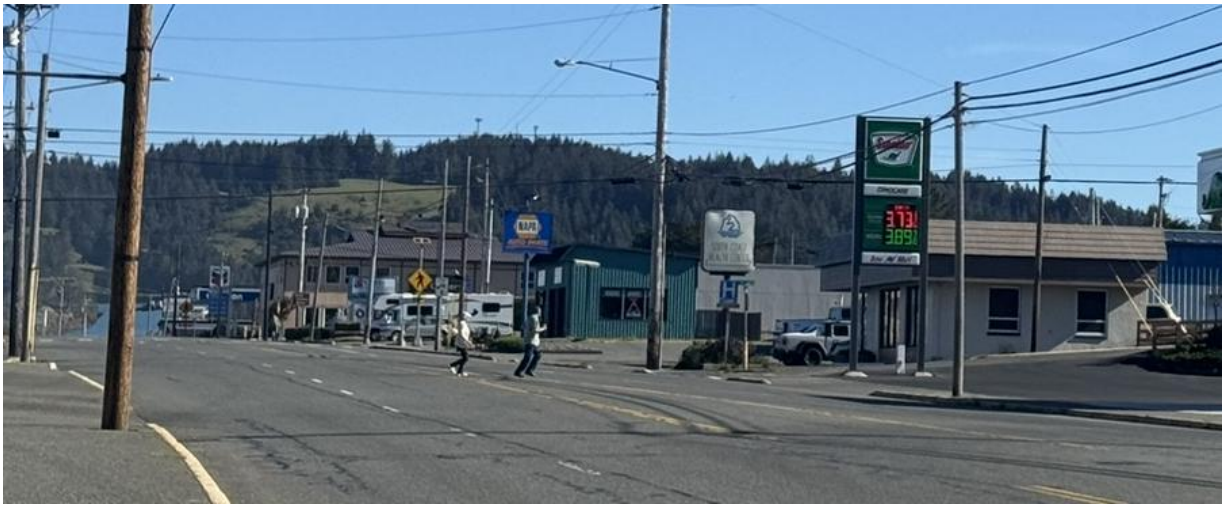
Source: Oregon Department of Transportation

PEDESTRIAN SYSTEM

The pedestrian system refers to infrastructure designed for people walking or using mobility devices and typically include sidewalks, trails, crossings, ramps, and technology such as push buttons or pedestrian activated flashing beacons (e.g., Rectangular Rapid Flashing Beacon). A well-connected pedestrian network provides safe and efficient links between pedestrian trip generators like schools, parks and community centers, residential neighborhoods, and other pedestrian attractors.

Figure 5 maps pedestrian facilities in the study area. The primary gaps in the pedestrian system will be discussed later under the Multimodal Analysis section. Exhibit 4 shows pedestrians crossing at an unmarked crossing between 4th Street and 5th Street.

Exhibit 4. Pedestrians Crossing at an Unmarked Crossing



Source: Kittelson & Associates, Inc.

BICYCLE SYSTEM

Bicycle facilities refer to infrastructure designed for people biking, including bike lanes, shared use paths, and paved shoulders. Figure 6 maps existing bicycle facilities and shoulder widths in the study area.

Like pedestrian facilities, bicycle facilities serve a variety of trips, including trips to major attractions such as schools, parks, commercial centers, public facilities, and recreational trips. The Oregon Coast Bike Route runs along US 101 in Gold Beach. The existing bicycle network in the City of Gold Beach is limited to small segments of paved shoulders and a multi-use path along Oceanside Drive, and wayfinding signage as illustrated in Exhibit 5. The primary gaps in the bicycle system will be discussed later under the Multimodal Analysis section. Exhibit 6 shows a cyclist biking in the travel lane on US 101 between Caughell Street and Moore Street.

Bicycle travel is accommodated on paved shoulders where there is enough width (i.e., shoulders greater than 4 feet). By law, bicyclists have the right to bike on the road as a vehicle (ORS 814.400). Along US 101 through Gold Beach, shoulder widths vary from 0 to 13 feet. The segment from Harbor Way to Kerber Drive does not have a shoulder.

Exhibit 5. Wayfinding for the Multi-Use Path Along Oceanside Drive

Source: Kittelson & Associates, Inc.

Exhibit 6. Cyclist Biking on US 101 in Gold Beach

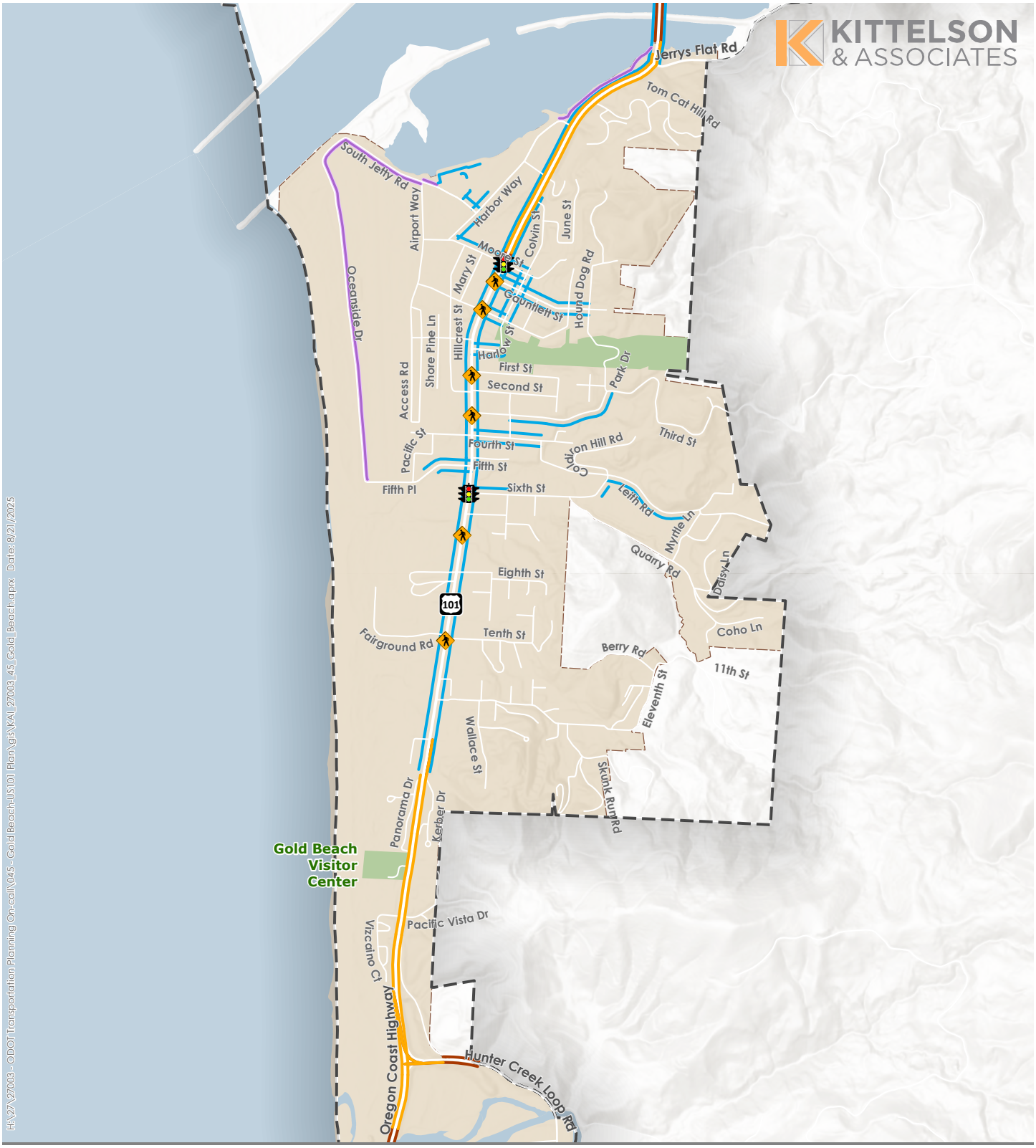
Source: Kittelson & Associates, Inc.

PUBLIC TRANSPORTATION SYSTEM

Curry Public Transit (CPT) operates the Coastal Express fixed-route service from Coos Bay/North Bend in Coos County to Smith River in northern California, as well as Dial-a-Ride service in Gold Beach. There is one bus stop in Gold Beach which is located at Gold Beach City Hall (Ray's Food Place stop) and has a bench, trash can, and shelter.

The Coastal Express, CPT's fixed-route service, operates from 6:15 AM to 6:55 PM, Monday through Saturday. Service is not provided on Sunday or on holidays. The route stops in the City of Gold Beach six times throughout the day with three stops going northbound and three stops going southbound. CPT indicated that the majority of rides along the Coastal Express are picked up and dropped off at Ray's Food Place, although drivers will stop alongside the road for flag stops in safe areas and deviate to Curry General Hospital if requested. In summer months, they provide many rides to tourists, travelers, campers, hikers, and bicyclists. They receive complaints from drivers, bicyclists, and hikers that they find the roadway conditions along U.S. 101 (with lack of bicycle lanes, narrow roads, truck traffic, and vehicle speeds) makes transit users feel unsafe.

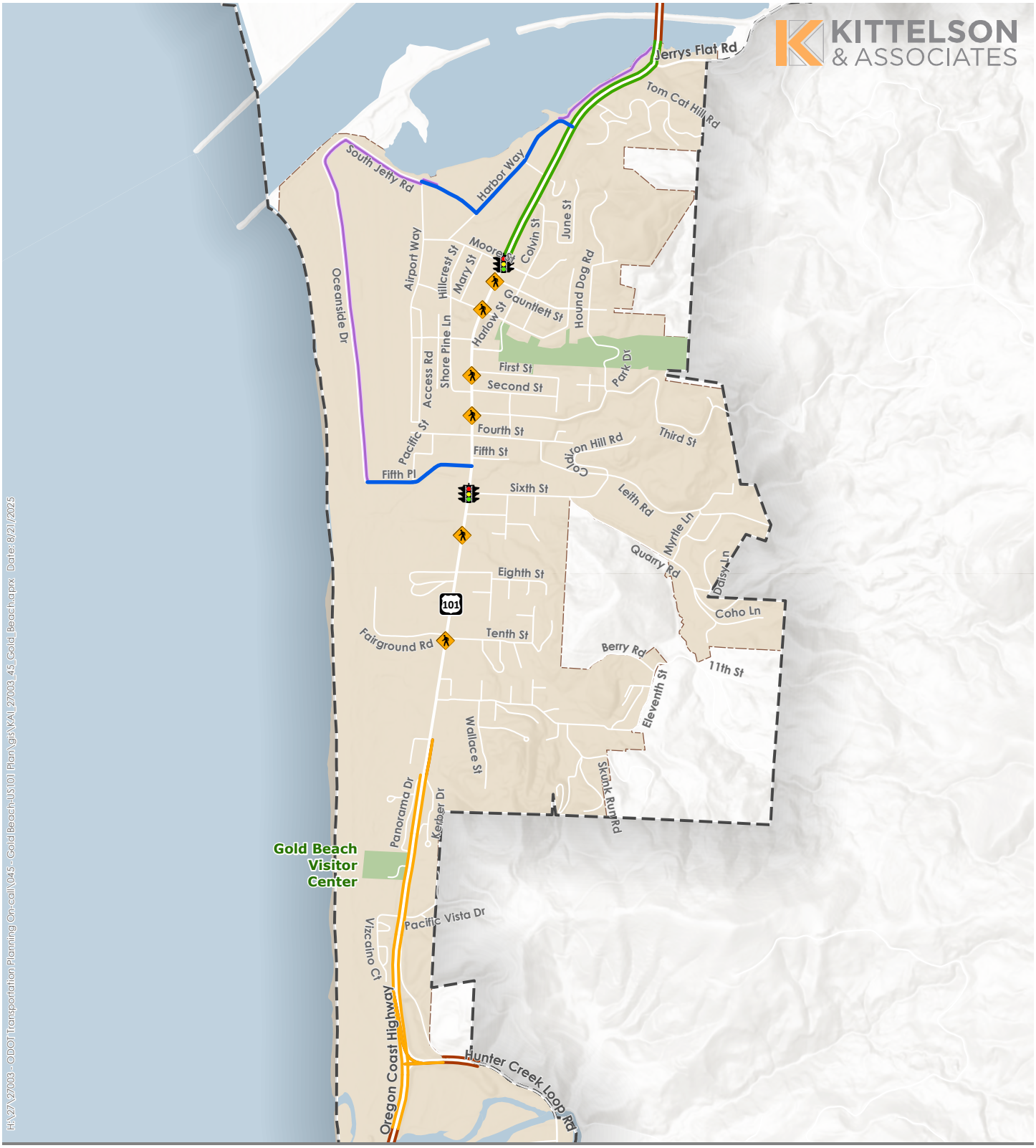
Dial-a-Ride is origin-to-destination, wheelchair accessible, demand-response service. CPT provides this service to the general public in Gold Beach. Dial-a-Ride operates from 9:00 AM to 2:00 PM on Monday and Tuesday and from 9:00 AM to 4:00 PM Wednesday and Friday, with no Thursday or weekend service. Buses run south on the hour and north on the half hour, with a half hour pick up window after scheduled time. CPT indicated that in FY 2025 they operated 3,723 rides in the Gold Beach Area.



Source: Oregon Department of Transportation

Figure 5

Pedestrian Facilities
Gold Beach, OR



Source: Oregon Department of Transportation

Figure 6

Bicycle Facilities
Gold Beach, OR

ROADWAY SYSTEM

Roadways provide infrastructure for motor vehicles, freight, bicycle, pedestrian, and transit facilities. The roadway network establishes links both within the urban area and outside of its boundaries, connecting surrounding regions and neighboring states. The following sections describe an inventory of the existing roadway system within the study area, including street jurisdictions and functional classifications, roadway improvement standards, key roadway characteristics, and freight routes.

Street Jurisdiction

Public streets within the Gold Beach urban area are operated and maintained by three primary jurisdictions: the City of Gold Beach, ODOT, and Curry County. These three jurisdictions coordinate planning, operations, maintenance, and improvements of roadway facilities within the urban area and ensure the continued performance and functionality of the transportation system to meet public needs. These jurisdictions are responsible for the following:

- Determining the road's functional classification.
- Defining the roadway's design and multimodal features.
- Approving construction and access permits; and,
- Maintenance and operations.

Figure 7 maps roadway facilities by jurisdiction within the study area.

Federal Functional Classification

The FHWA classifies key urban and rural roadways as Interstates, Other Freeways and Expressways, Other Principal Arterials, Minor Arterials, Major and Minor Collectors, or Local Roads. All public roadways within the urban area are federally designated as urban roadways. The federal classification for US 101 through Gold Beach is Rural Other Principal Arterial.

The FHWA provides financial assistance for roadways through the Federal-aid Highway Program. The FHWA uses the Federal functional classification system to determine eligibility for funding under the Federal-aid Highway Program, which provides financial assistance for construction, maintenance, and operations of local and state roadways. The functional classifications eligible for the Program include urban minor collectors, major collectors, minor arterials, principal arterials, and interstates.

Bridges, Intelligent Transportation System (ITS) Facilities, and Freight

Just outside the study area on US 101, there are two bridges to the north and south. The Wedderburn Bridge to the north crosses the Rogue River and has a curb-to-curb roadway width of 27 feet. To the south, the Hunter Creek Bridge crosses Hunter Creek and has a curb-to-curb roadway width of 30 feet. There are no ITS devices within the study area; the nearest device is a weather system located on the north side of the Wedderburn Bridge.

The segment of US 101 through Gold Beach is designated as a High Clearance Route and Reduction Review Route.

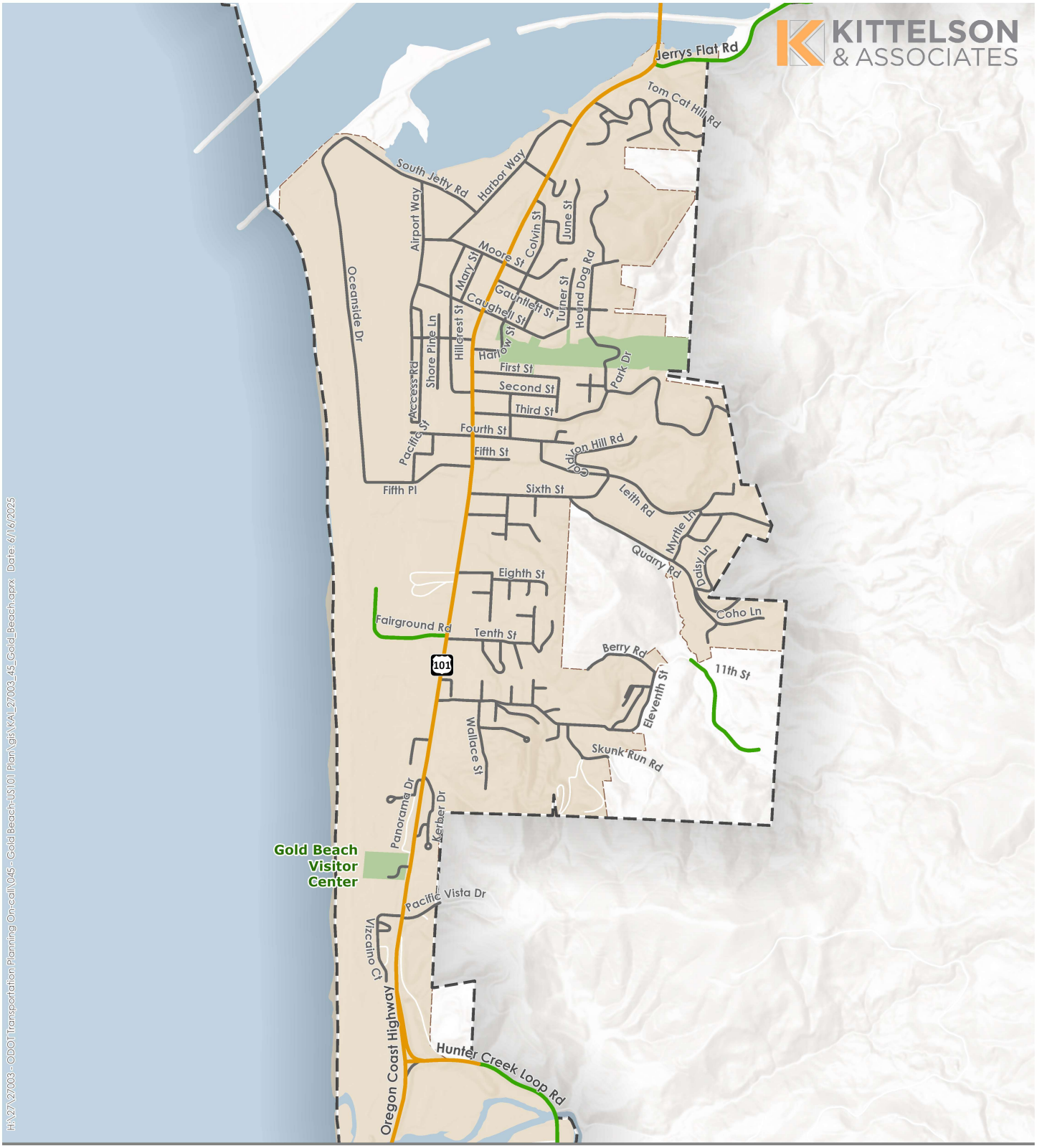


Figure 7

Street Jurisdiction
Gold Beach, OR

Source: Oregon Department of Transportation

Roadway Characteristics

This section provides an overview of the following roadway characteristics for US 101 and nearby streets in the study area:

- Number of travel lanes
- Posted speed limits
- On-street parking
- Pavement conditions
- Typical cross sections

Information in this section was summarized using available data from Curry County, ODOT, and Google Maps.

NUMBER OF TRAVEL LANES

Roadway facilities by travel lanes are mapped in Figure 8. There are two-lane cross sections along US 101 north of Jerry's Flat Road and south of Kerber Drive. The cross section varies from three to five lanes throughout the remainder of the study corridor.

POSTED SPEED LIMITS

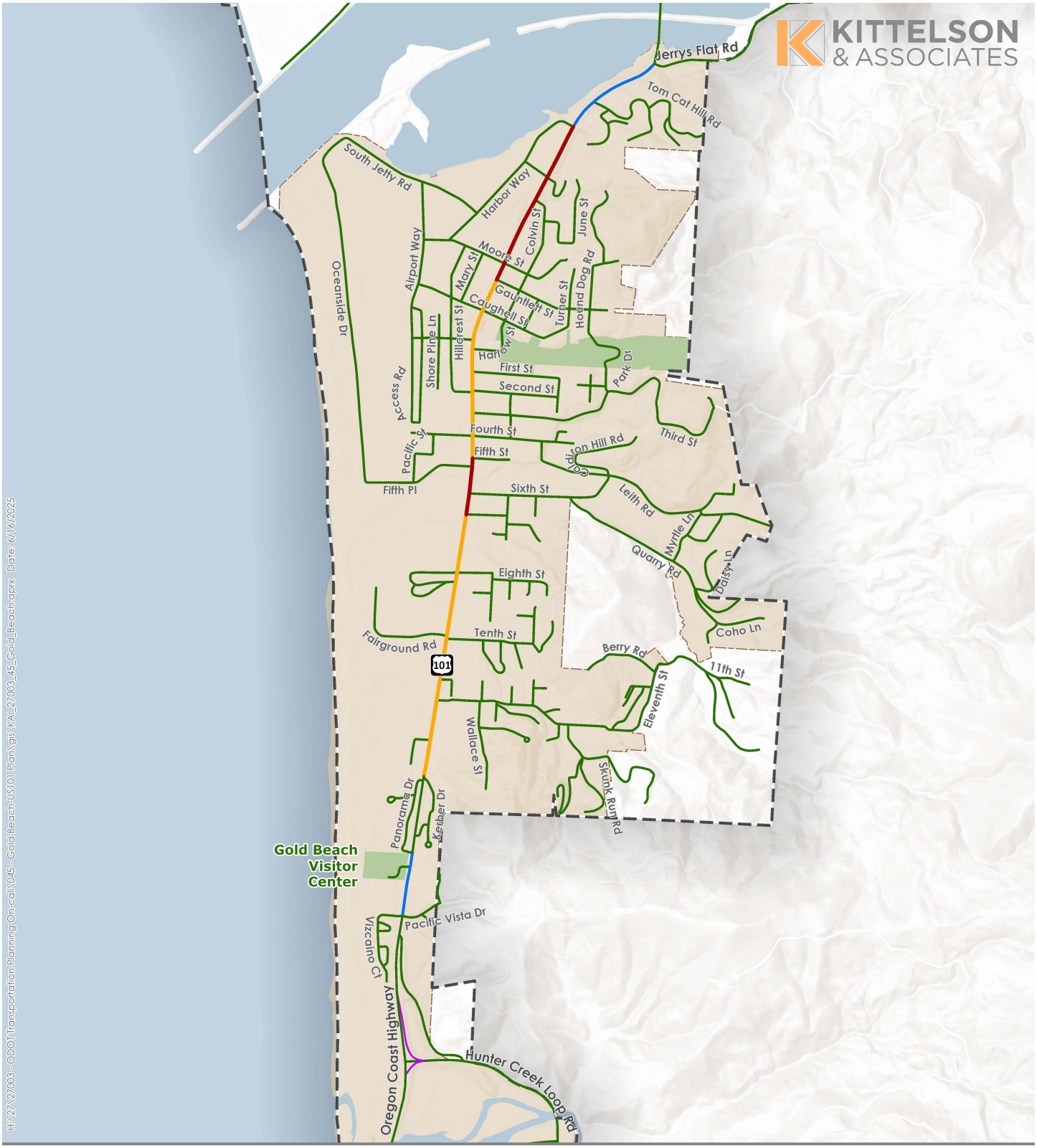
The posted speed limits are mapped in Figure 9. The posted speed limit along US 101 in the study area varies from 30 mph to 55 mph. Gold Beach Junior/Senior High School has a time-of-day school speed limit in front of it.

ON-STREET PARKING

On-street parking is available intermittently from Gauntlett Street to Kerber Drive. It is permitted on the four-lane cross section on one or both sides of the street where the curb is not painted yellow.

PAVEMENT CONDITIONS

Roadway facilities by pavement conditions are mapped in Figure 10. ODOT provides pavement conditions data for State highway in one of five categories: Very Good, Good, Fair, Poor, or Very Poor. The conditions along the study segment of US 101 vary from Fair to Poor.



Source: Oregon Department of Transportation

Figure 8

Number of Travel Lanes
Gold Beach, OR

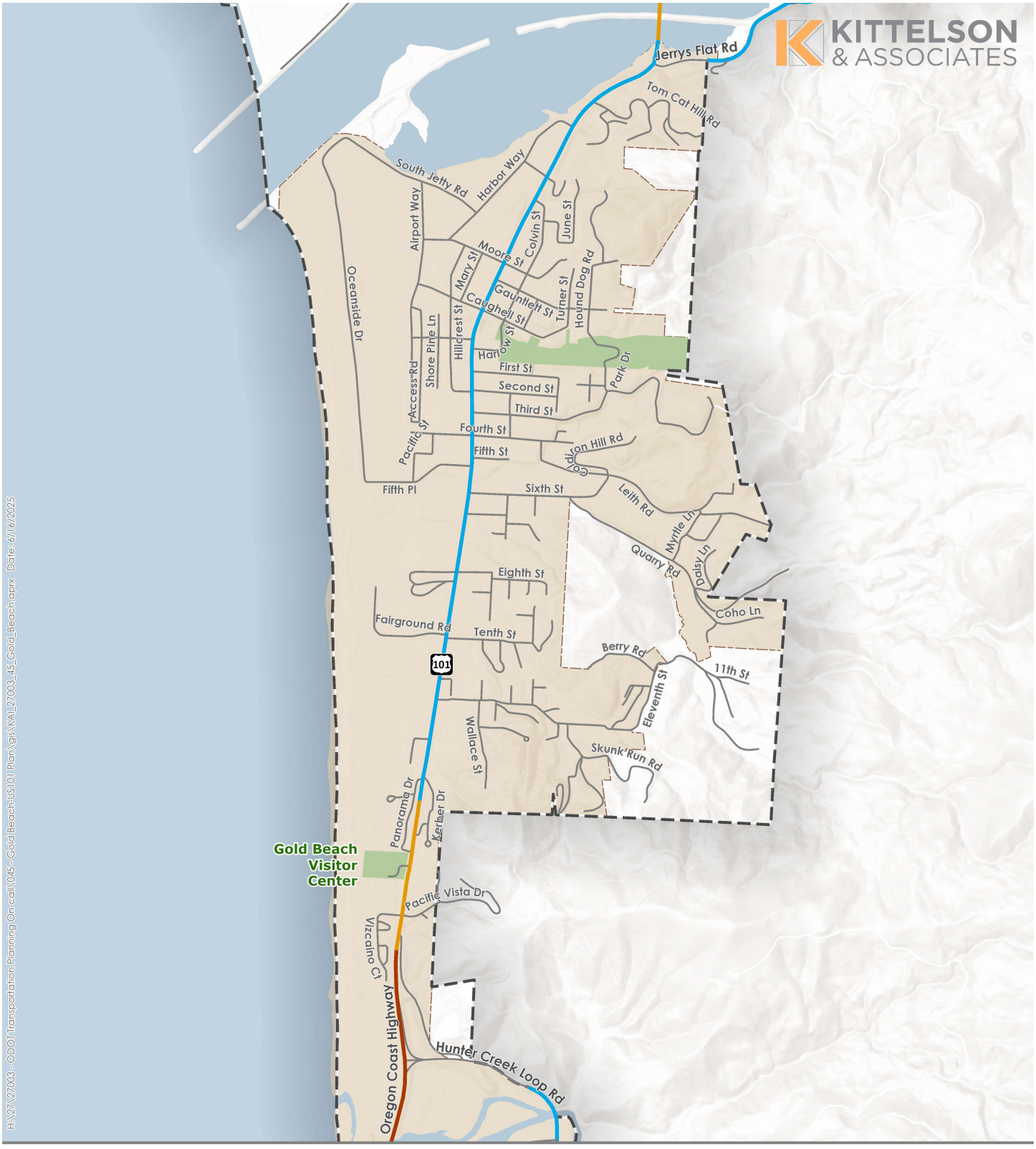


Figure 9

Posted Speed Limits
Gold Beach, OR

Source: Oregon Department of Transportation

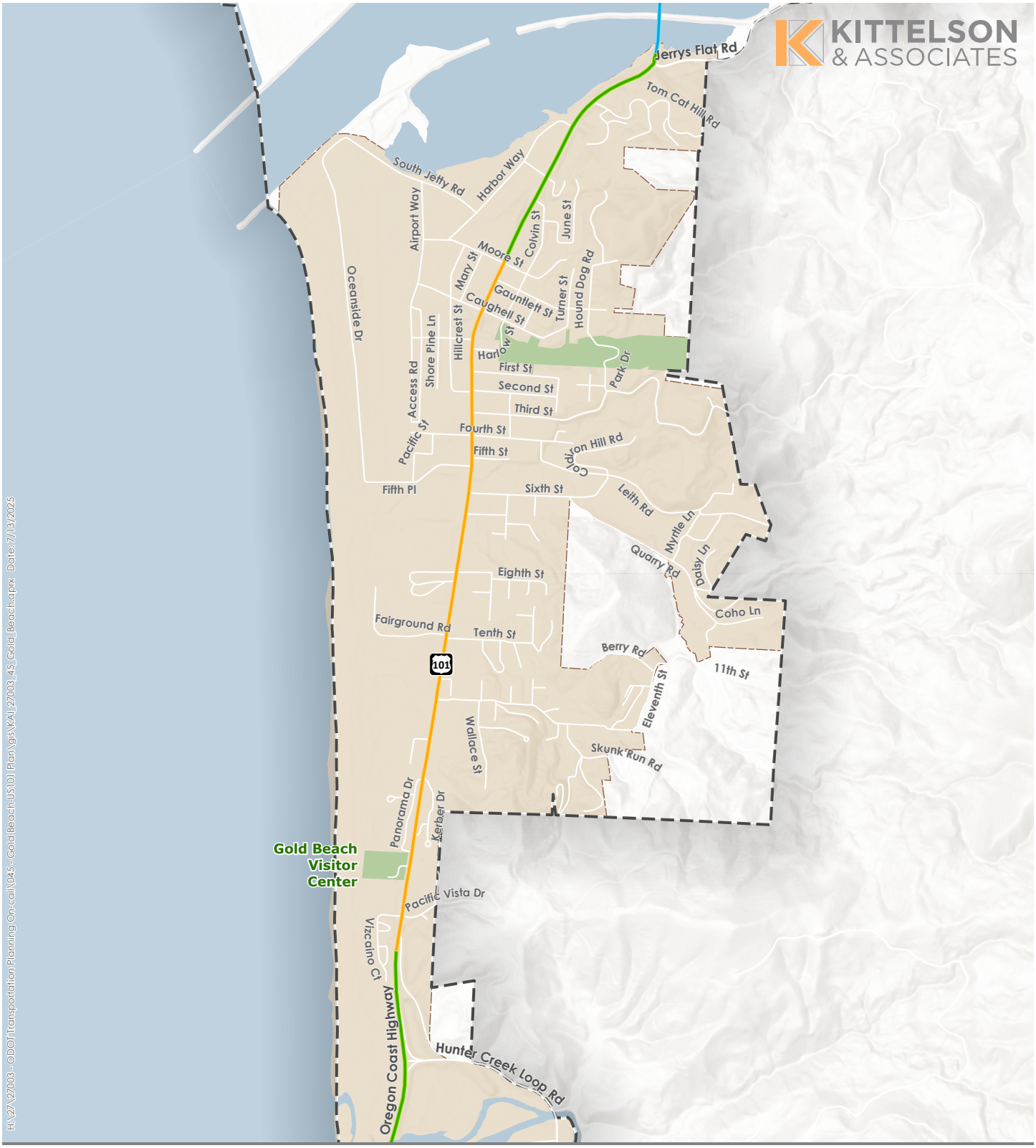


Figure 10

Pavement Conditions
Gold Beach, OR

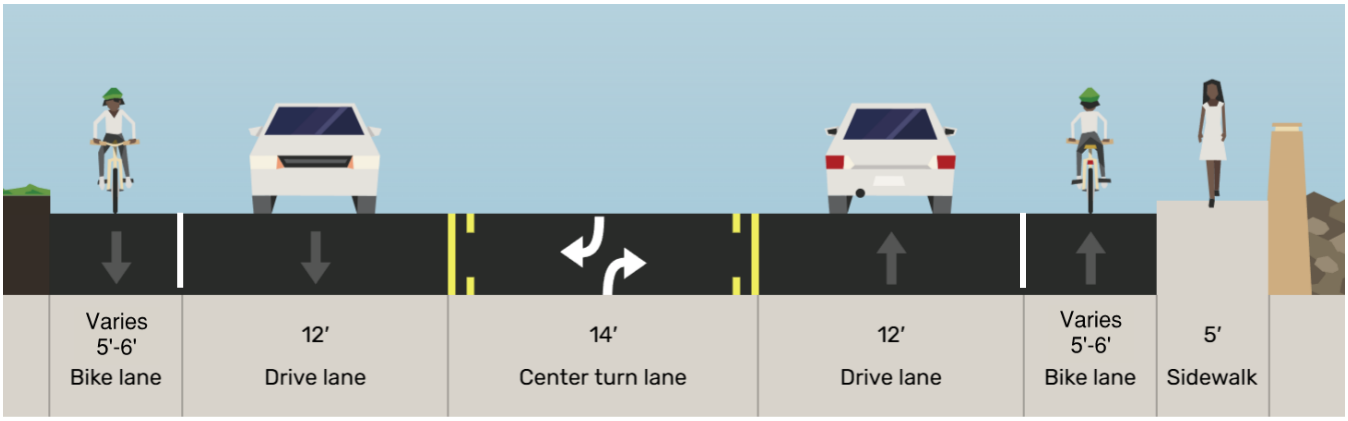
Source: Oregon Department of Transportation, Curry County TSP

TYPICAL CROSS SECTION

The typical cross section varies along the corridor.

From Jerry's Flat Road to Harbor Way, the roadway is a three-lane cross section with one travel lane in each direction, a center turn lane, bike lane/shoulder on both sides, and sidewalk on the west side of US 101. The approximate curb-to-curb width along this segment is 50 feet, and the right-of-way (ROW) width is 55 feet. The typical cross section and widths are shown in Exhibit 7.

Exhibit 7. Typical Three-Lane Cross Section from Jerry's Flat Road to Harbor Way Facing South



From Harbor Way to Kerber Drive, the roadway alternates between a five-lane and four-lane cross section. The five-lane section includes two travel lanes in each direction, a center turn lane, and sidewalks on both sides of US 101. The width of the sidewalks varies throughout the corridor, as shown in Exhibit 8. The four-lane section features two travel lanes in each direction, parking on both sides of the street where permitted, and sidewalks on both sides of US 101. The width of the sidewalks also varies throughout the corridor. The approximate curb-to-curb width along this segment is 62 feet, and the ROW width varies from 72 to 82 feet. The typical cross section and widths are shown in Exhibit 9.

Exhibit 8. Typical Five-Lane Cross Section from Harbor Way to Kerber Drive Facing South

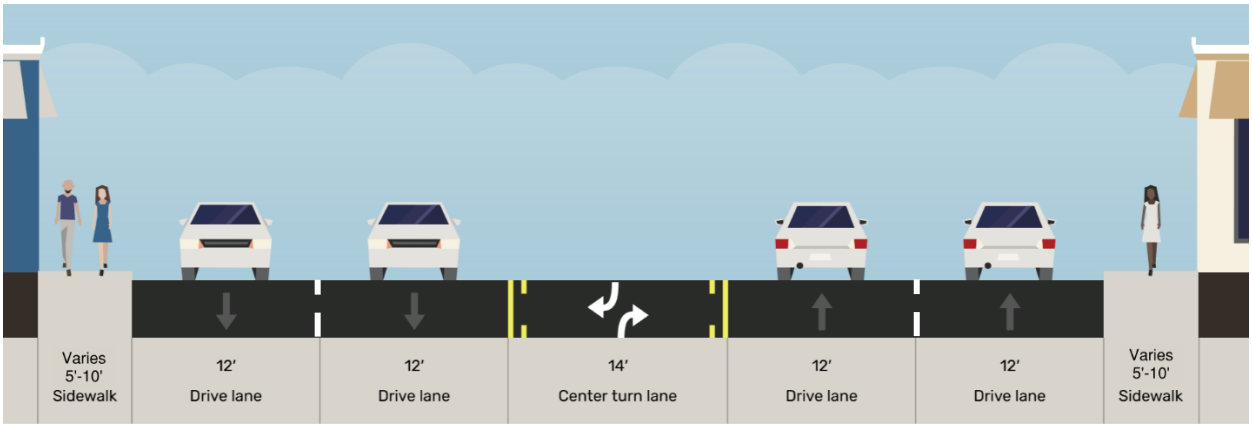
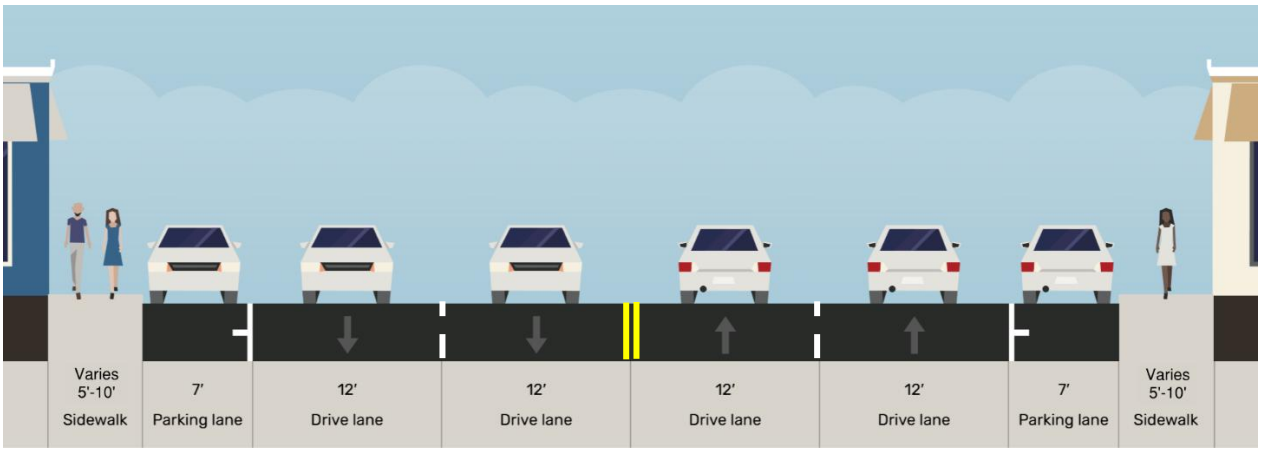
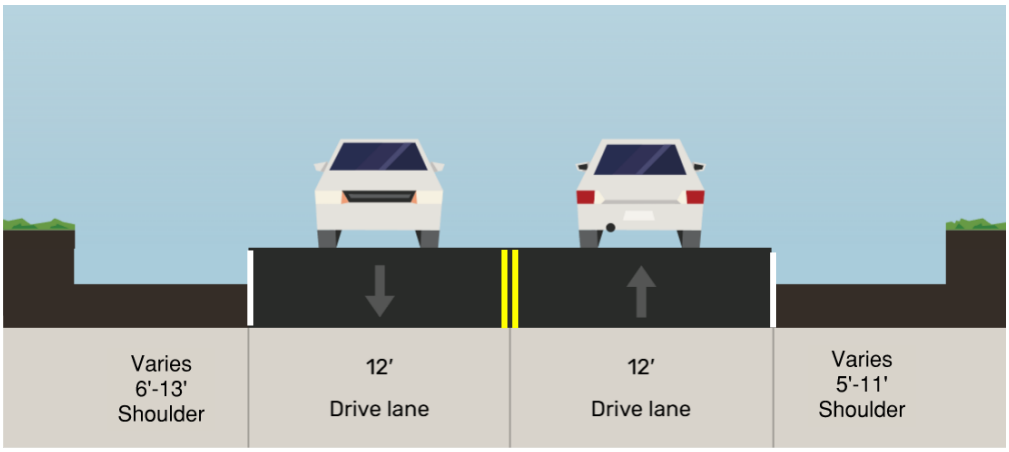


Exhibit 9. Typical Four-Lane Cross Section from Harbor Way to Kerber Drive Facing South



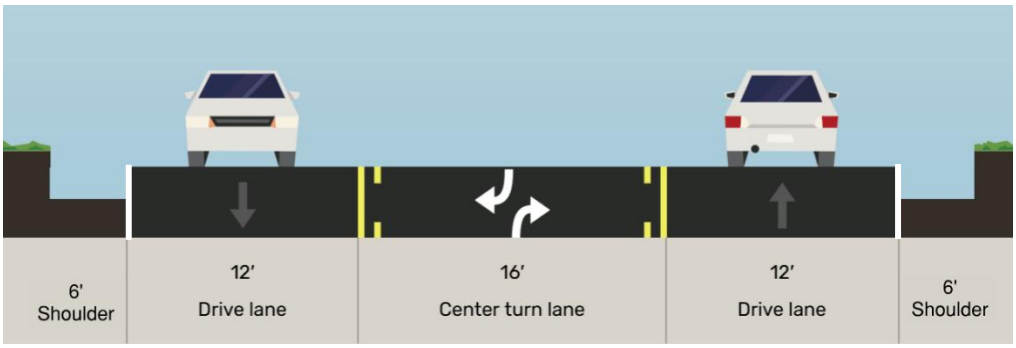
From Kerber Drive to Hunter Creek Road, the cross section features one travel lane in each direction with a varying shoulder width on both sides. The approximate curb-to-curb and ROW width varies along this segment from 35 to 48 feet. The typical cross section and widths are shown in Exhibit 10.

Exhibit 10. Typical Two-Lane Cross Section from Kerber Drive to Hunter Creek Road Facing South



Between Kerber Drive and Hunter Creek Road, there is a short segment from approximately Shirley Lane to Pacific Vista Drive, where the cross section features one travel lane in each direction, a center turn lane, and shoulder on both sides of the street. The approximate curb-to-curb and ROW width along this segment is 52 feet. The typical cross section and lane widths are shown in Exhibit 11.

Exhibit 11. Typical Three-Lane Cross Section from Shirley Lane to Pacific Vista Drive Facing South



POTENTIAL PARALLEL ROUTES

This section identifies and evaluates existing and potential parallel routes that support pedestrian and bicycle connectivity. Parallel routes can enhance corridors to create longer, more connected networks. Areas for potential parallel routes are identified in Figure 11 and described below.

1. **Oceanside Drive Multi-Use Path**
   An existing multi-use path runs along Oceanside Drive, offering an alternative route to US 101 for people walking and biking. However, the path is only about one mile long and lacks a connection to the sidewalk network south of the route. Extending the path to connect with existing sidewalks on 5th Place would close a key gap.

2. **Oceanside Drive to Fairground Drive**
   A potential connection between the Oceanside Drive path and Fairground Drive would strengthen the parallel network. Fairground Drive provides access to US 101 and runs behind the Curry County Fairgrounds and Gold Beach Junior/Senior High School's track. This connection would require a bridge over Riley Creek.

3. **4th Street to 6th Street**
   An existing route connects 4th and 6th Streets, but it requires significant out-of-direction travel. A more direct connection closer to US 101 would improve bicycle and pedestrian access. This connection would also need to cross Riley Creek via a new bridge. Curry County's desired hospital expansion to 4th Street and possible closure of that street could provide an opportunity to construct this connection as part of the project.

4. **6th Street to 8th Street**
   There is currently no route connecting 6th and 8th Streets. A new connection from Crook Street or 7th Street would help close this gap and improve north–south circulation.

5. **8th Street to 10th Street**
   A gap also exists between 8th and 10th Streets. Establishing a connection between the local roads extending from these streets would enhance the pedestrian and bicycle network.

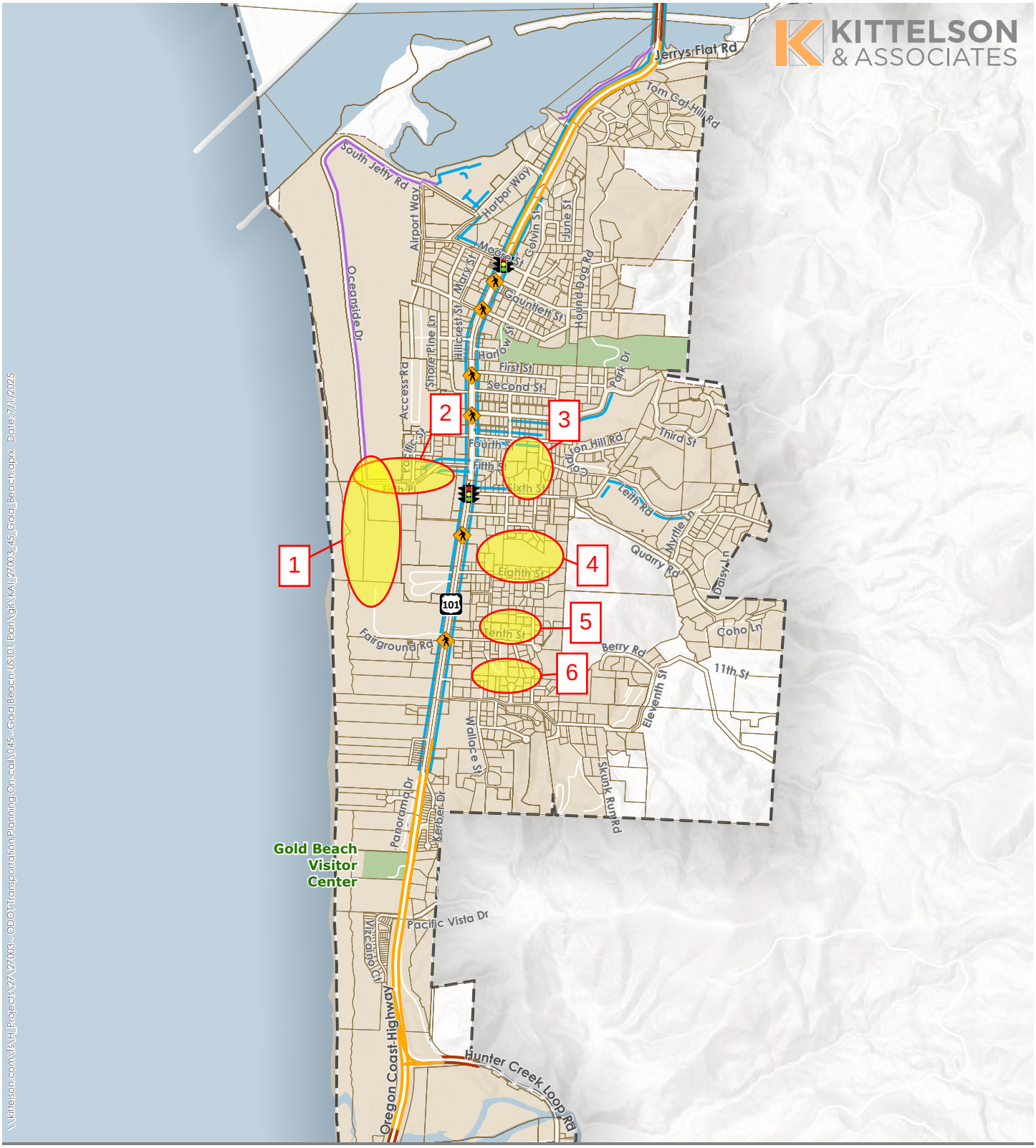
6. **10th Street to 11th Street**
   Similar to the previous gap, a connection between 10th and 11th Streets would improve network continuity for active transportation users.

Making these connections would allow pedestrians and cyclists to better navigate the community using alternatives to US 101.

Vehicle Connectivity Opportunities

In addition to parallel routes for pedestrians and bicycles close to US 101, there are opportunities to enhance vehicle connectivity on local streets that could help people reach tsunami evacuation areas without accessing US 101 or provide a more direct local route such as between the library, elementary school, and people living up 11th Street. One potential connectivity enhancement is between Quarry Road and 11th Street. There is a privately-owned gravel/dirt road that connects Quarry Road and 11th Street. This connection would provide another north/south route and could be useful in the event of a tsunami evacuation.

Another potential connectivity enhancement for vehicles is Park Drive. Park Drive connects from 3rd Street, leads to a park parking lot, and continues north as Hound Dog Road. If widened, it would provide another north/south route and could be useful in the event of a tsunami evacuation. However, grades and elevation changes could make these potential connections challenging.



Signalized Intersection with Marked Crosswalks

Midblock Crosswalk

Sidewalks

Multi-Use Path

≥4 Foot Paved Shoulders

<4 Foot Paved Shoulders

Water

Parks

Parcels

City Boundary

Urban Growth Boundary

0 0.5 Miles

Source: Oregon Department of Transportation

Figure 11

Potential Parallel Routes
Gold Beach, OR

Operations Analysis

Operations were assessed under existing conditions at key intersections along the Gold Beach US 101 Corridor. TM#3: Analysis Methodology Memorandum provides more details on the approach used for the operational analysis.

EXISTING OPERATIONS ANALYSIS

Operations at key intersections along US 101 within the study area were evaluated under existing conditions for both summer and non-summer PM peak hours. This analysis documents the no-build condition, where no changes are made to the roadway cross section or intersection configurations in the study area. Additional details on the analysis approach can be found in TM#3: Analysis Methodology Memorandum.

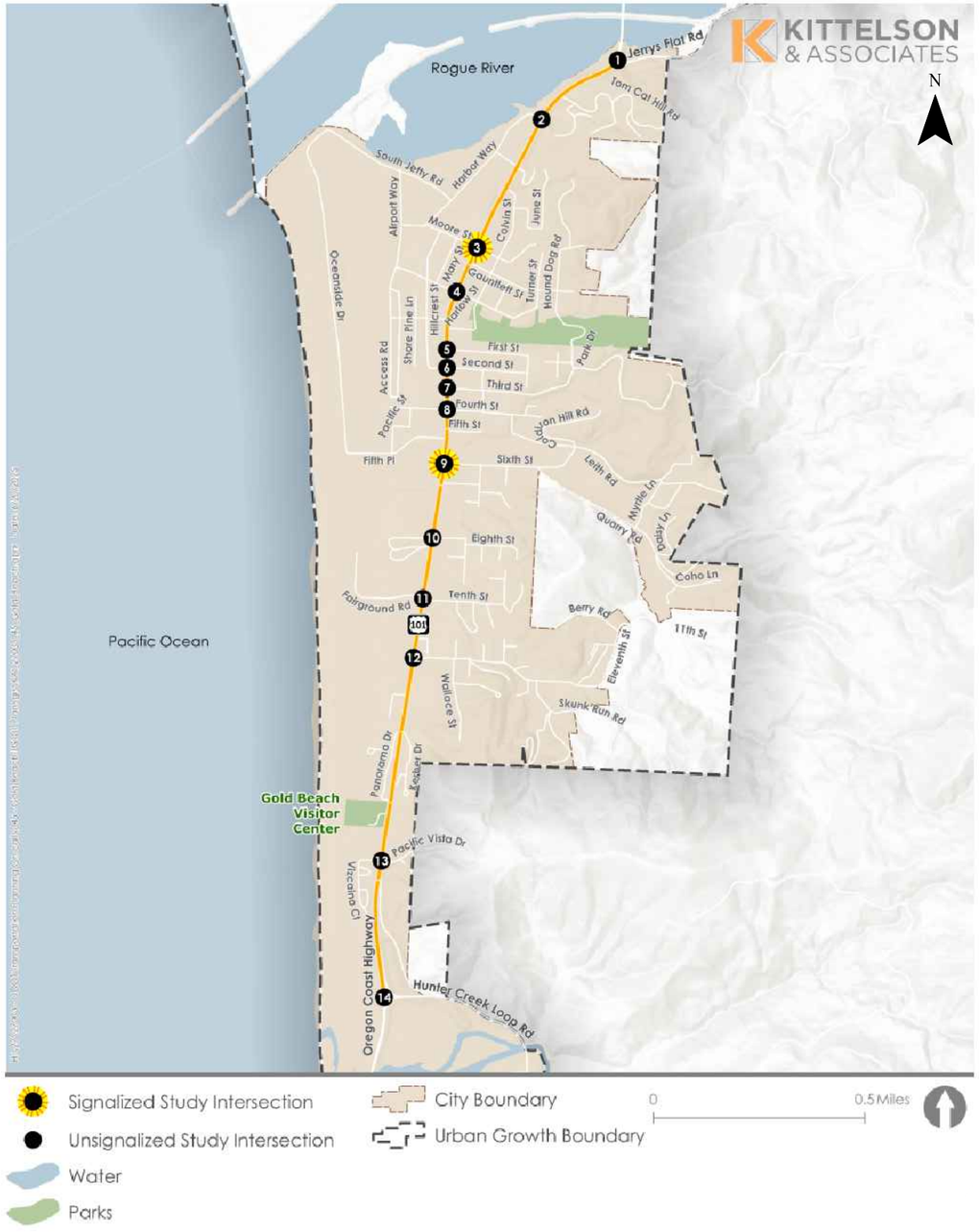
Existing Year Traffic Volumes

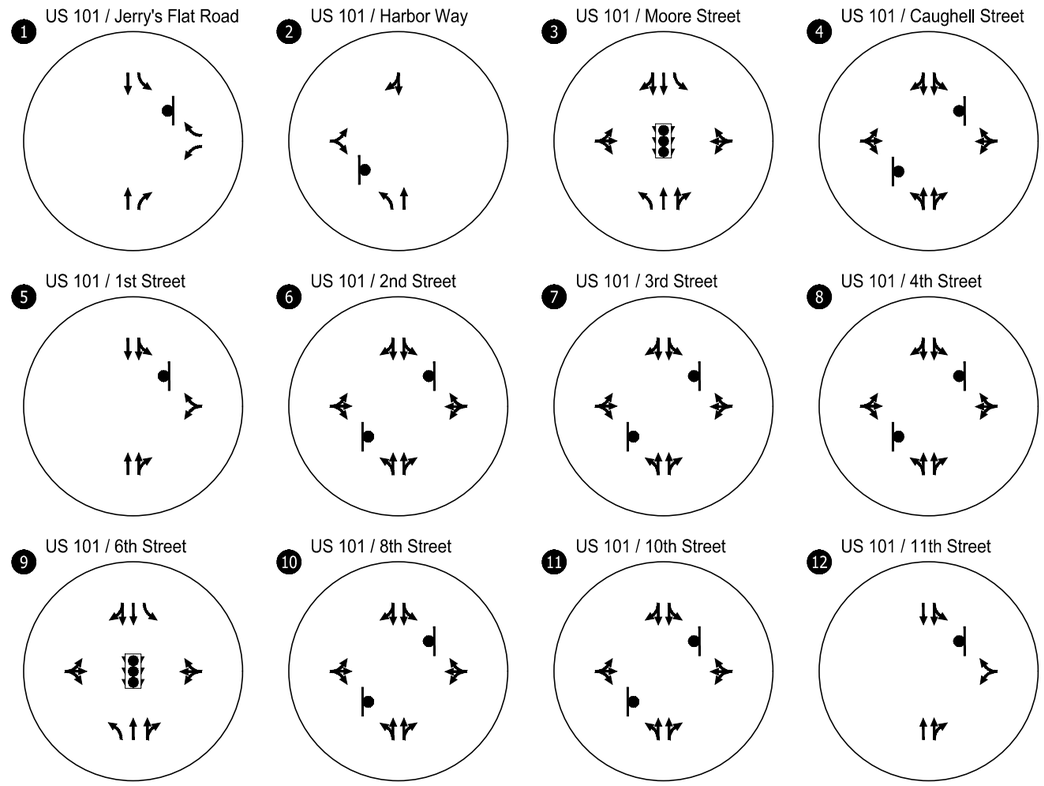
Traffic volumes for the study intersections reflect 2025 conditions. Counts were collected in August and September 2024 via manual turning movement counts performed by ODOT. The counts were adjusted to account for seasonal fluctuations and historical growth to represent a summer PM peak hour and a non-summer PM peak hour condition. Further details regarding volume development can be found in TM#3: Analysis Methodology Memorandum. Appendix A includes the traffic count worksheets.

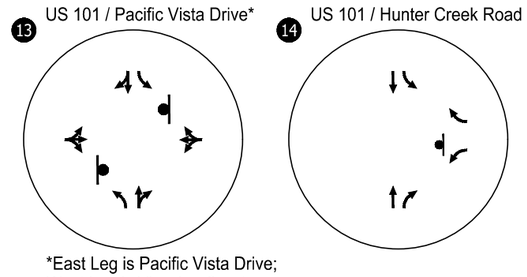
Operations

The intersection operations analysis was conducted using Synchro 12, a software tool designed to assist with operations analyses in accordance with the 7th Edition of the Highway Capacity Manual (HCM, Reference 6) methodology. The analysis results include level-of-service (LOS), delay, and volume-to-capacity (v/c) ratios at all intersections, regardless of jurisdiction. The LOS, delay, and v/c ratios are reported for the overall intersection at signalized intersections and the critical movement at unsignalized intersections in accordance with the methodologies outlined in ODOT's Analysis Procedures Manual (APM, Reference 3). Queuing was analyzed at signalized study intersections along only US 101 (northbound and southbound) legs of the intersections, side-street queuing was not included in this analysis. Queuing analysis was performed using SimTraffic 12.

Figure 12 shows the lane configurations and traffic control devices used to assess the existing operations. Table 2, Figure 13 (summer peak), and Figure 14 (non-summer peak) summarize the results of the PM peak hour intersection operations analysis and compare the results to the designated mobility standards. According to TransGIS, based on average annual daily traffic, the truck percentage along US 101 in Gold Beach is approximately 20%. Truck percentages for through movements along US 101 during the PM peak hour for the count period varied between 3% to 7%. Appendix A includes the count sheets with truck percentages. Appendix B contains the existing intersection operations analysis worksheets.







*East Leg is Pacific Vista Drive;
West Leg is Vizcaino Court

- STOP SIGN
- TRAFFIC SIGNAL
- Study Intersections

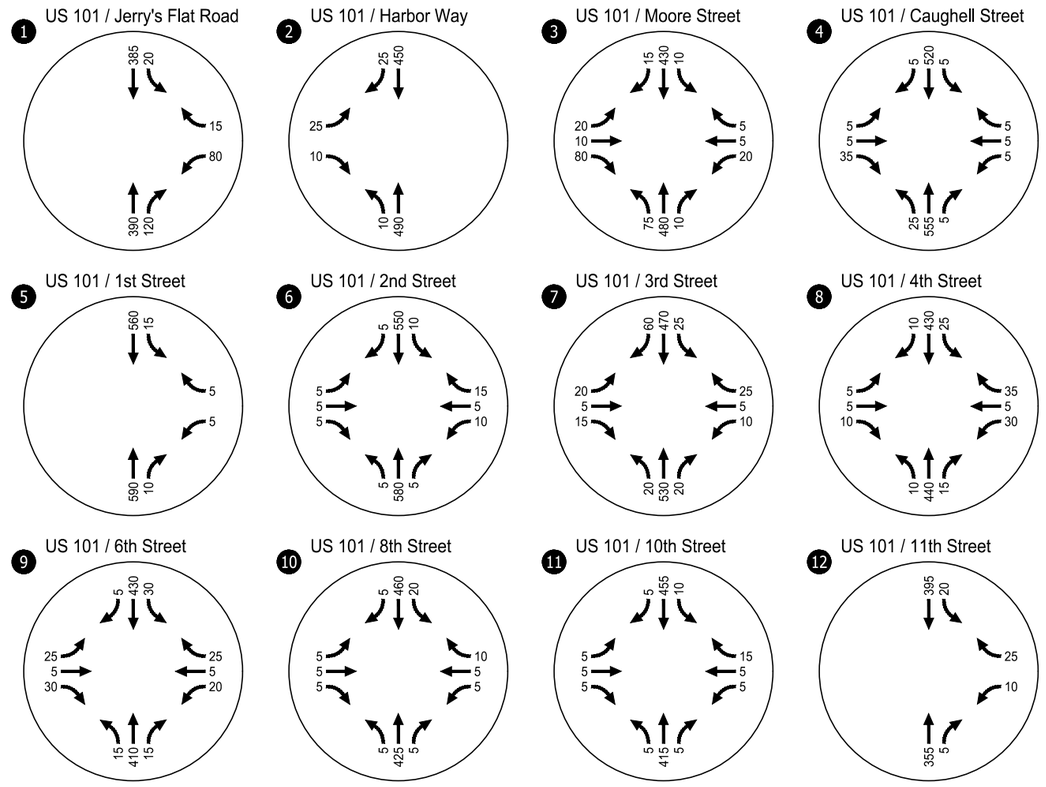
No-Build Lane Configurations & Traffic Control Devices
Gold Beach, OR

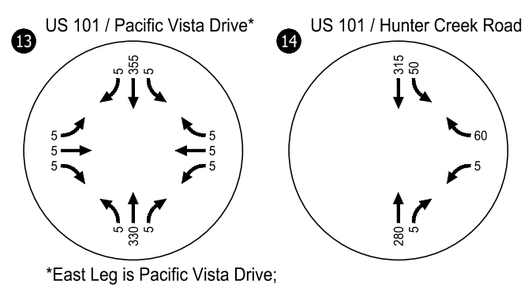
Figure 12

Table 2. Existing (2025) Traffic Operations - Summer Peak & Non-Summer Peak (PM Peak Hour)

#	Intersection	Lead Agency	Control Type	Operating Standard	2025 Summer Peak Hour Intersection Operations				2025 Non-Summer Peak Hour Intersection Operations			
					CM/CA	LOS[1]	Del[2]	v/c[3]	CM/CA	LOS[1]	Del[2]	v/c[3]
1	US 101 / Jerry's Flat Road	ODOT	Stop	v/c ≤ 0.95	WBL	C	15.8	0.21	WBL	B	13.1	0.12
2	US 101 / Harbor Way	ODOT	Stop	v/c ≤ 0.95	EB	B	14.4	0.09	EB	B	12.5	0.04
3	US 101 / Moore Street	ODOT	Signal	v/c ≤ 0.90	-	A	7.9	0.28	-	A	7.7	0.24
4	US 101 / Caughell Street	ODOT	Stop	v/c ≤ 0.95	WB	D	25.1	0.09	WB	C	18.0	0.06
5	US 101 / 1st Street	ODOT	Stop	v/c ≤ 0.95	WB	B	15.3	0.03	WB	B	13.2	0.02
6	US 101 / 2nd Street	ODOT	Stop	v/c ≤ 0.95	EB	C	21.3	0.07	EB	C	16.8	0.05
7	US 101 / 3rd Street[4]	ODOT	Stop	v/c ≤ 0.95	EB	C	22.2	0.17	EB	C	17.0	0.13
8	US 101 / 4th Street	ODOT	Stop	v/c ≤ 0.95	WB	C	18.1	0.22	WB	B	14.5	0.17
9	US 101 / 6th Street[4]	ODOT	Signal	v/c ≤ 0.90	-	A	7.0	0.23	-	A	7.1	0.19
10	US 101 / 8th Street	ODOT	Stop	v/c ≤ 0.95	EB	C	21.0	0.08	EB	B	15.7	0.06
11	US 101 / 10th Street	ODOT	Stop	v/c ≤ 0.95	EB	B	16.5	0.05	EB	B	13.4	0.04
12	US 101 / 11th Street	ODOT	Stop	v/c ≤ 0.95	WB	B	11.0	0.07	WB	B	10.2	0.06
13	US 101 / Vizcaino Court / Pacific Vista Drive	ODOT	Stop	v/c ≤ 0.90	EB	C	15.6	0.05	EB	B	12.4	0.03
14	US 101 / Hunter Creek Road	ODOT	Stop/Free Right-Turn[3]	v/c ≤ 0.90	WB	C	16.0	0.02	WB	B	12.6	0.01

Del = delay (sec/veh); EB = Eastbound; LOS = level of service; TWSC = two-way stop-control; v/c = volume to capacity; WB = Westbound; WBL = westbound left turn.
Stop Control Type TWSC at 4-legged intersections and one-way stop control at "T" intersections.
CA/CM = Critical Approach when minor approach to the TWSC is single lane; Critical Movement when minor approach to the TWSC is multi lane
[1] Intersection LOS (signal), CM LOS (stop)
[2] Intersection average vehicle delay (signal), CM vehicle delay (stop)
[3] Intersection v/c (signal), CM v/c (stop)
[4] Intersection is assumed to align with driveway to evaluate the worst-case scenario.



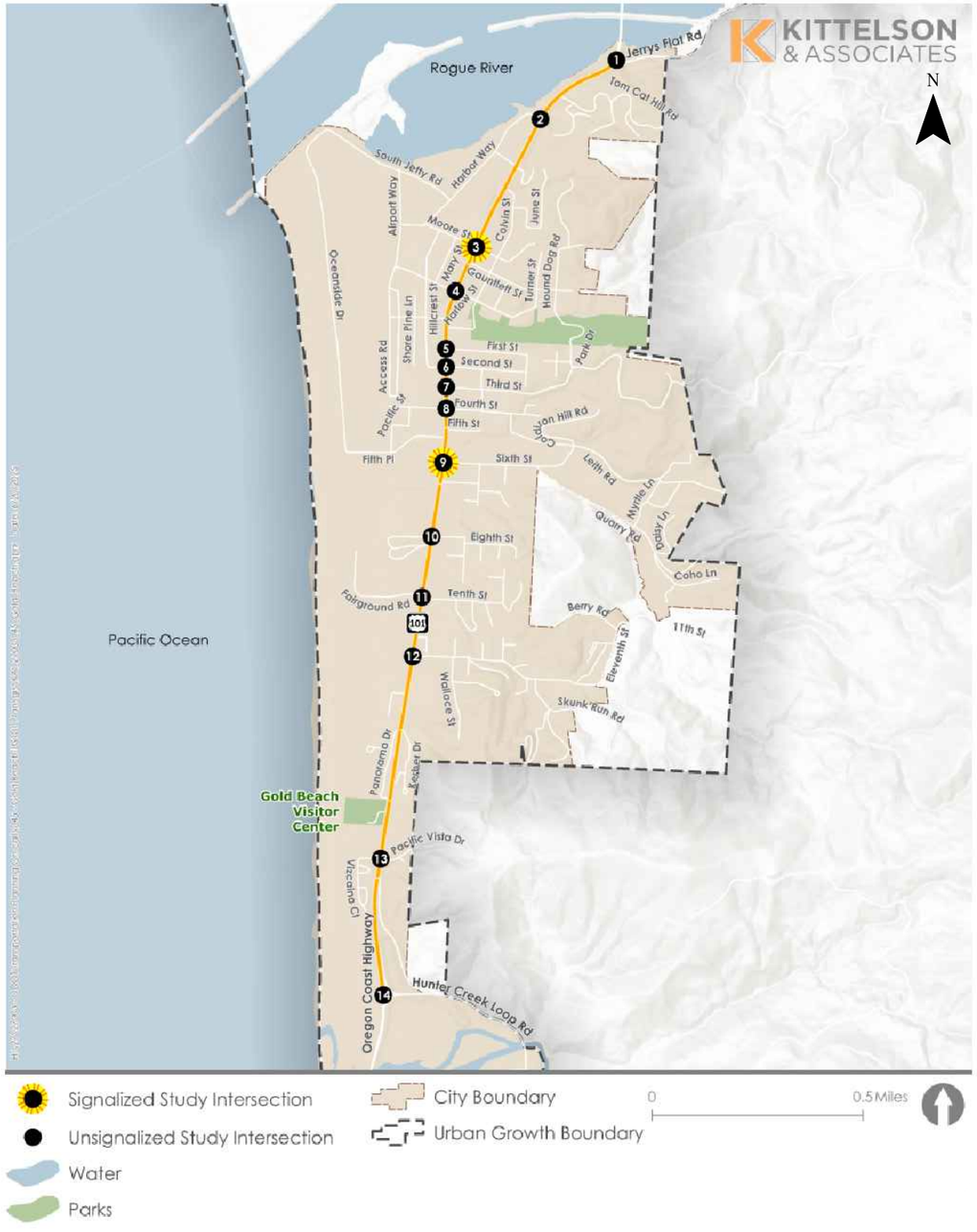


*East Leg is Pacific Vista Drive;
West Leg is Vizcaino Court

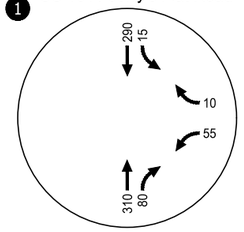
##- Study Intersections

Existing 2025 No-Build Traffic Volumes
Summer Peak - PM Peak Hour
Gold Beach, OR

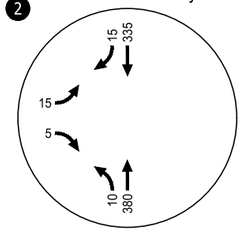
Figure
13



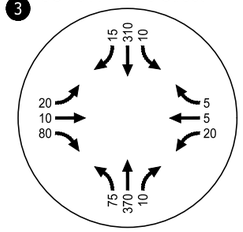
1 US 101 / Jerry's Flat Road



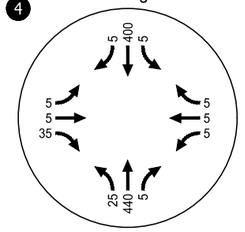
2 US 101 / Harbor Way



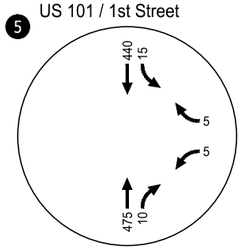
3 US 101 / Moore Street



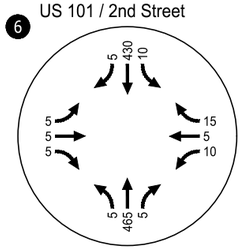
4 US 101 / Caughell Street



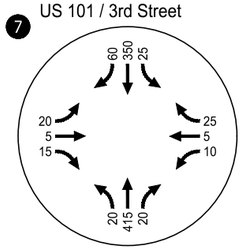
5 US 101 / 1st Street



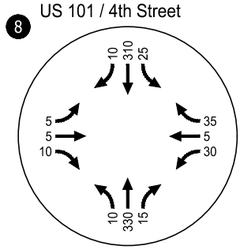
6 US 101 / 2nd Street



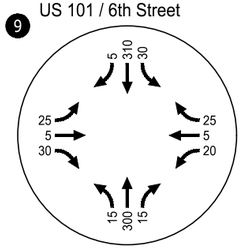
7 US 101 / 3rd Street



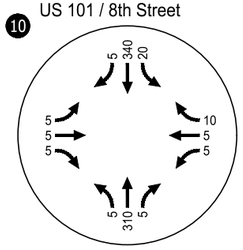
8 US 101 / 4th Street



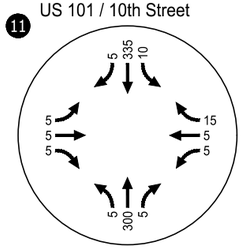
9 US 101 / 6th Street



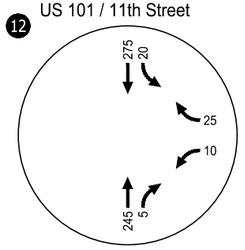
10 US 101 / 8th Street



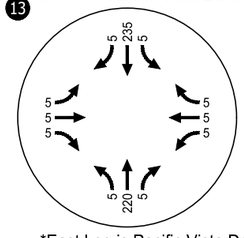
11 US 101 / 10th Street



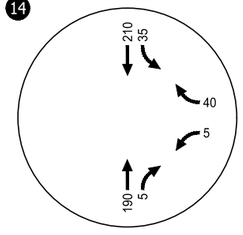
12 US 101 / 11th Street



13 US 101 / Pacific Vista Drive*



14 US 101 / Hunter Creek Road



*East Leg is Pacific Vista Drive;
West Leg is Vizcaino Court

- Study Intersections

Existing 2025 No-Build Traffic Volumes
Non-Summer Peak - PM Peak Hour
Gold Beach, OR

Figure
14

Queuing

SimTraffic 12 was used to assess 95th percentile queue lengths along the US 101 (northbound and southbound) legs of signalized study intersections. Existing 2025 summer peak volumes were used to analyze queuing in the PM peak hour. The 95th percentile queue length was compared to the available storage to assess whether queuing related mitigations will be recommended.

Although the analysis indicated that adequate storage is available for typical conditions, city staff have indicated that queues can frequently be longer and block additional driveways and side streets. Of particular concern is blocking of 5th Place for fire truck and emergency vehicle egress in an emergency. Some identified reasons why queueing may at times be longer than the analysis indicates include:

- long vehicle platoons without gaps associated with construction outside of the city where traffic is stopped for several minutes at a time;
- limited highway red time at the signalized intersections due to low side-street demand; and,
- afternoon peaks associated with school traffic.

Despite longer queues occurring at times, signal cycle failure (the need to sit through more than one red light at the same intersection) is not common even during surges in traffic.

Table 3. 95th Percentile Queue Lengths on US 101 at Signalized Intersections in Existing 2025 PM Summer Peak

#	Intersection	Movement	Available Storage (ft)[1]	2025 Summer Peak 95th Percentile Queue Length (ft)[2]	95th Percentile Queue Length > Available Storage?
3	US 101 / Moore Street	SB	>500	150	No
		SBL	150	50	No
		NB	150	125	No
		NBL	115	75	No
9	US 101 / 6th Street	SB	120	100	No
		SBL	120	50	No
		NB	180	100	No
		NBL	120	50	No

[1]Available storage rounded down to the nearest 5 feet.
[2]Reported queues rounded up to nearest vehicle length assuming 25 feet per vehicle.

Key Findings

All intersections meet their mobility standard in the Existing 2025 Summer Peak and Non-Summer Peak scenarios. There were no movements at signalized intersections where the 95th percentile queue length along US 101 exceeded the available storage in the Existing 2025 Summer Peak scenario. Although the analysis indicated that adequate storage is available for typical conditions, queues can frequently be longer and block additional driveways and side streets due to large vehicle platoons from construction, limited red lights, and school traffic. Of particular concern is queues blocking 5th Place for fire truck and emergency vehicle egress. Despite longer queues occurring at times, signal cycle failure (the need to sit through more than one red light at the same intersection) is not common even during surges in traffic.

FUTURE OPERATIONS ANALYSIS

Operations at key intersections along US 101 within the study area were evaluated under future conditions for both summer and non-summer PM peak hours. Additional details on the analysis approach can be found in TM#3: Analysis Methodology Memorandum.

Future Year Traffic Volumes

Future traffic volumes were developed for the study corridor using growth rates from ODOT's Statewide Integrated Model (SWIM) and a future study year of 2045. TM#3: Analysis Methodology Memorandum provides further detail on the development of the future volumes used in this analysis. The total assumed growth over 20 years was 15%, so the differences between existing and future no-build conditions are anticipated to be minor.

Operations

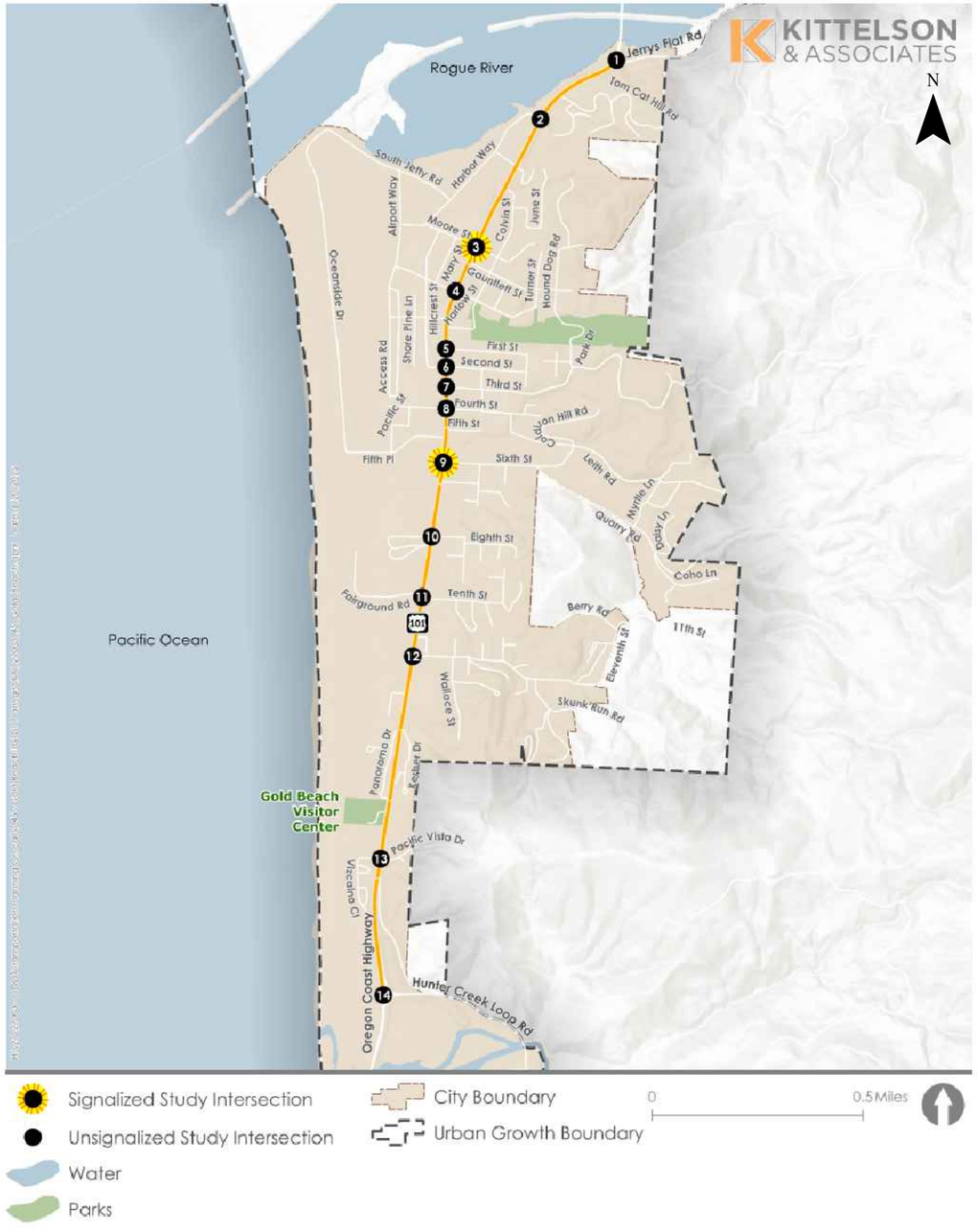
Future intersection operations analysis was also conducted using Synchro 12, a software tool designed to assist with operations analyses in accordance with the 7th Edition of the Highway Capacity Manual (HCM, Reference 6) methodology. The LOS, delay, and v/c ratios are reported for the overall intersection at signalized intersections and the critical movement (or approach) at unsignalized intersections in accordance with the methodologies outlined in ODOT's Analysis Procedures Manual (APM, Reference 3). Queuing was analyzed at signalized study intersections along only US 101 (northbound and southbound) legs of the intersections, side-street queuing was not included in this analysis. Queuing analysis was performed using SimTraffic 12.

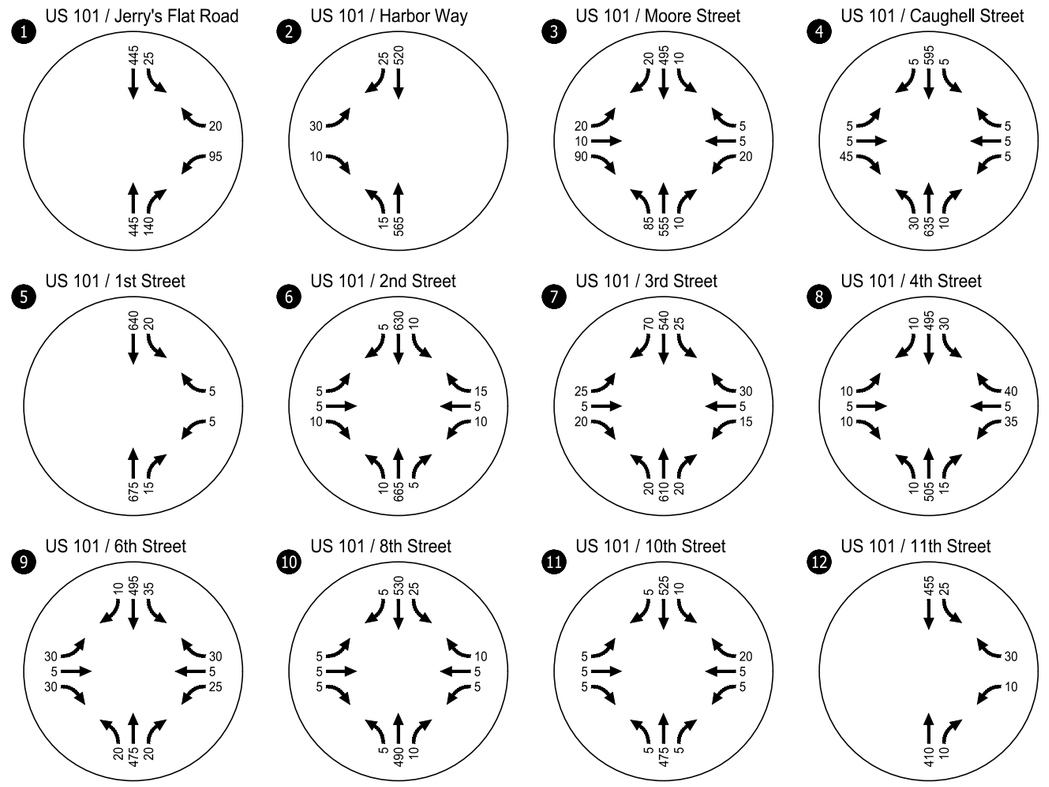
Figure 12 shows the lane configurations and traffic control devices used to assess future no-build operations. Table 4, Figure 15 (summer peak), and Figure 16 (non-summer peak) summarize the results of the future intersection operations analysis and compare the results to the applicable mobility standards and targets, which were presented in TM#3: Analysis Methodology Memorandum. Appendix C of this memorandum contains the future intersection operations analysis worksheets.

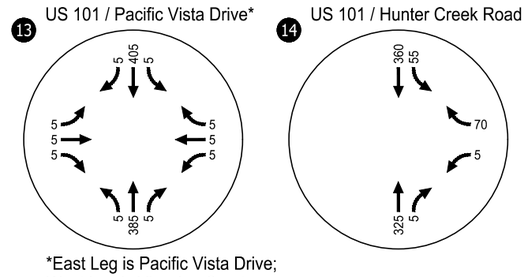
Table 4. Future (2045) Traffic Operations - Summer Peak & Non-Summer Peak (PM Peak Hour)

#	Intersection	Lead Agency	Control Type	Operating Standard	2045 Summer Peak Hour Intersection Operations				2045 Non-Summer PM Peak Hour Intersection Operations			
					CM/CA	LOS[1]	Del[2]	v/c[3]	CM/CA	LOS[1]	Del[2]	v/c[3]
1	US 101 / Jerry's Flat Road	ODOT	Stop	v/c ≤ 0.95	WBL	C	18.3	0.28	WBL	B	14.1	0.15
2	US 101 / Harbor Way	ODOT	Stop	v/c ≤ 0.95	EB	C	16.2	0.12	EB	B	13.5	0.06
3	US 101 / Moore Street	ODOT	Signal	v/c ≤ 0.90	-	A	8.2	0.32	-	A	7.9	0.27
4	US 101 / Caughell Street	ODOT	Stop	v/c ≤ 0.95	WB	D	32.3	0.11	WB	C	22.6	0.08
5	US 101 / 1st Street	ODOT	Stop	v/c ≤ 0.95	WB	C	17.5	0.04	WB	B	14.6	0.03
6	US 101 / 2nd Street	ODOT	Stop	v/c ≤ 0.95	WB	C	24.2	0.15	WB	C	18.3	0.11
7	US 101 / 3rd Street[4]	ODOT	Stop	v/c ≤ 0.95	EB	D	27.9	0.26	EB	C	19.6	0.18
8	US 101 / 4th Street	ODOT	Stop	v/c ≤ 0.95	WB	C	22.3	0.29	WB	C	16.5	0.22
9	US 101 / 6th Street[4]	ODOT	Signal	v/c ≤ 0.90	-	A	7.4	0.26	-	A	7.1	0.21
10	US 101 / 8th Street	ODOT	Stop	v/c ≤ 0.95	EB	D	26.1	0.10	EB	C	18.0	0.07
11	US 101 / 10th Street	ODOT	Stop	v/c ≤ 0.95	EB	C	18.9	0.06	EB	B	14.5	0.04
12	US 101 / 11th Street	ODOT	Stop	v/c ≤ 0.95	WB	B	11.5	0.08	WB	B	10.5	0.07
13	US 101 / Vizcaino Court / Pacific Vista Drive	ODOT	Stop	v/c ≤ 0.90	EB	C	17.5	0.06	EB	B	13.2	0.04
14	US 101 / Hunter Creek Road	ODOT	Stop/Free Right-Turn[3]	v/c ≤ 0.90	WB	C	18.1	0.02	WB	B	13.5	0.01

Del = delay (sec/veh); EB = Eastbound; LOS = level of service; TWSC = two-way stop-control; v/c = volume to capacity; WB = Westbound; WBL = westbound left turn.
Stop Control Type TWSC at 4-legged intersections and one-way stop control at "T" intersections.
CA/CM = Critical Approach when minor approach to the TWSC is single lane; Critical Movement when minor approach to the TWSC is multi lane
[1] Intersection LOS (signal), CM LOS (stop)
[2] Intersection average vehicle delay (signal), CM vehicle delay (stop)
[3] Intersection v/c (signal), CM v/c (stop)
[4] Intersection is assumed to align with driveway to evaluate the worst-case scenario.





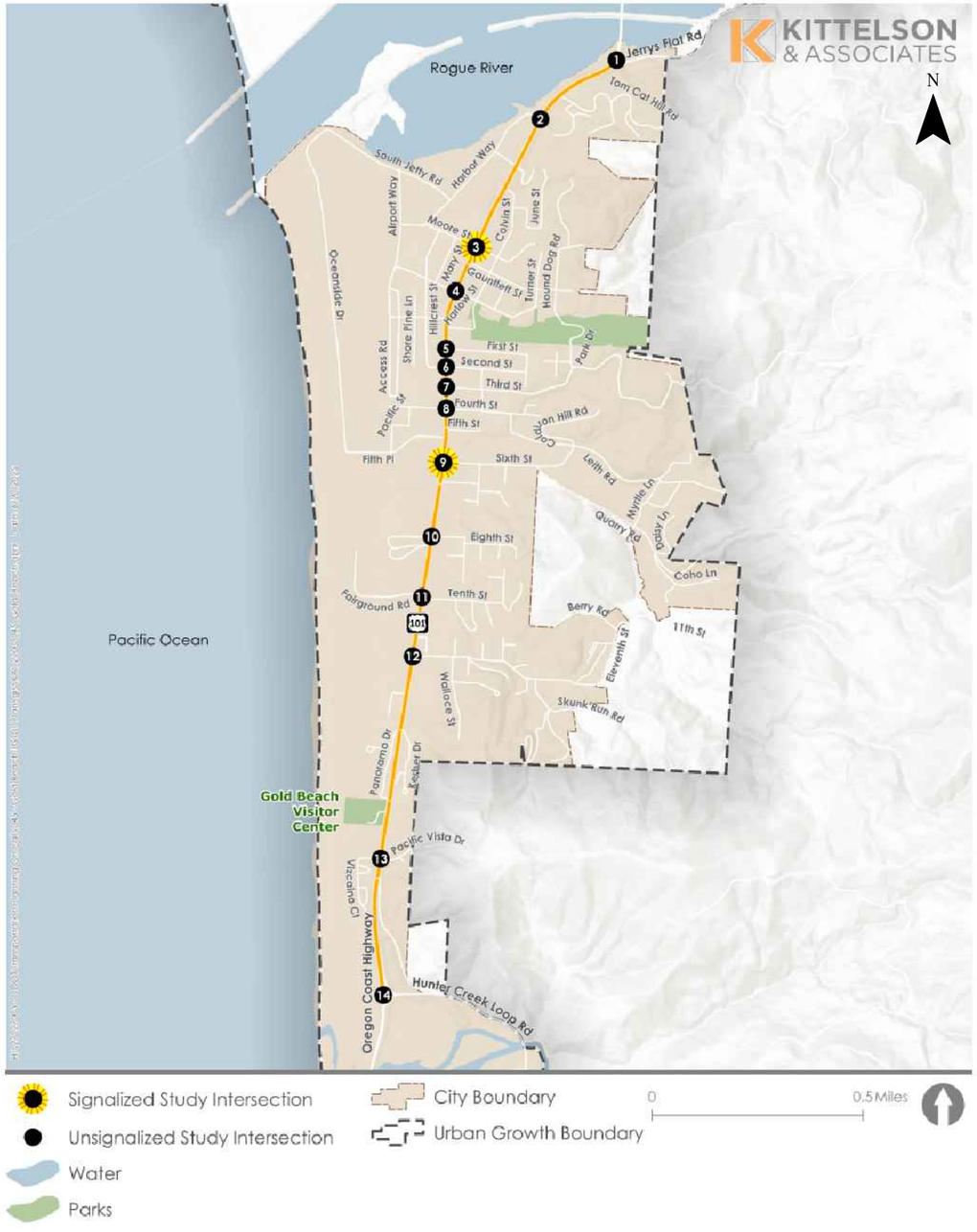


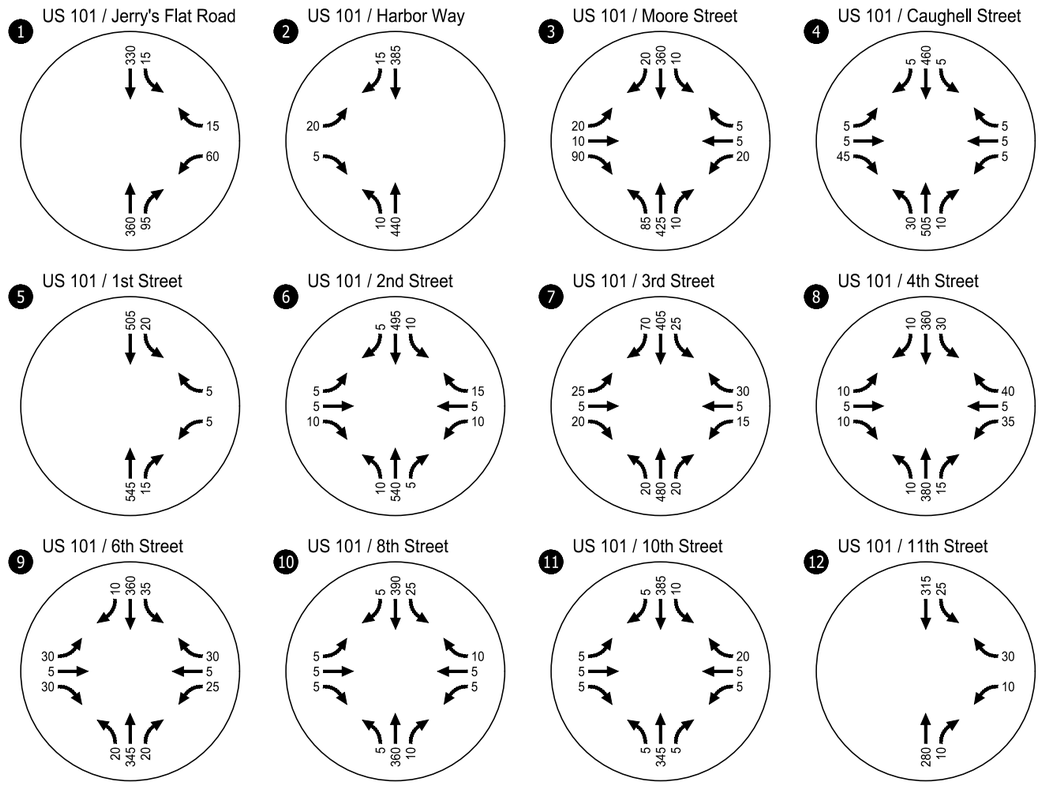
*East Leg is Pacific Vista Drive;
West Leg is Vizcaino Court

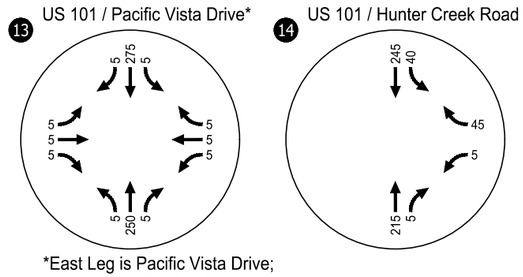
##- Study Intersections

Future 2045 No-Build Traffic Volumes
Summer Peak - PM Peak Hour
Gold Beach, OR

Figure
15







*East Leg is Pacific Vista Drive;
West Leg is Vizcaino Court

##- Study Intersections

Future 2045 No-Build Traffic Volumes
Non-Summer Peak - PM Peak Hour
Gold Beach, OR

Figure
16

Queuing

SimTraffic 12 was used to assess 95th percentile queue lengths at signalized study intersections. Queuing was only assessed along the US 101 (northbound and southbound) legs of signalized intersections. 2045 summer peak volumes were used to analyze queuing in the PM peak hour. The 95th percentile queue length was compared to the available storage to assess whether queuing related mitigations will be recommended.

Table 5. 95th Percentile Queue Lengths on US 101 at Signalized Intersections in Future 2045 PM Summer Peak

#	Intersection	Movement	Available Storage (ft)	2045 Summer Peak 95th Percentile Queue Length (ft)	95th Percentile Queue Length > Available Storage?
3	US 101 / Moore Street	SB	>500	150	No
		SBL	150	50	No
		NB	150	125	No
		NBL	115	100	No
9	US 101 / 6th Street	SB	120	100	No
		SBL	120	75	No
		NB	180	100	No
		NBL	120	50	No

[1]Available storage rounded down to the nearest 5 feet.
[2]Reported queues rounded up to nearest vehicle length assuming 25 feet per vehicle.

Key Findings

All intersections meet their mobility standard in the Future (2045) Summer Peak and Non-Summer Peak scenarios. There were no movements at signalized intersections where the 95th percentile queue length along US 101 exceeded the available storage in the Future 2045 Summer Peak scenario. The low projected growth rate results in minimal forecast degradation of future operations or increased queueing.

Crash Analysis

Crash data was obtained from ODOT's Crash Analysis & Reporting Unit. The data includes the total number, type, and severity of crashes that occurred at the study intersection and along US 101 within the Study Area for the 5-year period from January 1, 2019, through December 31, 2023. Appendix D contains the ODOT crash data along US 101 within the study area. The following sections summarize the results of the intersection and US 101 segment crash analysis based on the five years of crash data and identifies priority sites based on ODOT analysis methodologies. Key findings from the analysis include:

- There are no intersections along the corridor that exceed ODOT's 90th percentile crash rates. The intersection of US 101 / 3rd Street had 5 crashes, however, still remains below threshold crash rate values. No crash trends were identified at this location: the crash type directionality varied, there were no fatal or serious injury crashes, and there were no crashes involving a pedestrian or bicyclist. The slight offset between 3rd Street and McKay's Market driveway could be a contributing factor to crashes at this location.
- The segment crash rate for the segment of US 101 through the study area is lower than the ODOT average crash rate for roadways with similar jurisdiction and functional classification based on ODOT Crash Rate Table II.
- There are no sites along the corridor that are on ODOT's 2023 Safety Priority Index System (SPIS) list.
- There were no reported fatal crashes along US 101 during the study period. There was one serious injury crash at the US 101 / Hunter Creek intersection. The crash causes sited included inattention and failure to yield the right-of-way to oncoming traffic by the turning vehicle.
- There were no reported crashes along the corridor involving a pedestrian, bicyclist, or other active transportation users.

SEGMENT CRASH ANALYSIS

Segment crash rates were evaluated along the US 101 corridor between Jerry's Flat Road and Hunter Creek Road. Nineteen segment (non-intersectional) crashes occurred along the 2.4-mile segment between 2019 through 2023. None of these crashes involved a pedestrian or bicyclist, and no segment crashes resulted in serious or fatal injury. ODOT's TransGIS platform was used to identify the study corridor's AADT, which varies depending on the location along the segment from approximately 6,500 vehicles at either end to approximately 10,000 vehicles in the middle of the segment. Conservatively, an AADT of 6,500 vehicles was used, resulting in a segment crash rate of 0.67 crashes per million vehicle miles traveled, which is below the 5-year average for roadways with similar jurisdiction and functional classification.

INTERSECTION CRASH ANALYSIS

The intersection crash analysis includes an evaluation of intersection crash rates. The Critical Crash Rate and Excess Proportions of Specific Crash Types analysis methods was not applicable based due to the limited crash history[2], therefore it was not used in this study. Table 6 summarizes the collision type and crash severity for all reported crashes at the study intersections.

The intersection of US 101 / 3rd Street had 5 crashes reported from 2019 through 2023. The intersection remains below the threshold crash rate value for urban 4-way stop-controlled intersections indicated in ODOT's Analysis Procedures Manual (APM, Reference 3). Of the 5 crashes, there were three turning crashes, one angle, and one side-swipe crash. The three turn and one angle crash were due to failure of the turning or crossing vehicle to yield right-of-way to the through vehicle on US 101. There were no patterns in crash type (all turning crashes stemmed from a different leg of the intersection), no fatal or serious injury crashes, and no crashes involving a pedestrian or bicyclist at the US 101 / 3rd Street intersection. Of note, the west leg of this intersection is an offset, high-volume, supermarket driveway, and additionally, there is a second driveway [for the same supermarket] approximately 70-feet south of the intersection.

[2] These methods require at least five sites in each reference population. A minimum of two of those sites must have two or more observed crashes of the target crash type

Table 6. Intersection Crash History (January 1, 2019 to December 31, 2023)

#	Intersection	Crash Type				Severity			Crash Total
		Turning	Angle	Side Swipe	Fixed Object	PDO[1]	Injury	Fatal	
1	US 101 / Jerry's Flat Road	-	-	-	-	-	-	-	**0**
2	US 101 / Harbor Way	1	-	-	-	1	-	-	**1**
3	US 101 / Moore Street	-	-	-	1	1	-	-	**1**
4	US 101 / Caughell Street	-	-	-	-	-	-	-	**0**
5	US 101 / 1st Street	-	-	-	-	-	-	-	**0**
6	US 101 / 2nd Street	-	-	-	-	-	-	-	**0**
7	US 101 / 3rd Street	3	1	1	-	1	4	-	**5**
8	US 101 / 4th Street	-	-	-	-	-	-	-	**0**
9	US 101 / 6th Street	1	-	-	-	1	-	-	**1**
10	US 101 / 8th Street	1	-	-	-	1	-	-	**1**
11	US 101 / 10th Street	-	-	-	-	-	-	-	**0**
12	US 101 / 11th Street	-	-	-	-	-	-	-	**0**
13	US 101 / Vizcaino Court / Pacific Vista Drive	-	-	-	-	-	-	-	**0**
14	US 101 / Hunter Creek Road	1	-	-	-	-	1	-	**1**

[1]PDO = Property Damage Only

INTERSECTION CRASH RATES

Intersection crash rates were developed for the study intersections based on the total number of crashes reported at the intersections over the 5-year period (2019 – 2023) and the total entering volume (TEV), or million entering vehicles (MEV). Intersection crash rates were compared to the 90th percentile crash rates developed by ODOT and documented in Table 4-1 of the ODOT APM (Reference 3). Appendix E contains the intersection crash rate calculations. Table 7 summarizes the total number of crashes reported at the study intersections over the 5-year period, the intersection crash rates, and the corresponding 90th percentile crash rates as identified in the APM. The Table also indicates whether the intersection exceeds the 90th percentile crash rates.

Table 7. Intersection Crash Rates vs. ODOT 90th Percentile Rates

#	Intersection	Total Crashes	Observed Crash Rate (MEV)	90th Percentile Crash Rate by Land Type & Traffic Control	Observed Crash Rate > Critical Crash Rate?
1	US 101 / Jerry's Flat Road	0	0.00	0.48	No
2	US 101 / Harbor Way	1	0.05	0.48	No
3	US 101 / Moore Street	1	0.05	0.58	No
4	US 101 / Caughell Street	0	0.00	1.08	No
5	US 101 / 1st Street	0	0.00	0.48	No
6	US 101 / 2nd Street	0	0.00	1.08	No
7	US 101 / 3rd Street	5	0.23	1.08	No
8	US 101 / 4th Street	0	0.00	1.08	No
9	US 101 / 6th Street	1	0.05	0.58	No
10	US 101 / 8th Street	1	0.06	1.08	No
11	US 101 / 10th Street	0	0.00	1.08	No
12	US 101 / 11th Street	0	0.00	0.48	No
13	US 101 / Vizcaino Court / Pacific Vista Drive	0	0.00	1.08	No
14	US 101 / Hunter Creek Road	1	0.08	0.48	No

Multimodal Analysis

The ODOT APM provides a methodology for evaluating bicycle and pedestrian facilities within urban and rural environments called Level of Traffic Stress (LTS). As applied by ODOT, this methodology classifies four levels of traffic stress that a person walking or biking can experience on the roadway, ranging from LTS 1 (little traffic stress) to LTS 4 (high traffic stress).

A road segment that is rated LTS 1 generally has low traffic volumes and travel speeds and is suitable for all users, including children. A road segment that is rated LTS 4 generally has high traffic volumes and travel speeds and is perceived as unsafe by most adults. Per the ODOT APM, LTS 2 is considered a reasonable target for pedestrian and bicycle facilities due to its acceptability for most adults; however, within a ¼ mile of schools, a target of LTS 1 is recommended.

ODOT evaluates pedestrian and bicycle LTS at a system-level along their facilities, accessible on their TransGIS website. This macro-level analysis provides insight into segments whose pedestrian or bicycle LTS may be a concern. This study includes localized analysis with refined data inputs to provide additional insights into the pedestrian and bicycle LTS along US 101 in Gold Beach.

PEDESTRIAN LEVEL OF TRAFFIC STRESS ANALYSIS

The Pedestrian Level of Traffic Stress (PLTS) score is determined based on four criteria, including sidewalk condition, physical buffer type, total buffering width, and general land use. All four criteria are scored from PLTS 1 to PLTS 4 and the highest score determines the overall score for the road segment.

Figure 17 illustrates the results of the PLTS analysis in the study area. The PLTS score along US 101 is primarily PLTS 3 and PLTS 4. This is due to the lack of sidewalks or if there is sidewalk, there is not adequate buffer width for the total number of travel lanes (4-5) to receive a lower PLTS score. On the side streets, the PLTS score is PLTS 3 where sidewalks are present and PLTS 4 where they are missing.

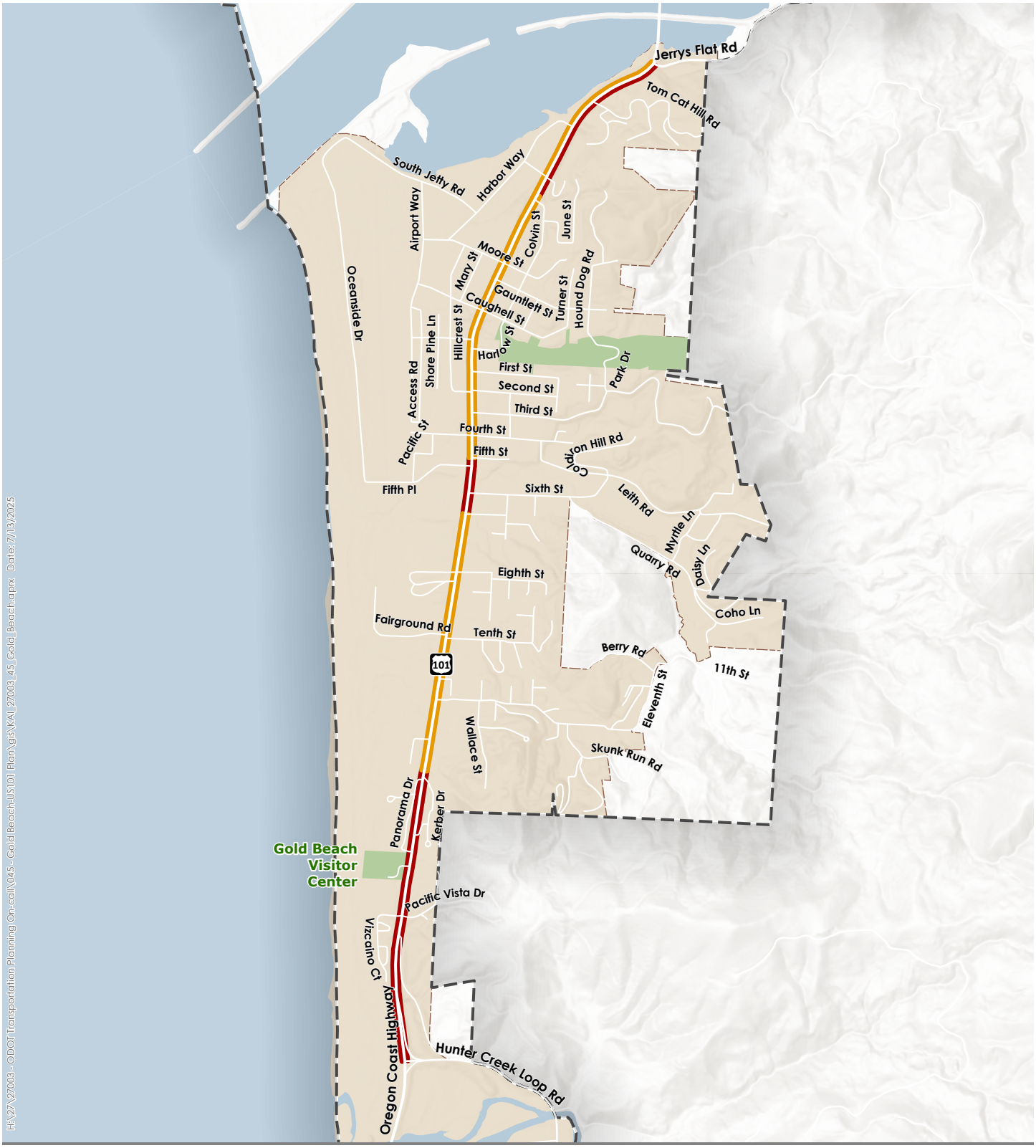
Appendix F contains PLTS calculations and results.

BICYCLE LEVEL OF TRAFFIC STRESS ANALYSIS

The Bicycle Level of Traffic Street (BLTS) score is determined based on the speed of the street, the number of travel lanes per direction, the presence and width of an on-street bike lane and/or adjacent parking lane, and several other factors.

Figure 18 illustrates the results of the BLTS analysis in the study area. As shown, the BLTS score ranges from BLTS 1 to BLTS 4. At the northern end, where striped bike lanes are present, the score is BLTS 2. As the bike lanes disappear near Moore Street, the score increases to BLTS 3 and BLTS 4, reflecting conditions where bicycles must share the travel lane. This variation in scores is influenced by the segment's Average Daily Traffic (ADT) and posted speed. On side streets, the BLTS score is BLTS 1 when ADT is 750 or less, BLTS 2 when ADT is between 751 and 1,500 and BLTS 3 when the ADT is greater than 1,500.

Appendix F contains BLTS calculations and results.



Pedestrian Level of Traffic Stress

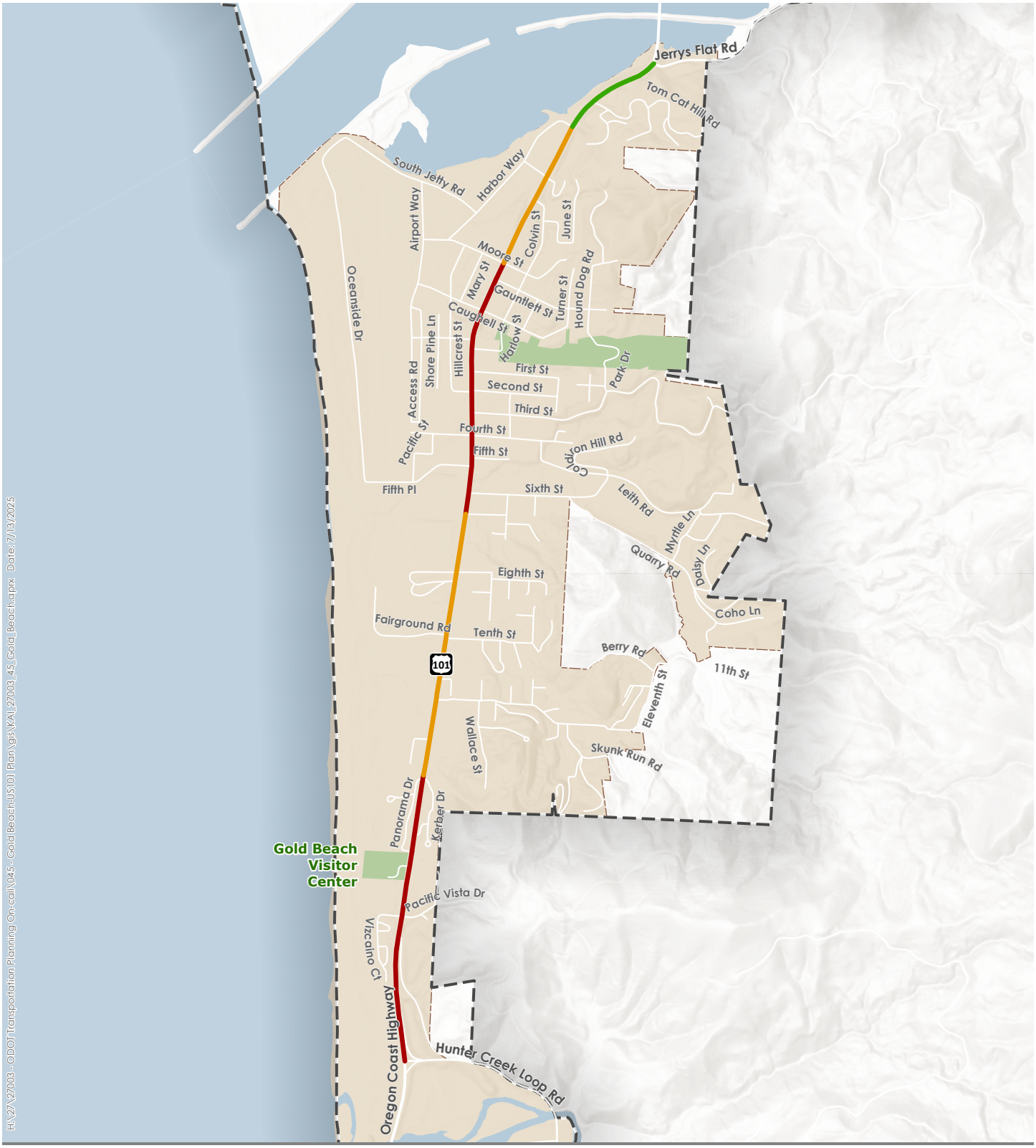
- 3
- 4

- Water
- Parks
- City Boundary
- Urban Growth Boundary

0 0.5 Miles

Figure 17

Pedestrian Level of Traffic Stress
Gold Beach, OR



Bicycle Level of Traffic Stress

- 2
- 3
- 4

- Urban Growth Boundary
- Water
- Parks
- City Boundary

0 0.5 Miles

Figure 18

Bicycle Level of Traffic Stress
Gold Beach, OR

Existing and Future Deficiencies and Needs

The project study area characteristics, safety conditions, traffic operations, and existing pedestrian and bicycle facilities, were reviewed to identify deficiencies and needs. The location of motor vehicle, pedestrian, and bicycle gaps and needs along US 101 are summarized in Figure 16. Additional details about how gaps and need are identified are provided below.

MOTOR VEHICLE FACILITY NEEDS

A deficiency is defined as a roadway facility that does not meet the mobility target, exceeds crash rates compared to representative locations, or has poor roadway condition. Based on the analysis documented herein, no gaps and needs were identified with respect to operations or safety analysis. However, the majority of the study area has Poor pavement condition.

PEDESTRIAN FACILITY NEEDS

A deficiency is defined as a pedestrian facility that does not meet the PLTS target or is insufficient to meet the users' needs. According to the APM, PLTS 2 (e.g. PLTS 1 or 2 facilities) is generally a reasonable minimum target for pedestrian routes. Facilities within ¼ mile of schools and routes heavily used by children should use a target of PLTS 1. To meet this target where sidewalks exist, improvements may include adding a physical buffer, reducing the posted speed, decreasing the number of travel lanes, improving sidewalk condition, or increasing the total buffer width.

The pedestrian facilities along US 101 are deficient throughout the study area in Gold Beach. As noted in the Potential Parallel Routes section, there are also pedestrian gaps and deficiencies along potential parallel routes. Most sidewalks in the study are 5 feet wide or less. According to the ODOT Highway Design Manual (HDM), the minimum standard for the existing urban contexts present in the corridor is 5 feet for Urban Mix and 8 feet for Suburban Fringe. The segment between Moore Street and 11th Street, classified as Urban Mix, is intended to meet the design guidelines for a Traditional Downtown/Central Business District (CBD), which call for a minimum sidewalk width of 8 feet. The HDM further recommends beginning with the upper end of the sidewalk width range in these contexts—8 feet for Urban Mix and 10 feet for Traditional Downtown/CBD areas—to better accommodate pedestrian activity and streetscape function.. Although most of the urban area has sidewalks, they are generally below standard in terms of width, condition, and buffer, leading to a poor PLTS score. At the PAC meeting, PAC members mentioned that they feel people avoid walking along US 101 because it does not feel safe for many users.

According to the ATNI, US 101 through Gold Beach has high pedestrian risk factor scores, indicating the segment has safety concerns for non-motorized users. The ATNI also assigns high pedestrian prioritization scores along US 101 through Gold Beach, indicating that high need for improvements.

BICYCLE FACILITY NEEDS

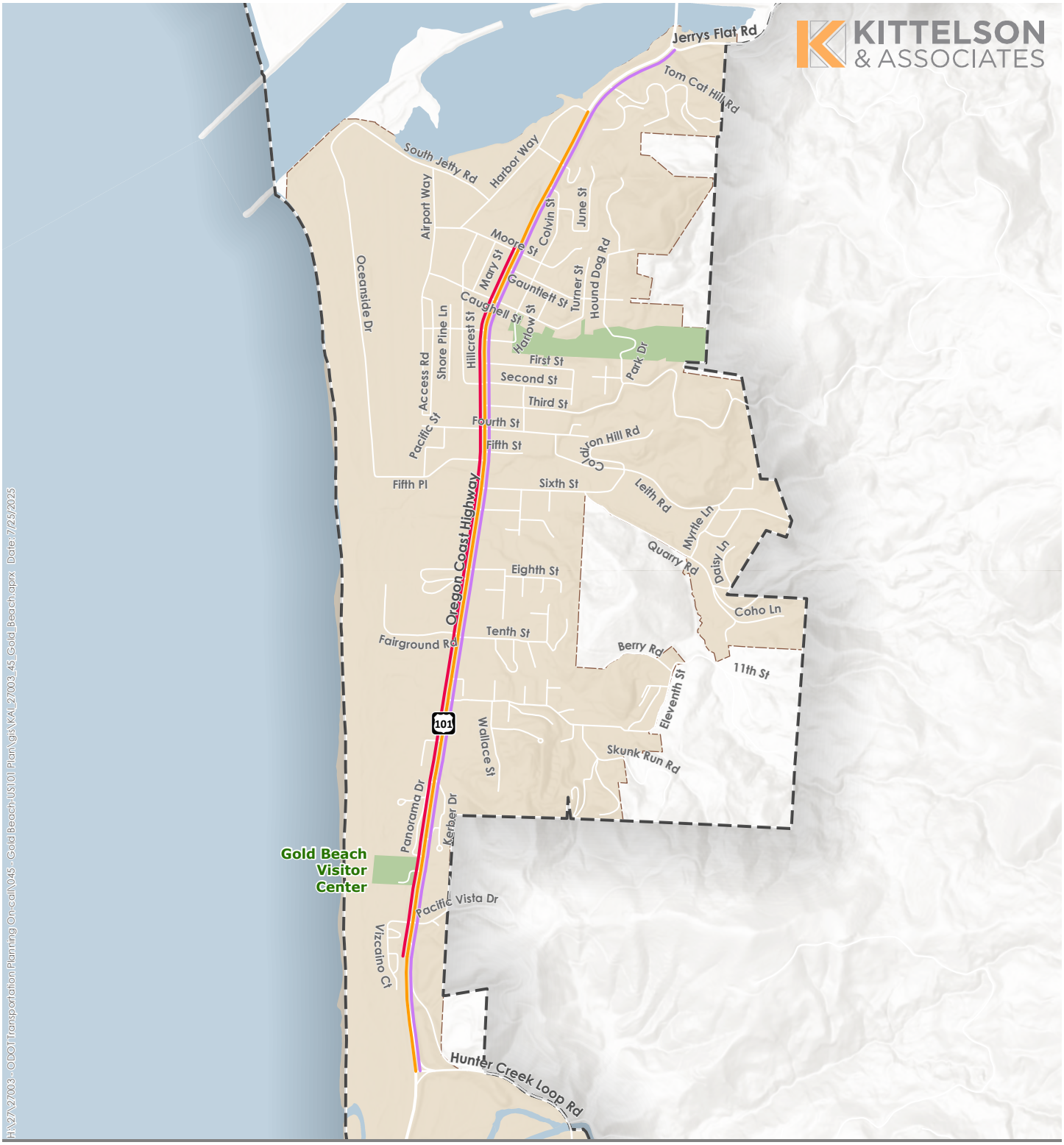
A deficiency is defined as a bicycle facility that does not meet the BLTS target or is insufficient to meet the users' needs. The APM states that BLTS 2 is the typical target (e.g. BLTS 1 or 2 facilities) as it typically

appeals to the majority of the potential bike-riding population. Within a ¼ of elementary schools, the desired level of traffic stress is BLTS 1.

Due to the high ADT on US 101 through the study area, the BLTS score will be at least BLTS 3 when bikes and vehicles share a lane regardless of the number of lanes or posted speed. To achieve a BLTS 2, a designated bicycle facility must be added with sufficient width and buffer for the number of travel lanes and posted speed. Where shoulder bicycle lanes exist, improving the BLTS score will require lowering the posted speed, widening the bicycle facility, and/or the bicycle facility's buffer width. Much of the corridor lacks a bike lane, making it challenging for the majority of cyclists to navigate the corridor comfortably. At the PAC meeting, PAC members mentioned that they feel people avoid biking along US 101 because it does not feel safe for many users.

The HDM states that for Urban Mix the design elements should start with separated bicycle facilities for Urban Mix, Suburban Fringe, and Traditional Downtown/CBD, but can consider roadway characteristics. The associated design element recommendations for separated facilities in those contexts is a minimum of 7 feet, with 8 feet desired. The bike between Jerry's Flat Road and Moore Street do not meet this width and the shoulders between Weber Way and Hunter Creek Road intermittently meet this width, and there are no bike facilities between More Street and Weber Way.

According to the ATNI, US 101 through Gold Beach has high bicycle risk factor scores, indicating the segment has safety concerns for non-motorized users. The ATNI also assigns high bicycle prioritization scores along US 101 through Gold Beach, indicating that high need for improvements.



Pedestrian Facility Needs (Exceeds PLTS Target)

Bicycle Facility Needs (Exceeds BLTS Target)

Roadway Facility Needs (Poor Pavement Condition)

Water

Parks

City Boundary

Urban Growth Boundary

0 0.5 Miles

Figure 19

Gaps and Deficiencies
Gold Beach, OR

Next Steps

The information documented herein will be used to develop and evaluate alternatives, which will be presented to the Public and to the PAC.

References

1) City of Gold Beach. Comprehensive Plan. 1982.
2) Curry County. Transportation System Plan. 2024*.
3) Oregon Department of Transportation. Analysis Procedures Manual. 2025.
4) Oregon Department of Transportation. Oregon Highway Plan. 2015.
5) Oregon Department of Transportation. TransGIS. Available at https://gis.odot.state.or.us/transgis/
6) National Academies of Sciences, Engineering, and Medicine. Highway Capacity Manual 7th Edition: A Guide for Multimodal Mobility Analysis. 2022
7) Oregon Department of Geology and Mineral Industries. Oregon Tsunami Clearinghouse. 2023.
8) Oregon Department of Transportation. Oregon Coast Bike Route Plan. 2022.

*Plan not yet adopted

Appendices

- Appendix A: Traffic Count Worksheets
- Appendix B: Existing Traffic Operations Worksheets
- Appendix C: Future Traffic Operations Worksheets
- Appendix D: ODOT Crash Data
- Appendix E: Crash Analysis Worksheets
- Appendix F: Pedestrian and Bicycle Level of Traffic Stress Calculations and Results

Appendix A: Traffic Count Worksheets

Appendix B: Existing Traffic Operations Worksheets

Appendix C: Future Traffic Operations Worksheets

Appendix D: ODOT Crash Data

Appendix E: Crash Analysis Worksheet

Appendix F: Pedestrian and Bicycle Level of Traffic Stress Calculations and Results

Appendix G: ODOT v/c Calculator Spreadsheet