TILLAMOOK COUNTY

TSP

Transportation System Plan

This chapter of the TSP document comprises the actual transportation system plan for adoption by Tillamook County and acknowledgment by the Oregon Department of Land Conservation and Development. The purpose of the TSP is to (1) guide the development of a safe, convenient and efficient transportation system that promotes livability and economic prosperity for all county residents and (2) integrate land use and transportation planning to maintain and enhance a safe and efficient transportation system that complies with the state TSP.

Based on ODOT's Transportation System Plan Guidelines 2001, the Tillamook County TSP will:

- Establish a system of facilities and services to meet local transportation needs.
- Serve as the transportation element of the local comprehensive plan.
- Serve as a long-range (20-year) plan for the county.
- Be consistent with the State TSP (Oregon Transportation Plan and Modal Plans).
- Provide long-range direction for development of local transportation facilities and services for all modes.
- Integrate transportation and land use.
- Provide a rational for making prudent transportation investments and land use decisions.
- Provide a linkage to the STIP process.

Implementation of TSP Goals

The TSP must comply with the TPR and establish a system of transportation facilities and services adequate to meet identified local transportation needs by providing the following elements:

- Reduce reliance on the automobile.
- Provide transportation options for all people, including the transportation disadvantaged.
- Promote a safe transportation system.
- Minimize conflicts between modes.
- Promote intermodal linkages for passengers and goods.
- Minimize impacts to the natural and built environment.
- Make decisions about the community intentions and expectations for the future of its transportation system.

To meet each of these elements, a set of criteria was developed in conjunction with the PMT/TAC. Potential projects were rated with each of these criteria to determine priorities and feasibility. These criteria, which represent the TSP goals, are summarized in Table 7-1, along with statements indicating how they are implemented through the policies and projects in the TSP. Further detail on the proposed implementing ordinances for this plan are provided in Chapter 8.

TABLE 7-1
Implementation of TSP Goals

TSP Goal/Criteria	Implementation Strategies
1. Capacity—Provides additional capacity to the system and improves the operating conditions at deficient locations.	Roadway capacity was one of the criteria reviewed for the evaluated projects and was used to determine priorities. Thus, the roadway projects in the transportation system plan (TSP) fulfill the goal of addressing capacity needs of the county transportation system.
2. Safety—Improves safety at a top 10 percent Safety Prioritization Index System site or location identified by the consultant in the safety analysis or by the PMT/TAC.	Numerous safety projects are included in the TSP, based on the review of existing and future conditions and input from the PMT/TAC. Projects in many different categories (for example, county roadway, intersection, pedestrian/bicycle) have safety components.
3. Mobility/Accessibility—Provides new transportation options or connectivity to serve different types of users (for example, bikes, pedestrians, freight, street connections).	The plan addresses mobility and connectivity through specific projects and policies for pedestrians and bicyclists, transit, and motor vehicles, including freight.
4. Coordination—Included as part of other local, county, regional or state policies or plans.	The TSP process has been coordinated with the plans and policies of relevant agencies through the plan and policy review conducted at the beginning of the process and through meetings of the PMT/TAC. Consistency with relevant sections of the Oregon Highway Plan and the Transportation Planning Rule are documented throughout the TSP.
5. Average Daily Traffic (ADT)—The improvement will serve more than 5,000 ADT (state roads), 3,000 ADT (county roads) or 9,500 entering ADT (intersections).	The existing and anticipated future ADT on each facility was one of the criteria reviewed for the evaluated projects and was used to determine priorities. Thus, the roadway projects in the TSP address the goal of addressing portions of the system with the highest ADT.
6. Non-Motorized Users—Provides a complete interconnected system of bicycle and/or pedestrian facilities to serve commuters, transit users and/or recreational users.	Based on the inventory of existing conditions, review of applicable standards and review of existing local plans, a large number of pedestrian and bicycle projects is included in the TSP. Several of the recommended changes to the county land use code also would improve conditions for pedestrian and bicycle users.
7. Feasibility—Can be implemented without much effort and has no obstacles (high costs, right-of-way, other agency approval etc.) or is already approved/funded.	All evaluated projects were reviewed and evaluated for feasibility and notes made as to potential issues, which are documented in the Appendix K and L.
8. Environment—Enhances or preserves environmentally significant or natural areas, historic features or farmland	Beneficial environmental impacts will result from pedestrian, bicycle and transit projects that support the use of non-motorized transportation in the county. Potential adverse environmental impacts were considered and identified through the project evaluation process. Where substantial environmental impacts would result from a proposed project, these are noted as potential constraints.
9. Cost—Projects are cost effective.	Cost estimates have been developed for all evaluated projects and the projects have been assigned a priority that reflects their cost and likelihood of being funded. Transportation funding is discussed in detail in the financing portion of the TSP.
10. Lifeline Routes—Creates or improves the quality of a lifeline route or routes.	Several lifeline route connections on state facilities are recommended and existing lifeline route designations on county facilities are affirmed in the plan.

Transportation System Plan

The TSP identifies the transportation improvements and policies that should be implemented in the next 20 years in Tillamook County to improve motor vehicle operations, safety, and pedestrian and bicycle travel. The plan also includes public transportation, rail, air and water elements. The transportation improvements and policies in this chapter were included on the basis of the information presented in previous chapters of this document, including the analysis of existing and future, forecasted, no-build conditions; the analysis of alternatives and projects; and the selection of a preferred alternative.

The TSP is divided into the following elements:

- State Roadway System
- Local and County Roadway System
- Freight System
- Pedestrian and Bicycle System
- Public Transportation System
- Rail System
- Air System
- Water System

Tables 7-2 through 7-4, and 7-6 through 7-13; as well as figures 7-1 through 7-4 and 7-7- through 7-10 are adopted by reference as the "Tillamook County Transportation Priorities" so that they may be reviewed an modified on an annual basis.

Figures 7-1 through 7-4 show the locations of roadway segment and intersection improvements that are recommended on state highways and local/county roads. Because not all of the projects are likely to be funded by existing revenue sources, each project is given a priority (1 to 4). The priorities are based on the measures of effectiveness (evaluation criteria) and input from stakeholders, including the PMT/TAC. An order-of-magnitude cost was calculated for most projects, using planning-level assumptions. The list of projects does not represent a financially constrained plan.

State Roadway System

The state roadway network in Tillamook County, which consists of U.S. 101, Oregon 6, Oregon 18, U.S. 26, Oregon 22, Oregon 53, Little Nestucca Highway (130) and Netarts Highway (131), serves both local and tourist traffic. In this section, capacity and safety improvements on state roadway segments and intersections along state highways are identified. This section also discusses potential highway segment designations, potential expressway classifications, planning studies, functional classifications and lifeline routes.

State Roadway Segment Improvements

Table 7-2 presents improvements that are recommended for state highway segments in Tillamook County. The projects are numbered and shown in Figures 7-1 through 7-4.

(Figures 7-1 through 7-4 are included with "Tillamook County Transportation Priorities")

(Table 7-2 is included with "Tillamook County Transportation Priorities")

State Roadway Intersection Improvements

Table 7-3 lists improvements that are recommended for intersections along state highways in Tillamook County. The projects are numbered and shown in Figures 7-1 through 7-4.

(Table 7-3 is included with "Tillamook County Transportation Priorities")

Access Management

To improve access management and to comply with the state TPR, modifications have been proposed for Tillamook County's Land Use Ordinance. Specifically, procedural reviews in the ordinance have been modified to allow closer evaluation of transportation projects and the impact of development projects on transportation facilities.

Also, several projects with access management components have been identified in the TSP to improve safety and operating conditions. County roads where access management measures should be considered include Blimp Boulevard, McCormick Loop and Resort Drive. Potential access management measures near intersections (for example, U.S. 101 at Blaine Road) and on state facilities (for example, U.S. 101, unincorporated communities) also are identified.

Highway Segment Designation

The OHP provides for special designation of certain highway segments to guide future planning and management decisions, and to balance the needs of through traffic with local traffic and development. The designations, which include STAs, commercial centers and urban business areas, have specific objectives for access management, automobiles, pedestrian and bicycle accommodation, transit amenities and development. In Tillamook County, commercial centers or urban business area designations are not recommended. A discussion of potential STA designations in the county is provided below.

Special Transportation Area (STA). The STA designation is a tool developed and supported by the OTC designed to make a downtown district function well when the state highway is also the community's main street. For example, an STA may have special features that result in lower speeds, narrower lane widths and wider sidewalks on the state highway. As of June 2003, four STAs have been conditionally designated on district or regional highways in Oregon. The STA designation process is currently under review by ODOT. Some STA designations require a detailed management plan (as described in OHP Policy 1B.11).

Potential STA Benefits.

- Provides greater flexibility for state highway standards, such as highway mobility, street spacing, signal spacing and street treatments. For example, highway mobility standards may allow for more congestion than on other urban highways.
- Receives ODOT approval up front. Addresses exceptions early in the planning process and in writing.
- Provides certainty about how the highway will be managed.

Potential STA Drawbacks.

- Criteria and the process are exacting—must be a good fit to the existing city conditions or the city must have future plans that would make it a good fit.
- It is a new program that has not yet been implemented on a statewide highway, such as U.S. 101
- There may be other, easier ways to make the desired changes, including the use of guidelines for downtown areas provided by the 2002 ODOT Highway Design Manual.

Potential STA Designations. ODOT previously identified the following potential future STA designations in Tillamook County in both incorporated and unincorporated areas:

- Incorporated Communities: ODOT identified the potential for an STA designation along U.S. 101 in the communities of Tillamook, Garibaldi, Rockaway Beach, Wheeler and Nehalem. Designations in incorporated areas are beyond the scope of this TSP and should be addressed by the respective cities. The TSPs and/or downtown transportation plans recently prepared for Tillamook, Garibaldi, Rockaway Beach and Nehalem include a review and recommendations regarding STA designation.
- Unincorporated Communities: ODOT identified the potential for a future STA in Cloverdale and Oceanside, both with low priority. In Cloverdale, the designation would be applied to U.S. 101 and in Oceanside the designation would be applied to Netarts Highway (131). Based on a preliminary review of the requirements and characteristics of an STA, designations for Cloverdale and Oceanside should be explored further by the county and ODOT. These studies are recommended as refinement plans to the TSP.

Additional detail about STA requirements is in the OHP.

Expressway Classification

At this time, no state highways in Tillamook County are classified as expressways. However, one potential future expressway designation has been identified by ODOT, as discussed below.

Oregon 18—Valley Junction to U.S. 101. ODOT has previously identified the section of Oregon 18 from Grande Ronde to U.S. 101 in Tillamook County as a medium priority for expressway classification, based on its designation as an OHP Freight Route and the need to retain its functional integrity. This section of Oregon 18 serves the communities of Otis and Grande Ronde, in addition to through traffic from the Willamette Valley to the Oregon Coast. Oregon 18 is currently classified as an expressway from west of McMinnville to Grande Ronde.

An expressway classification of Oregon 18 from Grande Ronde to U.S. 101, including the section in Tillamook County, would provide a continuous safe, efficient, high speed and high volume route from the Willamette Valley to the Oregon Coast. However, implementation of an expressway also may result in changes to access management and local circulation. The classification of Oregon 18 as an expressway by the OTC would take place in consultation with local government.

Planning Studies

Table 7-4 presents recommended planning studies for Tillamook County.

(Table 7-4 is included with "Tillamook County Transportation Priorities")

Maintenance/Preservation/Operations

There are several locations on state and county facilities where flooding or landslide issues have been identified. The TSP does not recommend specific maintenance, preservation and operations projects, but leaves these to the county staff to identify and implement on an as-needed basis. However, if a roadway is recommended for other roadway improvements, it may be beneficial to include improvements for maintenance needs at that time. Some of the projects included in the project list in Appendix L include maintenance, preservation or operation components that address existing deficiencies.

Functional Classifications

No changes to the functional classifications of the state highways in Tillamook County are recommended.

Design Standards

Roadway design standards were not developed for state facilities. Applicable standards for state roads are provided in the ODOT Design Manual. State facilities that currently do not meet roadway design standards should be upgraded as feasible. See Table 3-3 in Chapter 3 for an inventory of state facilities that do not meet ODOT design standards.

Lifeline Routes

Several state roadways in Tillamook County—sections of U.S. 101, Oregon 53, Netarts Highway (131), Oregon 6, Oregon 22, Oregon 18—are designated as lifeline routes by ODOT. The priority of each designation varies, depending on the importance of the section for emergency response. Continuation of a lifeline route designation by ODOT for each of these facilities in Tillamook County is recommended, because these sections of roadway are important links for Tillamook County residents and through traffic in the event of an emergency.

Under existing conditions, there are gaps in connectivity for lifeline routes between counties on state facilities. For connectivity purposes, a lifeline route designation should be considered by ODOT on the following state segments:

- U.S. 26 in Tillamook County
- Oregon 53 from U.S. 101 to Tillamook/Clatsop County line

In addition, several county facilities—Resort Drive, Wilson River Loop, Latimer Road, Alderbrook Loop, Miami-Foley Road and North Fork Road—are designated as lifeline routes by ODOT. All of these routes are currently designated as Priority 1 lifeline routes, indicating they are essential for emergency responses in the first 72 hours after an incident.

Local Roadway System

Functional Classification

The proper classification of each roadway in Tillamook County is important to help determine the appropriate traffic control, design standards, pedestrian and bicycle facilities, and access to adjacent properties for a roadway segment. The following are the functional classification definitions for Tillamook County:

- **Arterial Roadways.** The primary function of an arterial roadway is to provide mobility. Therefore, arterials typically carry higher traffic volumes and allow higher travel speeds while providing limited access to adjacent properties.
- **Collector Roadways.** The function of a collector roadway is to collect traffic from local streets and provide connections to arterial roadways. Generally, collectors operate with moderate speeds and provide more access in comparison to arterials.

- **Local Roadways.** The primary function of a local roadway is to provide access to local traffic and route users to collector roadways. Generally, local roadways operate with low speeds, provide limited mobility, and carry low traffic volumes compared with other roadway classifications.

No changes to functional classifications of county roads are recommended. However, the county should use the following guidelines to determine the need for future changes. Generally, there likely will be few arterial roadways under county jurisdiction. County facilities with high traffic volumes and speeds that must provide mobility should be classified as arterials. Areas where arterials might be appropriate include within the city limits of incorporated cities (that is, 3rd Street in Tillamook) and in unincorporated communities (that is, Pacific Avenue, Cape Kiwanda Drive and Brooten Road in Pacific City). Generally, the county roadway network likely will include collectors and locals. County roads that carry relatively high bicycle and vehicle volumes should be classified as collectors. County roads with low bicycle and vehicle volumes should be classified as local facilities, with a lower design standard.

Table 7-5 provides some general guidelines for functional classifications based on minimum ADT volumes. In addition to ADT, other roadway characteristics (for example, surrounding roadway network, access and speed) should be considered when determining functional classifications.

TABLE 7-5
Functional Classification Guidelines

Functional Road Class	Minimum ADT Volume
Arterial	1,000
Collector	300 - 1,000
Local	0 - 300

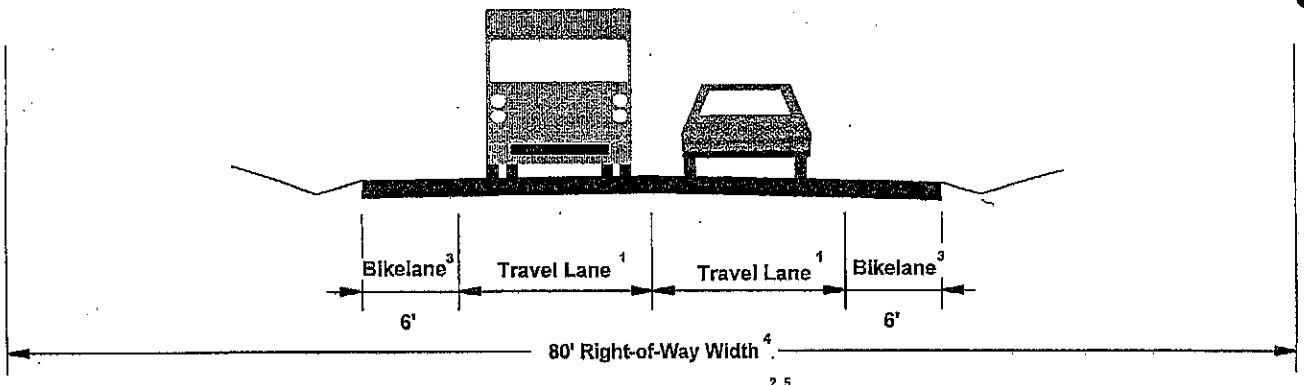
ADT—average daily traffic.

Roadway Design Standards—County Facilities

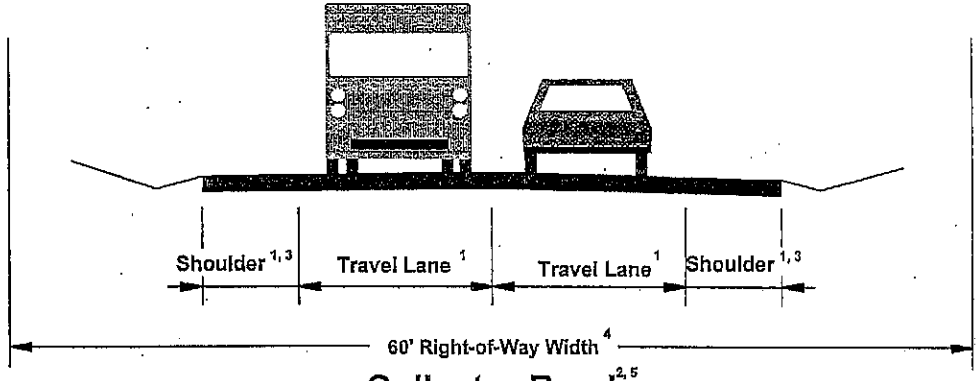
Roadway design standards were developed for each functional classification (arterial, collector, local) for county facilities. Each functional classification requires different design standards based on the operating conditions (volumes, access management, speeds) and users (bicyclists, pedestrians, motorists) of the roadway. The design standards are not intended to require the county to update and retrofit current roadways to new standards, but should be applied during future development. See Figure 7-5 and Figure 7-6 for proposed roadway standards (cross-sections) on arterial, collector and local roadways. The collector roadway standard applies to both major and minor collectors. The local roadway standard applies to both major and minor local roadways.

Urban Growth Management Agreement. Tillamook County has adopted an Urban Growth Management Agreement (UGMA) with each of the seven incorporated cities in the county: Tillamook, Bay City, Garibaldi, Rockaway Beach, Wheeler, Nehalem and Manzanita. The purpose of the agreement is to provide for coordination of services in the city-county mutual interest area, defined as lands that are outside of the city limits, but within the city's UGB. By definition, these lands are determined to be necessary and suitable for future urban development.

The county's UGMA requires that the city and county coordinate with each other regarding major transportation improvement projects, county road vacations, extensions of city services and annexations, which is the current practice. The UGMA also recommends that cities and the county consider the possibility of developing a common set of road, street and storm drainage standards to be used in the mutual interest area.



Arterial Road 2, 5



Collector Road 2, 5

Notes:

1 Travel lane and shoulder widths shall be in accordance with AASHTO Manual.

2 Sidewalks may be considered along County arterial and collector facilites within unincorporated communities, within subdivisions, or near significant pedestrian generators as required by County Engineer or Department of Community Development.

3 Bikelanes will be considered on all arterial roadways. Six-foot wide, striped and stenciled bike lanes may be constructed along these facilities except where special constraints exist or where exempted by County Engineer; in these areas, 14-foot shared travel lanes will be considered in place of bike lanes.

Bikelanes will also be considered on collector roads with significant bike traffic (i.e. Three Capes Scenic Route, unincorporated communities) when feasible. The need for bikelanes will be reviewed by the Department of Community Development and the County Engineer. On collector roads with low bicycle usage, shoulders will be constructed in accordance with the AASHTO Manual if bikelanes are not constructed.

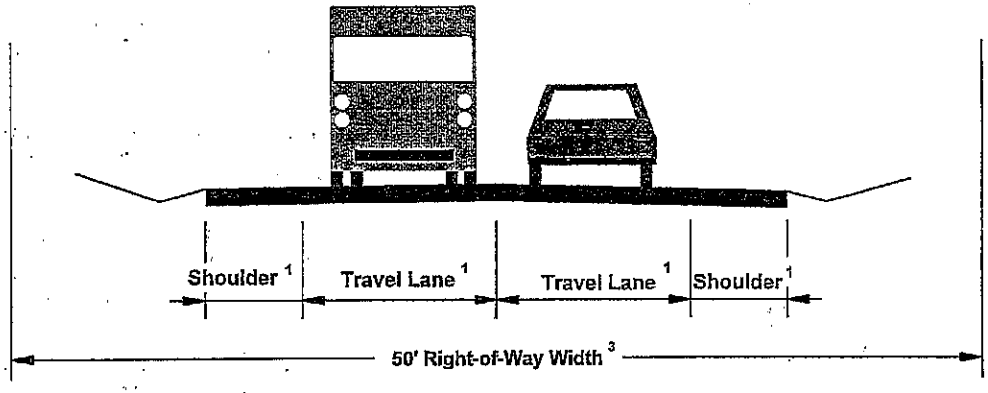
4 Right-of-way widths shown are for new roadways and may be reduced by Tillamook County where constraints exist. The minimum new public road right-of-way width is 50 feet.

5 Within City Limits or Urban Growth Boundaries, Tillamook County will consult with the applicable City to determine the appropriate standards.

FIGURE 7-5

Cross Sections
Tillamook County Arterial and Collector Roads

Tillamook County Transportation System Plan



Local Road 2,4

Notes:

[1] Travel lane and shoulder widths shall be in accordance with the AASHTO Manual. The Land Division Ordinance includes a design exception and variance process for local road standards.

[2] Sidewalks may be considered along County local facilites within unincorporated communities, within subdivisions, or near significant pedestrian generators as required by County Engineer or Department of Community Development.

[3] Right-of-way widths shown are for new roadways and may be reduced by Tillamook County where constraints exist. The minimum new public road right-of-way width is 50 feet.

[4] Within City Limits or Urban Growth Boundaries, Tillamook County will consult with the applicable City to determine the appropriate standards.

FIGURE 7-6
Cross Sections
Tillamook County Local Roads

Tillamook County Transportation System Plan

County Roadway Segment Improvements

Table 7-6 presents the improvements that are recommended for county roadway segments in Tillamook County. The projects are numbered and shown in Figures 7-1 through 7-4. Many of the projects listed in Table 7-6 would improve operations for pedestrians and bicycles, and, therefore, are shown in Figures 7-7 through 7-10.

(Table 7-6 is included with "Tillamook County Transportation Priorities")

County Intersection Improvements

Table 7-7 presents the safety improvements that are recommended for county intersections in Tillamook County. The projects are numbered and shown in Figures 7-1 through 7-4.

(Table 7-7 is included with "Tillamook County Transportation Priorities")

Parking Improvements

Table 7-8 presents the parking improvements that are recommended in unincorporated communities of Tillamook County. The projects address needs on state and local roadways. The projects are identified in other planning documents and are described here at the conceptual level only.

(Table 7-8 is included with "Tillamook County Transportation Priorities")

Lifeline Routes

In addition to the state roads listed above, several county facilities—Resort Drive, Wilson River Loop, Latimer Road, Alderbrook Loop, Miami-Foley Road and North Fork Road—are designated as lifeline routes by ODOT. All of these routes are currently designated as Priority 1 lifeline routes, defined as routes that are essential for emergency responses in the first 72 hours after an incident. Continuation of a lifeline route designation by ODOT for each of these facilities in Tillamook County is recommended, as these sections of roadway are important links for Tillamook County residents and through traffic in the event of an emergency.

Freight System

As part of the TSP process, Tillamook County and City of Tillamook staffs identified the need and desire to minimize the impacts of local and through freight truck traffic and large recreational vehicles in the City of Tillamook downtown commercial area and in residential neighborhoods in the city. The issue and potential solutions affect both the City of Tillamook and unincorporated areas of Tillamook County. This section, which is being included in both the City of Tillamook TSP and the Tillamook County TSP, describes the efforts to identify the problem and potential solutions around this issue. As described below, however, specific solutions are not recommended at this time.

Preliminary Study

A brief study of Large Vehicle Alternative Routes was undertaken jointly as part of the county and city TSP processes. The purposes of the study were:

- To clearly document the nature of the problem facing the city and the county relating to conflicts between trucks and other uses
- To identify and evaluate proposed solutions
- To initiate discussion among the City of Tillamook, Tillamook County, ODOT and other stakeholders regarding a preferred solution or solutions.

These initial steps were conducted in May 2003 and resulted in the further identification of the problem and a number of potential solutions. Documentation of this process, including the proposed solutions, is included in Appendix M.

Problem Statement

As described in Appendix M, the following needs related to truck and large vehicle traffic were identified:

- Improve truck and other large vehicle movements through the City of Tillamook.
- Improve access to the Tillamook Lumber Company mill.
- Develop solutions that are cost-effective and that will be used (for example, minimize out-of-direction travel or trip time).
- As part of the above solutions, minimize adverse impacts of truck traffic on the commercial and residential areas of Tillamook to ensure the future economic health and livability of the city.

Potential Solutions

Because of the complex nature of this problem, specific solutions are not recommended in the TSP. Several potential solutions are identified and discussed in Appendix M. For the purposes of the TSP, an additional study is recommended, as follows:

- Detailed Large Vehicle Alternate Route Study: Several specific recommendations for this study are identified in Appendix M. The detailed study would take the preliminary work from the Large Vehicle Alternate Route study completed for the TSP and develop further detail, with a focus on cost-effective solutions that are most likely to be used (for example, minimize out-of-direction travel or trip time). It also would include an internal circulation study at the Tillamook Lumber Company mill site. This study would identify opportunities and constraints for changing circulation patterns at the mill to improve overall truck routing.

After completion of this refinement study, the priorities of projects included in the Tillamook County TSP may shift because many of the potential solutions include improvements on state and county facilities.

Pedestrian System

Pedestrian activity in Tillamook County occurs primarily within cities and unincorporated rural communities. The county's scenic character also promotes pedestrian activity around natural features (such as beach accesses and hiking trailheads) and other significant landmarks (viewpoints and historical markers). However, because of the distances between cities and rural communities, there is relatively little pedestrian activity between communities. Therefore, the Pedestrian System Plan focuses on improving connections within communities and enhancing pedestrian access to the numerous recreational features of Tillamook County.

Providing a connected network of pedestrian facilities in Tillamook County is important to:

- Serve shorter pedestrian trips from neighborhoods to area recreational and activity centers, such as schools, churches and neighborhood commercial uses.
- Provide access to public transit.
- Meet residents' and visitors' recreational needs.
- Provide circulation within town centers and more densely populated areas of the county.

Tillamook County will encourage walking as a means of transportation by addressing the following areas:

- **Connectivity.** The county will work to develop a connected network of pedestrian facilities. Connected networks are important to provide continuity between communities and to improve safety.
- **Safety.** The county will work to provide a secure walking environment. For residents to use the pedestrian system, it must be perceived as safe.
- **Design.** The county can ensure pedestrian-oriented urban design by adopting policies and development standards that integrate pedestrian scale, facilities, access and circulation into the design of residential, commercial and industrial projects.

The Pedestrian System Plan identifies facility and system improvements that will contribute to a safe and well-connected pedestrian environment. This, in turn, will promote walking as a viable transportation mode for recreational users and the transportation disadvantaged.

Pedestrian Facility Improvements

The Tillamook County pedestrian system along state highways is generally in good condition within incorporated cities (for example, Tillamook). However, many of the county roadways, particularly outside of city limits, do not have sidewalks, and pedestrians share the roadway with bicycle and vehicle traffic. Where sidewalks exist, they vary in condition and level of ADA compliance. A lack of crosswalks on busy roads also can be a barrier to walking. Although many crosswalks exist along U.S. 101, they are needed along other roadways to promote pedestrian circulation and safety. Shoulder widths on many state and county facilities are deficient, and should be widened where feasible.

Sidewalks

To provide a network of safe and connected facilities and promote a balanced transportation system in Tillamook County, sidewalk improvements have been identified. Particular focus is placed on increasing pedestrian safety by adding new sidewalks along such high traffic routes as U.S. 101 and Netarts Highway (131).

In rural areas of the County where it is not feasible to construct sidewalks, it is recommended that the shoulders be widened from their current width. These improvements are recommended for portions of state and county facilities, as summarized in Tables 7-1 and 7-5. This will enhance accessibility for those who travel these roads as pedestrians and share the roadway shoulder with bicycle traffic.

Crosswalks and Trails

To assist pedestrians in crossing busy roads, marked crosswalks and pedestrian warning signage should be installed at high volume intersections and near pedestrian generators in rural Tillamook County. To increase safety and better connect foot traffic to popular recreational areas, trail construction is recommended near Pacific City and other unincorporated communities.

Rural Communities

The unincorporated communities of Tillamook County, such as Oceanside, Netarts, Pacific City, Beaver, Hebo and Cloverdale will benefit from many of the pedestrian improvements identified in Table 7-9.

Pedestrian Projects

Table 7-9 displays the recommended pedestrian facility improvements along existing streets and roads for the next 20 years. Many of these projects are shown in Figures 7-7 through 7-10.

(Table 7-9 is included with "Tillamook County Transportation Priorities")

(Figures 7-7 through 7-10 are included with "Tillamook County Transportation Priorities")

Pedestrian Standards and Policies

To enhance pedestrian and safety, circulation and connectivity, and to comply with the state TPR, several modifications have been proposed for Tillamook County's various planning documents, including the Comprehensive Plan, the Land Use Ordinance, the Land Division Ordinance, the Road Approach Ordinance and the Road Acceptance Ordinance. Policies facilitating pedestrian safety, connectivity and mobility have been included in the Comprehensive Plan. Street cross sections have been updated (as reflected in the TSP) to allow the county to incorporate sidewalks in rural communities. Street design standards have been modified to reflect the different functional classification of roads and to provide facilities (for example, sidewalks) where they are appropriate.

Bicycle System

Bicycle travel offers commuters, children and others an important option for transportation and is a transportation choice for people who do not own vehicles. Cycling is also an important recreational option, especially in scenic areas of Oregon, such as Tillamook County.

This bicycle system element of the TSP establishes a network of bicycle lanes and routes throughout Tillamook County, to connect trip generators and provide a safe, interconnected bicycle system. While all roadways and streets can be used as bikeways, designated routes along bicycle streets and roads and/or separated bicycle lanes on busy streets can improve safety as well as increase bicycle usage by recreational cyclists and the transportation disadvantaged.

Widening Projects

The Oregon Coast Bike Route passes through Tillamook County along U.S. 101, Sand Lake Road, McPhillips Drive, Cape Kiwanda Drive, Brooten Road and Slab Creek Road, with marked bike lanes or shoulders that are at least 3 feet wide and signage. With the projects included the Tillamook County TSP, the type of bikeway provided along the Oregon Coast Bike Route will vary by location. Sections of state facilities (U.S. 101) and county facilities (Brooten Road) will provide bike lanes. Other locations with low traffic volumes will provide shoulder or shared roadways.

The Three Capes Scenic Route, which consists of county and state facilities, is also in Tillamook County. The signed route experiences high volumes of vehicles and bikes because it is a popular tourist route that follows the Oregon Coast. With the projects included the Tillamook County TSP, the type of bikeway provided along the Three Capes Scenic Route will vary by location. Generally, the route will consist of shoulder or shared roadways with bike lanes along steep upgrades where feasible.

The remainder of the Tillamook County bicycle system will generally consist of shared roadways (particularly on local and collector roads) or shoulder bikeways. Many of the shoulder widening improvements identified for county facilities in Table 7-6 will benefit bicyclists.

Signage

To promote safety and awareness of bicyclists where they share facilities with pedestrian and vehicular traffic, designation signage is recommended along state highways and county roads with significant bike traffic.

Bicycle Parking

To comply with the standards stated in the OBPP, bicycle parking will be installed at significant bicycle generators, such as schools and parks in rural areas.

Bikeway Improvements

To promote safe and convenient bicycle linkages between commercial, recreational and other land uses, bicycle system improvements have been identified. General bikeway improvements are proposed for

portions of the county facilities with significant bike traffic (for example, the Three Capes Scenic Route). Where width deficiencies exist, notably along county roads and bridges, and on routes with high volumes of vehicular and bicycle traffic, widening has been identified as a high priority project.

Trails

To provide an opportunity for recreational off-road cycling, the development of a recreational pedestrian and biking trails are proposed near incorporated and unincorporated communities.

Rural Communities

The unincorporated communities of Tillamook County, such as Oceanside, Netarts, Pacific City, Beaver, Hebo and Cloverdale will benefit from many of the bicycle improvements identified in Table 7-10.

Bicycle Projects

Table 7-10 presents the recommended bicycle route improvements required during the next 20 years. Figures 7-7 through 7-10 present the proposed pedestrian and bicycle improvements recommended for Tillamook County.

(Table 7-10 is included with "Tillamook County Transportation Priorities")

Bicycle Standards and Policies

To enhance bicycle safety, circulation and connectivity, and to comply with the state TPR, several modifications have been proposed for Tillamook County's various planning documents, including the Comprehensive Plan, the Land Use Ordinance, the Land Division Ordinance, the Road Approach Ordinance and the Road Acceptance Ordinance. Policies facilitating bicycle safety, connectivity and mobility have been included in the Comprehensive Plan. Street cross sections have been updated (as reflected in the TSP) to allow the county to incorporate bicycle lanes and sidewalks in rural communities as needed. Street design standards have been modified to reflect the different functional classification of roads. Bicycle parking provisions have been included for higher density development projects.

Public Transportation System

Improvements to the public transportation system will offer commuters, children, and others an important option for transportation. Facility and service improvements will improve conditions for the transportation disadvantaged (that is, people who do not own vehicles).

The TCTD currently operates public transportation services both in Tillamook County, and between Tillamook County and surrounding communities. In unincorporated communities of Tillamook County, the addition of transit amenities at transit stops should be considered, including covered benches, bus pullouts, signage and concrete landing pads. These amenities would make the system more visible to potential users and possibly attract new riders. Also, all transit stops should be accessible to all potential riders per ADA standards.

The TCTD has outlined opportunities to improve public transportation services offered by TCTD, including the following:

- **Expand service to Portland on Sundays.**
- **Provide park-and-ride services at the TCTD's building headquarters.** This is a planned facility included in the Phase 2 construction of the TCTD's new headquarters building. It is expected that the park-and-ride will provide 25 stalls. Two STIP projects were awarded to TCTD for the new bus facilities. They are STIP #12484 and 12089.

- **Improve connections with other transit service providers.** Currently, connections between transit service providers, including Sunset Empire, Pacific Transit and Oregon Coachways are not available or not well coordinated.
- **Expand service to Oceanside** on Netarts Highway (131)
- **Expand service to Pacific City.**
- **Expand service between Tillamook and the Port of Tillamook Bay.**
- **Provide transit pull-outs on state and county facilities.** This is one of TCTD's immediate priorities.
- **Enlarge transit shelters.** This is a current proposal to the Tillamook City Council. It includes expansion of the transit center on 2nd Street and Laurel Avenue and adds additional shelters at stops where none exist.
- **Provide additional services at the 2nd Street and Laurel Avenue Transit Center stop.** Includes providing restrooms, customer service station and bike racks.
- **Advertise and promote** TCTD services.
- **Complete permanent facility construction.** Maintenance building needs to be constructed.
- **Cohesive transit signage.** TCTD and ODOT should coordinate to determine appropriate signage along state highways.

The following transit issues were identified through the inventory process:

- Transit amenities, including covered benches, signage and concrete landing pads, should be considered at transit stops with high ridership in Tillamook County. These amenities would make the system more visible to potential users and possibly attract new riders. Also, all transit stops should be accessible to all potential riders per ADA standards.
- Opportunities to expand transit service to Lincoln City, Manzanita, Bayside Gardens, Nehalem and Wheeler should be explored.
- Opportunities for implementing TDM measures such as carpooling and vanpooling in the county should be explored further by TCTD, ODOT and Tillamook County.
- The county should explore opportunities to form a Citizen Advisory Committee to develop a public transportation program (Tillamook County Comprehensive Plan).
- Pacific City should explore opportunities to create a community shuttle to provide public transportation and delivery services (Pacific City/Woods Transportation Plan). According to TCTD, Pacific City currently has an underutilized DAR service. Therefore, Pacific City and TCTD could explore ways to increase transit usage in this unincorporated community through the DAR service currently provided.

Through discussions with the school districts in Tillamook County, several hazardous locations for bus traffic were identified. TCTD, ODOT and the school districts in Tillamook County should coordinate efforts to install remote controlled signs with flashing lights at the following locations, if feasible, to address safety concerns:

- U.S. 101 in Neahkahnie
- Railroad crossing on U.S. 101 at Hobsonville Point Road

- Oregon 6 at MP 9 and MP 11
- Trask River Road at MP 3.9
- North U.S. 101 business area in Tillamook

TDM Recommendations

ODOT's TSP Guidelines list circumstances where TDM techniques can benefit the transportation system and enhance mobility. These circumstances include:

- Favorable community demographics for employment/residency
- Appropriate travel distances for the trip to work
- Appropriate travel patterns for the trip to work
- Supportive community attitudes

While congestion is not currently a large problem in Tillamook County during the weekday PM peak period, access to employment and services can present challenges for certain residents because of limited travel options. Ridesharing is a flexible, low-cost method of addressing these challenges in certain situations.

In larger metropolitan areas, a dedicated staff person offers assistance to citizens and employers interested in ridesharing via a local phone number. This of level assistance is not necessary in rural areas where there usually is not a need for a dedicated staff person because of the low demand for ridesharing. TCTD currently refers drivers interested in ridesharing to the Tri-Met hotline. Nonetheless, certain TDM tools can be identified in a TSP that can provide a basic level of benefit without incurring a great deal of cost. The following are examples:

- An effective, low-cost method of providing rideshare assistance in lieu of a dedicated staff person is via an online ride-matching tool. This Web site, www.carpoolmatchnw.org, is provided by the City of Portland as a free service for communities.

- While the use of the site is free, gaining access to the reporting functions of the site does require a fee. The entire state of Oregon and certain counties in southwest Washington have been mapped, so the site has the capabilities of providing connections within and outside of Tillamook County. Portland is currently working on adding a "one-time only" trip feature, which will allow the casual traveler to potentially find a ride. Providing carpooling opportunities between incorporated or rural communities and major employment centers (for example, Port of Tillamook Bay) should be considered.

- Park-and-ride lots provide a centralized locale for carpoolers to meet. Existing parking, such as churches or grocery stores parking lots, should be used to the extent that it is feasible. Right-of-way owned by the state or county can be signed and developed into low-cost lots if a need for additional park-and-ride lots develops.

- A simple listing of a county's available transit, rideshare and park-and-ride lot information should be made available and distributed via government agencies, social service agencies, libraries, community Web sites, etc.

Rail System

The rail line in Tillamook County is owned and operated by the Port of Tillamook Bay. This rail line serves the Tillamook County Lumber Company, Port of Tillamook Bay industrial area, and coastal communities along U.S. 101 between Wheeler and Tillamook. The existing rail line is being upgrade to a Class II rail facility. After the upgrade, train speeds may increase in Tillamook County and safety improvements at existing at-grade crossings may become a high priority.

The existing rail line in Tillamook County is part of a countywide rail system. On a county level, the following rail issues have been identified and should be addressed:

- Identify and prioritize improvements on railroad bridges throughout the county to ensure the system is able to function throughout the 20-year design horizon.
- Explore opportunities to expand tourist rail services throughout Tillamook County.
- Consider improvements at the Latimer Road railroad crossing as necessary to accommodate increased truck traffic.
- Upgrade the rubber crossing material at the U.S. 101 railroad crossing near Hobsonville Point Road.
- Construct improvements within the vicinity of Three Graces on U.S. 101 to address safety issues caused by tourists crossing the railroad tracks to view tidepools. A pedestrian overcrossing is currently under construction to address this issue.
- Upgrade the existing railroad tracks from Tillamook County to Blimp Boulevard. This improvement is currently underway.
- Expand the ability of the system to transport rock from local quarries and wood chips. To transport these products along the existing rail lines, the Port of Tillamook Bay would need to acquire new cars to carry rock and wood chips.
- Improve marketing of the Port of Tillamook Bay, including improving the appearance (road improvements) and infrastructure (storm drainage, rail line) of the port.

Air System

Tillamook County is served by three public airports, which are located in Tillamook, Nehalem and Pacific City. The following issues should be addressed:

- The entrance from U.S. 101 to the Tillamook Airport should be improved.
- Existing land use and constraints (utilities, adjacent properties) at the Pacific City Airport should be further evaluated.

Water System

There are three ports/boat launches in Tillamook County. Opportunities to improve the function of each port/boat launch are described below.

Garibaldi Boat Basin

The Port of Garibaldi currently serves the fishing industry, including both recreational and commercial fishermen. However, the Port of Garibaldi is currently inactive in terms of water freight traffic. This is partly the result of gradual sedimentation in the bay, which has reduced the water depth below a point that makes such traffic feasible. For water freight traffic to be a feasible transportation mode, the entry jetties and authorized navigation channel would need to be maintained. The Port of Garibaldi should investigate the feasibility of barging logs to Garibaldi, including the level of dredging and other sight improvements that would be necessary to support this mode of transportation.

In addition, improvements should be considered for the main port entry (7th Street), secondary entry (3rd Street), parking and circulation, and pedestrian amenities (sidewalks, landscaping, benches) as detailed in the Garibaldi TSP.

Pacific City Boat Launches

In Pacific City, there are two public boat launches: the Woods Boat Launch and the Guard Rail Boat Launch. As described in the Pacific City/Woods Transportation Plan, improvements are needed to improve operations at both boat launches. At the Woods Boat Launch, improvements should be considered and an additional boat launch should be considered along Resort Drive. At the Guard Rail Boat Launch, improvements relating to parking and circulation (signage and striping) should be considered.

Port of Nehalem

For water freight to be a feasible option at the Port of Nehalem, rehabilitation and maintenance of the entrance jetties would be necessary in Nehalem Bay. In addition, the Tillamook County Comprehensive Plan identifies the need for the Port of Nehalem to establish a natural channel maintenance program for navigation, obtain COE authorization of a navigation channel in Nehalem Bay, and maintain the channel marker system.

Transportation Funding Plan

This section summarizes funding sources available to Tillamook County to establish a transportation investment baseline for maintenance and capital improvement projects in the TSP. Local, state and federal funding sources are described. Potential future funding sources for projects included in the Tillamook County TSP also are discussed.

Existing County Funding Sources

Table 7-11 summarizes Tillamook County's revenues and expenditures for transportation maintenance and capital improvements during the past 5 fiscal years (1997 through 2002), as well as the projected budgets for years 2002 through 2006. As shown in Table 7-11, the county's primary sources of transportation revenue are state gas tax and federal funding available through the U.S. Forest Service, which represent approximately 30 and 35 percent of the total transportation revenue, respectively.

Table 7-11 also illustrates how local transportation funds were spent during 5 fiscal years (1997 through 2002). Tillamook County spent transportation funds on maintenance activities, preservation/overlay projects, capital improvements and slide repair. As is evident from Table 6-1, transportation funding was variable during the 3-year period, averaging approximately $4 million per year.

State Funding Sources

In Oregon, the STIP provides funding for capital improvements on federal, state, county and city transportation systems. Within the STIP, which is updated every 2 years, funds are allocated for multimodal projects, including roadway, public transportation, bicycle and pedestrian, air, freight and bridge projects. Each STIP lists projects that are planned for construction during a 4-year period. Projects that are included in the STIP are regionally significant and have been given a high priority through planning efforts.

Transportation projects in the STIP generally are categorized in the following manner:

Modernization Projects: Improvements to accommodate existing traffic and/or projected traffic growth. They include:

- Addition of lanes: High-occupancy vehicle (HOV) lanes, new alignments and new facilities (bypasses)
- Highway reconstruction with major alignment improvements or major widening
- Grade separations

- Widening of bridges to add travel lanes
- Immediate Opportunity Fund (IOF) projects
- New safety rest areas

(Table 7-11 is included with "Tillamook County Transportation Priorities")

Safety Projects: An investment program focused on improvements to address priority hazardous highway locations and corridors, including the interstate, to reduce the number of fatal and serious injury crashes. Projects funded through this program meet strict benefit/cost criteria. They include:

- Capital improvements, such as passing lanes, turn lanes and wider shoulders
- Access management
- New guardrails
- Illumination, delineation or signing
- Channelization in the existing roadway at intersections
- Continuous shoulder rumble strips
- Enforcement of traffic laws
- Railroad crossing improvements (separate funding source)

Pavement Preservation: Improvements to rebuild or extend the service life of existing facilities, and rehabilitative work on roadways. Preservation projects add useful life to the road without increasing the capacity. They include:

- Pavement overlays (includes minor safety and bridge improvements)
- Interstate Maintenance (IM) Program (pavement preservation projects on the interstate system)
- Reconstruction to re-establish an existing roadway
- Resurfacing projects

Bridge Projects: Improvements to rebuild or extend the service life of existing bridges and structures beyond the scope of routine maintenance. They include:

- Rehabilitation, replacement, major repair and major maintenance
- Overpass screening
- Tunnels
- Large (more than 6-foot-wide) culverts

Operations: System management and improvements that lead to more efficient and safer traffic operations and greater system reliability. They include:

- Signals, signs, illumination and other operational improvements
- Rockfalls and slides (chronic rockfall areas and slides; not emergency repair work)
- ITS (includes ramp metering, incident management, emergency response, traffic management operations centers, and mountain pass and urban traffic cameras)
- Slow-moving-vehicle turnouts, traffic circles or roundabouts
- TDM (includes rideshare, vanpool, and park-and-ride programs)

Oregon Transportation Investment Act

The OTIA was passed by the 2001 Oregon legislature and is funded through bond proceeds derived from increased Oregon Department of Motor Vehicles fees. OTIA currently provides $650 million (including $150 million local matching funds) for 173 construction projects that will improve pavement conditions, increase lane capacity, and improve bridges throughout Oregon. Projects were selected with extensive input from local communities and other stakeholders. In 2002, the OTC allocated these funds for modernization, preservation and bridge projects throughout the state.

State-Funded Projects in Tillamook County

The 2002-2005 STIP, 2004-2007 Draft STIP and OTIA-funded projects combine to generate more than $36 million dollars in project work during 6 years in Tillamook County, which will result in an average of $6 million dollars in funding per year. Table 7-12 summarizes the proposed STIP and OTIA funding for projects in Tillamook County from 2002 to 2007.

As shown in Table 7-12, two large projects will be funded in Tillamook County through special program funds that amount to $6.5 million. These projects include improvements along Sand Lake Road and Blaine Road, and are both federally administered projects.

(Table 7-12 is included with "Tillamook County Transportation Priorities")

Transportation System Plan Financing

Overall, the TSP contains more than $175 million in multimodal transportation improvements during the next 20 years, with the biggest improvements occurring on the primary state facilities serving Tillamook County. The TSP assumes that existing revenues and expenditures for transportation maintenance and capital improvements during the next 20 years will remain stable. As a result, the county likely will need a combination of state and/or federal assistance in addition to additional local revenue to address funding needs. Table 7-13 summarizes timing and costs for projects listed in this chapter under the categories of state, county, intersection and pedestrian/bicycle improvements.

(Table 7-13 is included with "Tillamook County Transportation Priorities")

Potential Future Funding Sources

U.S. Department of Transportation TEA-21 Reauthorization

The 2004 budget lays the groundwork for a $247 billion, 6-year reauthorization proposal, as compared to TEA-21's current level of $218 billion. Of the proposed total, $195 billion would fund the highway program (up from $168 billion) for 6 years, and $45 billion would fund the transit program (up from $41 billion). Federal funding typically is distributed through the state.

U.S. Department of Homeland Security

Several agencies formerly under the U.S. Department of Transportation now reside in the U.S. Department of Homeland Security (DHS). Based on spending by various agencies and offices that have moved to DHS proposed funding for the $36 billion agency represents a 64 percent increase. The DHS's focus is on reducing the nation's vulnerability to terrorism, and minimizing the damage and recovering from attacks that may occur. Funding for projects that involve military operations and lifeline routes should be pursued through the DHS.

ODOT Bicycle and Pedestrian Program

The state-funded OBPP distributes approximately $3 million per year. Many of the pedestrian and bicycle projects included in the TSP would be eligible for funding through this program. Therefore, Tillamook County should consider applying for these funds for pedestrian and bicycle projects included in the TSP.

System Development Charges

System development charges (SDC) create a mechanism for development to pay for transportation improvements necessary to support trips generated by development. SDCs are used in many cities and counties in Oregon and generally are based on the number of vehicle trips generated by the development.

Local Gas Tax

Tillamook County receives revenue from state gas taxes. To increase revenue and fund additional transportation related improvements, the county could implement a local gas tax. Local gas taxes are currently being used by several Oregon counties and cities, including the City of Tillamook, to fund transportation projects.

Road Pricing

As described in this TSP, tourism accounts for major increases in traffic volumes on state and county facilities in Tillamook County. In coordination with the state, Tillamook County could employ some form of toll to support transportation-related improvements.

Revenue and General Obligation Bonds

Revenue bonds sold by government agencies and repaid by user charges. Typically, the bonds are secured by stable revenue stream, such as a local gas tax, street utility fee or toll.

Similarly, general obligation bonds serve the same purpose, however, they are secured by the full faith and credit of the issuing municipality. Such bonds are authorized by vote. Revenue bonds also can be issued with this backing.

Property Tax

Currently, Tillamook County does not receive revenue from property taxes. Therefore, the county could fund additional improvements by implemented a local property tax.

Parking Fees

Parking fees could be implemented at boat launches, county parking lots, or within unincorporated communities to generate revenue for transportation-related improvements.

Tillamook County Transportation Priorities

November 2004

This document exists separately from the Tillamook County Comprehensive Plan and Transportation System Plan to allow the County to periodically review and revise lists of recommended projects. Annually, or as necessary, the County will review the lists of projects, remove projects that have been completed, add new projects, and reprioritize as appropriate.

The following tables and figures are included in this document:

Table and figure numbers are as referenced in the Transportation System Plan.

TABLE 7-2
Recommended State Roadway Segment Improvements

Project Number	Location and Description	Estimated Cost	Priority (1 to 4)
SRD-1	U.S. 101: Manzanita—Wheeler. Overlay.	$1,417,000	1
SRD-2	U.S. 101: Jetty Creek Realignment. Correct alignment problem.	$1,060,000	1
SRD-3	U.S. 101: Nehalem to Garibaldi. Safety improvements (access management, guardrail, rumble strips, remove vegetation to improve sight distance, slope flattening on curves, relocate utility poles, modify striping to not allow passing).	[2]	1
SRD-4	Three Graces Area on U.S. 101. Address parking/safety issues caused by tourists crossing U.S. 101 to view tidepools through construction of a pedestrian overpass (already underway) and improved parking facilities (long term).	$630,000	1
SRD-5	U.S. 101 near Juno Hill and Alderbrook Lane. Address safety issue caused by conflict between drivers pulling out of driveways/side streets and passing on U.S. 101 (currently a dashed yellow line).	$5,000	1
SRD-6	U.S. 101: Suppress Road-Wilson River Bridge. Construct bridge and modernize roadway.	$3,895,000	1
SRD-7	U.S. 101: Blanchard Road—Brooten Road. Overlay (Milepost [MP] 77.1 to MP 90.31).	$3,053,000	1
SRD-8	Oregon 18 at MP 13. Safety improvements. Improve striping and sight distance improvements (vegetation removal).	[2]	1
SRD-9	Oregon 22: U.S. 101 to Castle Rock. Overlay (MP 0 to MP 4.82).	$937,000	1
SRD-10	Oregon 6: Tillamook Railroad Overpass—Jordan Creek Bridge. Overlay MP 0.5 to MP 4.5 and MP 11.8 to MP 18.00.	$2,533,000	1
SRD-11	Netarts Highway (131) (Cape Meares to Oceanside). Resurfacing.	$1,762,000	1
SRD-12	U.S. 101 from MP 84.41 to MP 84.59. Improve sight distance and construct geometric improvements (curve realignment and shoulders).	[2]	1 [1]
SRD-13	U.S. 101: North of Manzanita to Clatsop County. Northbound (NB) Passing Lanes.	$8,000,000	2
SRD-14	U.S. 101: Clatsop /Tillamook Line to Manzanita. Construct left-turn lanes onto public streets where feasible (Oswald West State Park, Sunset Drive, Falcon Cove Road, Scenic Overviews).	$600,000+	2
SRD-15	Scenic Viewpoint on U.S. 101 at MP 54.8. Safety. Upgrade landscaping and median island between the parking area and U.S. 101 to decrease speeds.	$200,000	2
SRD-16	U.S. 101 in Beaver, Hebo, Idaville and Cloverdale. Coordinate with the Oregon Department of Transportation (ODOT) to improve the appearance and function of U.S. 101 in Beaver, Idaville, Hebo and Cloverdale. Install lighting, develop a parking strategy, construct bulb-outs, implement an access management strategy, construct sidewalk, increase enforcement for speed control.	[2]	2
SRD-17	Oregon 6 in Siskeyville. Coordinate with ODOT to improve the appearance and function of Oregon 6 in Siskeyville. Consider bike lanes on Oregon 6, improved signage (Entering Siskeyville sign), reduced speed zone (would require coordination with ODOT).	[2]	2

TABLE 7-2
Recommended State Roadway Segment Improvements

Project Number	Location and Description	Estimated Cost	Priority (1 to 4)
SRD-18[3]	Countywide. Install variable message signs (VMS) for emergency warning system (floods, landslides, etc.). Consider purchasing trailer-mounted Highway Advisory Radios and installing signs with mounted beacons to warn motorists of hazards.	$250,000	2
SRD-19	U.S. 26. Safety improvements. Improved icy conditions warning system/signage.	$50,000+	2
SRD-20	Oregon 53. Addition of shoulders and sight distance improvements (vegetation removal). Improve the function and safety of Oregon 53 in Mohler. Consider a bike lane in Mohler, access management, improved signing (Welcome to Mohler sign), and a reduced speed zone.	$3,000,000	3
SRD-21	U.S. 101: Twin Rocks to Barview. NB and southbound (SB) passing lanes. Improve the function of U.S. 101 (speeds, access management for new development) and improve safety for pedestrians and bicycles.	$4,000,000	3
SRD-22	U.S. 101: Bay City to Tillamook. NB and SB passing lanes.	$4,000,000	3
SRD-23	U.S. 101: Tillamook to Brooten Road. NB and SB passing lanes at appropriate intervals (one feasible location is near the weigh station).	$4,000,000+	3
SRD-24	Netarts Highway (131) (Rural). Construct shoulders, sight distance improvements (slope flattening on curves, vegetation removal), access management, improved striping, guardrail improvements.	$1,400,000+	3
SRD-25	U.S. 101: Garibaldi to Bay City. NB and SB passing lanes near Bay City.	$4,000,000	4
SRD-26	U.S. 101: Green Timber Road to Brooten Road. Safety and geometric improvements.	$47,000,000	4
SRD-27	Little Nestucca Highway (130) (Rural). Overlay and construct shoulders, sight distance improvements (slope flattening on curves, vegetation removal), access management, improved striping, guardrail improvements, drainage improvements. Replace one-way bridges.	$1,200,000+	4

[1] Refinement plan proposed.
[2] The project will need to be further refined before a cost can be estimated.
[3] This project is not shown in Figures 7-1 through 7-4.

TABLE 7-3
Recommended State Roadway Intersection Improvements

Project Number	Location and Description	Estimated Cost	Priority (1 to 4)
INT-2	U.S. 101 (Main) at 3rd Street. Improve signing and striping.	$50,000	1
INT-3	U.S. 101 at Latimer Road. Intersection improvements with potential signalization included in the Draft 2004 to 2007 STIP List (Suppress Road to Wilson River Bridge Project on U.S. 101).	Part of Modernization Project	1
INT-4	U.S. 101 at Long Prairie Road. Improvements included on the Draft 2004 to 2007 STIP List (OTIA Funding). Note: The right-turn lane criteria for northbound U.S. 101 is met in year 2021. The intersection also meets the preliminary traffic signal warrant analysis.	$900,000	1
INT-5	U.S. 101 at Sand Lake Road. Improve the landing on the Sand Lake approach and add left- and right-turn pockets if criteria are met. Consider a flashing light to warn drivers on U.S. 101 of an upcoming intersection. Consider slope flattening on U.S. 101 to improve sight distance for drivers making a left turn onto U.S. 101.	$750,000	1
INT-6	Oregon 6 at Wilson River Loop. Major improvements included in the Draft 2004 to 2007 STIP List. ODOT also implementing a short-term solution (striping modifications).	$8,270,000 (long term)	1
INT-7	Netarts Highway (131) at Burton-Frasier. Realign to a T-intersection and improve sight distance (slope flattening)	Part of Preservation Project	1
INT-8	U.S. 101 at Oregon 6 (1st Street). Construct a pedestrian island that channelizes the westbound right turn at U.S. 101 and Oregon 6 intersection, reconstruct corner, provide downstream lane and widen Hoquarten Bridge. Provide signing that yields vehicles to pedestrians crossing this lane.	$3,000,000	1
INT-9	U.S. 101 at McCormick Loop. Consider an improved radius to accommodate truck turn movements and a left-turn pocket on the McCormick Loop approach if criteria are met. Would require right-of-way acquisition.	$200,000	1
INT-10	U.S. 101 at Wilson River Loop. Provide an eastbound right-turn lane to U.S. 101 southbound.	$100,000	1
INT-13	U.S. 101 at Blaine Road. Construct sidewalk at intersection (to school). Implement access management strategies at Texaco. Construct left- and right-turn pockets on U.S. 101 (Note: criteria are met in year 2021), construct left urn pocket on Blaine Road if criteria are met. Improve striping on the Blaine Road approach.	$500,000	2
INT-14	U.S. 101 at Brooten Road. Consider the addition of a flashing light warning drivers on U.S. 101 and Brooten Road of an upcoming intersection. Construct a right-turn lane from U.S. 101 if criteria are met. Consider a raised island on the Brooten Road approach to channelize drivers.	$500,000	2
INT-15	U.S. 101 at Cedar Street. Construct left-turn pocket on Cedar Street and exclusive right-turn lane on U.S. 101 if criteria are met. Improve the radii to accommodate turn movements. Implement access management at properties near the intersection.	$500,000	2

TABLE 7-3
Recommended State Roadway Intersection Improvements

Project Number	Location and Description	Estimated Cost	Priority (1 to 4)
INT-16	U.S. 101 at Oregon 22. Channelization improvements (that is, access management along approaches, curb and concrete/landscaped islands). Construct sidewalk and landscaping at intersection. Improve striping on Oregon 22 approach. Construct right-turn lane on U.S. 101 (Note: turn lane criteria are met in 2021).	$500,000	2
INT-17	U.S. 101 at Laneda Avenue. Improve the landing along the Laneda Avenue approach.	$650,000	2
INT-18	U.S. 101 at North Fork Nehalem River Road. Solutions include roundabout, all-way stop, or geometric improvements. Note: the left-turn lane criteria are met on U.S. 101.	$750,000	2
INT-19	Oregon 53 at Miami-Foley Road. Improve the radii to accommodate truck turn movements. Construct left-turn pocket on Miami-Foley Road if criteria are met. Implement access management strategy at the intersection.	$350,000	2
INT-20	Oregon 53 at North Fork Nehalem River Road. Realign the North Fork Road approach to a T-intersection with Oregon 53 to provide adequate sight distance. Consider slope flattening on Oregon 53 to improve sight distance.	Varies $200,000 to $750,000	2
INT-21	Oregon 6 at Olsen Road. Consider lowering the speed on Oregon 6 at Olsen Road (would require enforcement) or adding left-turn pocket on the northbound approach of Olsen Road if criteria are met.	$300,000	2
INT-24	U.S. 101 at Idaville Road. Realign intersection perpendicular with U.S. 101. Construct left-turn pockets on U.S. 101 and Idaville Road approaches if criteria are met. Eliminate passing opportunity on U.S. 101 (currently a dashed yellow stripe).	$400,000	2
INT-25	U.S. 101 at Manzanita Avenue. Intersection improvements (Note: left- and right-turn lanes on U.S. 101 are warranted).	$250,000	2
INT-26	U.S. 101 at Warren Avenue. Realign approaches perpendicular to U.S. 101 (constrained). Sight distance improvements on U.S. 101 (slope flattening).	$500,000	2
INT-28	U.S. 101 at Alderbrook Road (S). Realign intersection, pull stop bar back from U.S. 101, add left-turn lane on U.S. 101, add left-turn lane on Alderbrook Road approach, and make sight distance improvements (slope flattening along U.S. 101).	$350,000	3
INT-29	U.S. 101 at Oregon 53. Realign intersection perpendicular with U.S. 101. Construct left-turn pocket on Oregon 53 approach. Add a stop sign ahead on Oregon 53 approach. Restripe left-turn lane on U.S. 101 to make smooth turn movement.	$350,000	3
INT-30	U.S. 101 at Miami-Foley Rd. Potential solutions analyzed as part of the Garibaldi Transportation System Plan (TSP) included constructing a signal (rejected because of rural environment). Remove brush near railroad to improve sight distance. Consider a raised concrete island for improved channelization.	$200,000	3
INT-31	Netarts Highway (131) at Bay Ocean Road. Construct right-turn refuge from Bay Ocean Road approach and improve turn radius. Consider a right-turn lane on Netarts Highway (131) (Note: right-turn lane criteria are met in year 2001 , left-turn lane criteria are not met in year 2021).	$250,000	3

TABLE 7-3
Recommended State Roadway Intersection Improvements

Project Number	Location and Description	Estimated Cost	Priority (1 to 4)
INT-32	Netarts Highway (131) at Whiskey Creek Road. Realign intersection and make sight distance improvements (slope flattening) along Netarts Highway (131). Consider left-turn pocket on Whiskey Creek Road approach if criteria are met.	$350,000	3
INT-36	U.S. 101 at Necarney City Road. Construct a left-turn pocket on Necarney City Road. Relocate the private access (southwest radius) farther down Necarney City Road. Remove vegetation if sight distance becomes an issue.	$350,000	3
INT-37	U.S. 101 at 5th Street. Construct curb and sidewalk to create urban effect. Relocate landscaping to improve sight distance.	$200,000	3
INT-38	U.S. 101 at Hobsonville Point Drive. Consider reducing the speed on U.S. 101 near the rail crossing (would require enforcement). Remove brush near the railroad to improve sight distance.	$5,000	3
INT-40	U.S. 101 at Alderbrook Road (N). Construct sight distance improvements on U.S. 101 (reduce brush and vegetation). Realign the approach perpendicular to U.S. 101. Move the stop bar back from the U.S. 101 travel lane.	$350,000	4
INT-41	U.S. 101 at Slab Creek Road. Realign intersection and add turn lanes if criteria are met.	$500,000	4
INT-43	Netarts Highway (131) at Bilyeu Avenue. Realign the intersection and provide better landing for recreational vehicles (RVs). Add width for right turns.	$350,000	4
INT-44	U.S. 101 at Sunset Drive. Continue to monitor this intersection. Approach is fairly steep. Consider adding a warning sign on U.S. 101 indicating this intersection is ahead.	$5,000	4
INT-45	U.S. 101 at Hawk Street. Add a left-turn pocket on Hawk Street if criteria are met and consider yellow flasher to warn drivers on U.S. 101 of an upcoming intersection.	$350,000	4
INT-47	Oregon 22 at Little Nestucca Highway (130). Realign to a T-intersection within existing right-of-way. Improve channelization.	$150,000	4

TABLE 7-4
Planning Studies

Location and Description
U.S. 101: Clatsop County line through Garibaldi. Develop an access management plan.
Investigate access management and the feasibility of a central parking area within downtown Pacific City.
Investigate access issues and longer left-turn lanes at Cape Kiwanda in Pacific City.
Develop an access management plan for U.S. 101 and Oregon 22 in Hebo.
Determine appropriate land use/ transportation planning/access management measures to mitigate potential auto/pedestrian conflicts if businesses locate on the west side of U.S. 101, across from the Tillamook Creamery. (Note: this issue to be addressed as part of the Oregon Department of Transportation Suppress Road to Wilson River Bridge Project.)
Conduct a study of the drainage system along Oregon 6 to determine appropriate measures to address drainage/icy conditions issues (that is, improved icy conditions warning signs, ditch maintenance, drainage system upgrades).
Conduct a refinement plan for the unincorporated community of Oceanside to address appropriate access management and parking strategies on Netarts Highway (131) and the potential for an STA designation.
Conduct a refinement plan for Netarts to address access management along U.S. 101.
Determine appropriate solutions to address top 10 percent SPIS site on U.S. 101 (MP 84.41 MP to 84.59).
Conduct a refinement plan for Cloverdale to investigate the potential for an STA designation on U.S. 101.
Conduct a conditions study for U.S. 101 in Tillamook County.
Conduct a more detailed Large Vehicle Alternate Route Study, as described in the Tillamook County and City of Tillamook transportation systems plans, to determine an appropriate solution to better accommodate freight traffic in and near the City of Tillamook. This detailed study also should include an internal circulation study at the Tillamook Lumber Company mill site. This study would identify opportunities and constraints for changing circulation patterns at the mill to improve overall truck routing.

MP - milepost.
SPIS - Safety Prioritization Index System.
STA - special transportation area.

TABLE 7-6
County Roadway Segments

Project Number	Location and Description	Estimated Cost [3]	Priority (1 to 4)
CRD-1	Sand Lake Road and Galloway Road: Construct shoulders, U.S. 101 intersection improvements	$3,000,000	1
CRD-2	Blaine Road: Road Reconstruction: Milepost (MP) 6.7 to MP 8.4	$3,500,000	1
CRD-3	Laneda Avenue (Manzanita): Construct roadway improvements, including sidewalk and parking. Consider transferring jurisdiction to Manzanita.	$750,000+	1
CRD-4	Cape Kiwanda Drive: Construct right- and left-turn lanes where necessary (that is, left-turn lane at the Kiwanda Senior Community Center, Spooner Property, and right-turn lane at Nestucca Ridge). Construct 28-foot-wide typical section.	$210,000	2 [1]
CRD-5	Trask Road: Improvements to accommodate additional log trucks. Overlay and construct 28-foot-wide typical section. Consider geometric and sight distance (brush/vegetation removal, slope flattening) improvements.	$5,900,000	2
CRD-6	McPhillips Drive: Construct 28-foot-wide typical section.	$570,000	2
CRD-7	Bay City - 4th and 5th Street. Construct roadway improvements, including sidewalk and parking. Consider transferring jurisdiction to Bay City.	[2]	2
CRD-8	Tillamook: McCormick Loop. Construct 28-foot-wide typical section and implement access management strategies. Consider improvements at railroad crossing.	$1,070,000	2
CRD-9	Tillamook: Marolf Loop. Overlay and construct 28-foot-wide typical section.	$370,000	2
CRD-10	North Fork Road. Construct 28-foot-wide typical section from B Street to Oregon 53. Include sight distance improvements (slope flattening, brush removal) and consider geometric improvements. Consider guardrail and ditch/drainage improvements.	$1,720,000	2
CRD-11	Miami-Foley Road. Mitigate flooding and improve ditches for drainage. Construct 28-foot-wide typical section. Include sight distance improvements (vegetation removal, slope flattening) and consider geometric improvements. Improve rail crossing (safety features) if rail traffic increases.	$4,340,000	2
CRD-12	Alderbrook Road. Overlay and construct 28-foot-wide typical section.	$950,000	2
CRD -13	Latimer Road. Construct 28-foot-wide typical section. Improve rail crossing and intersection with Sollie Smith Road (consider a raised median or improved radius to accommodate turn movements).	$1,200,000	2
CRD-14	Wilson River Loop. Construct 28-foot-wide typical section.	$640,000	2
CRD-15	Long Prairie Road. Construct 28-foot-wide typical section to accommodate trucks.	$1,380,000	2
CRD-16	Blimp Boulevard. Overlay and construct 28-foot-wide typical section. Access management and intersection improvements. Improve signing and striping. Improve the entrance to the Air Museum. Improve the intersection of Blimp and Long Prairie.	$640,000	2
CRD-17	Pacific City. Construct traffic calming improvements at community entries (that is, signage, striping, landscaping) on McPhillips Drive, Cape Kiwanda Drive, Brooten Road, Sand Lake Road and Ferry Street.	$250,000	2
CRD-18	Brooten Road. Construct sight distance improvements (slope flattening on curves).	[2]	2
CRD-19	Resort Drive. Overlay and construct 28-foot-wide typical section. Construct sight distance improvements (slope flattening, vegetation removal) and access management.	$1,080,000	3

TABLE 7-6
County Roadway Segments

Project Number	Location and Description	Estimated Cost [3]	Priority (1 to 4)
CRD-20	South Prairie Road. Construct 28-foot-wide typical section. (Note: potential for development has been identified along this roadway. This development should identify appropriate improvements to mitigate impacts. The priority and types of improvements on this section of roadway may changed based on the type of development).	$1,320,000	3
CRD-21	Slab Creek Road. Construct 28-foot- wide typical section.	$1,830,000	3
CRD-22	Munson Creek Falls Road. Overlay and construct 28-foot-wide typical section on county section leading to the state park. Striping Improvements.	$350,000	3
CRD-23	Blaine Road and Upper Nestucca Road. Construct 28-foot- wide typical section and consider geometric improvements.	$2,390,000	3
CRD-24	Necarney City Road. Overlay and construct 28-foot-wide typical section from U.S. 101 to state park. Include sight distance improvements and consider geometric improvements.	$550,000	3
CRD-25	Tillamook River Road. Construct 28-foot-wide typical section.	$940,000	3
CRD-26	Whiskey Creek Road. Overlay and construct 28-foot-wide typical section. Improve sight distance (vegetation removal).	$1,910,000	3
CRD-27	Cape Meares Loop Road. Overlay entire length and replace gravel section with asphalt. Construct 28-foot-wide typical section.	$1,930,000	4
CRD-28	Foss Road. Overlay and construct sight distance improvements (slope flattening). Consider the installation of guardrail (and updated existing guardrail).	$800,000	4
CRD-29	Manzanita/Bayside Gardens/Nehalem. Local roadway system improvements to connect communities.	[2]	4
CRD-30	McPhillips Drive. Eliminate inadequate vertical sight distance on McPhillips Drive near Pine Road.	$300,000	4
CRD-31	Bay Ocean Road. Construct 28-foot- wide typical section and sight distance improvements (slope flattening, vegetation removal).	$2,480,000	4
CRD-32	East Beaver Creek Road. Overlay and construct 28-foot-wide typical section.	$1,170,000	4
CRD-33	Cape Lookout Road. Construct 28-foot-wide (minimum) typical section. Shoulder/ bike lane maintenance.	$1,850,000	4
CRD-34	Netarts Bay Drive. Construct 28-foot-wide typical section. Construct parking improvements and sight distance improvements (slope flattening).	$540,000	4

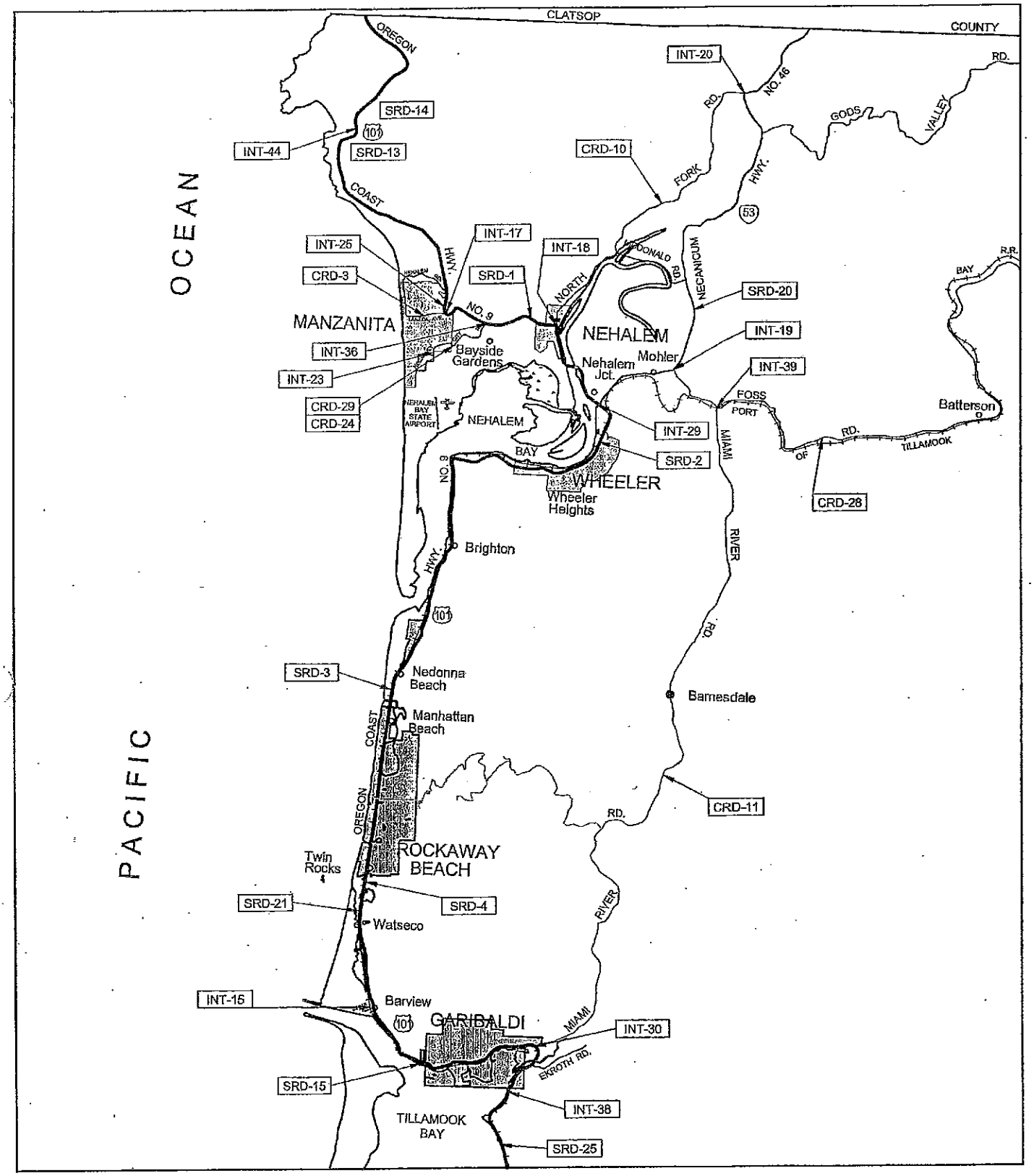
[1] Refinement plan proposed.

[2] The project will need to be further refined before a cost can be estimated.

[3] The estimated costs generally include widening only. Geometric improvements, flood mitigation, guardrail improvements, and sight distance improvements would increase the project costs.

TABLE 7-7
Recommended County Intersection Improvements

Project Number	Location and Description	Estimated Cost	Priority (1 to 4)
INT-1	Brooten Road at Pacific Avenue. Relocate utility poles and implement access management and parking strategies along each approach. Construct sidewalk and ramps at intersection. Add left- and right-turn lanes along each approach if criteria met (long term). Improve signing and striping at the intersection (short term).	Varies $10,000 (short term) to $500,000 (long term)	1
INT-11	12th Street at Tillamook River Road. Relocate stop bar to provide better sight distance.	$5,000	1
INT-12	3rd Street at Trask River Road. Relocate the stop bars and signs in appropriate location. Realign the approaches.	$250,000	2
INT-22	Brooten Road at Fisher Road. Realign the intersection to improve safety, turning movements and visibility.	$350,000	2
INT-23	Necarney City Road at Ridge. Intersection improvements (make north-south major approach, Necarney City Road minor).	$350,000	2
INT-27	Sand Lake Road at Cape Lookout Road. Turn lanes could be added if criteria met (westbound left, eastbound right). Traffic control at the intersection could be modified if necessary (one-way stop control). Improve the signing at the intersection.	$350,000	3
INT-33	Kilchis River Road at Alderbrook Loop. Realign to a T-intersection within existing intersection right-of-way. Construct left- and right-turn pockets on Alderbrook Loop if criteria are met.	$150,000	3
INT-34	Trask River Road at Long Prairie Road. Improved striping (short term). Improved radii to accommodate truck traffic and turn lanes if criteria are met (long term).	$350,000	3
INT-35	Cape Kiwanda Dr at Pacific Avenue. Short term improvements (signage and striping) and long-term improvements (add/widen left- and right-turn lanes if criteria are met, would require right-of-way acquisition).	$400,000	3
INT-39	Foss Road at Miami-Foley Road. Consider moving the reduced speed zone sign towards the bridge (45 mph). Improve the radii to accommodate turn movements. Consider a left-turn pocket if criteria are met.	$250,000	4
INT-42	Whiskey Creek Road at Netarts Bay Drive. Realign to a T-intersection within existing intersection right-of-way. Consider a left-turn pocket on Whiskey Creek Road if necessary.	$150,000	4
INT-46	McPhillips Drive at Pine. Eliminate the inadequate vertical sight distance on McPhillips Drive, construct radius improvements, and sight distance improvements (slope flattening along McPhillips Drive).	$250,000	4

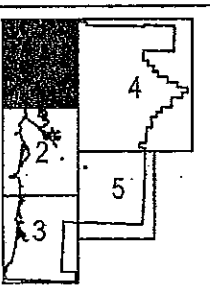


LEGEND

INT – #	INTERSECTION IMPROVEMENT
SRD – #	STATE ROADWAY SEGMENT IMPROVEMENT
CRD – #	COUNTY OR LOCAL ROAD IMPROVEMENT

TILLAMOOK COUNTY TRANSPORTATION SYSTEM PLAN

Figure 7-1



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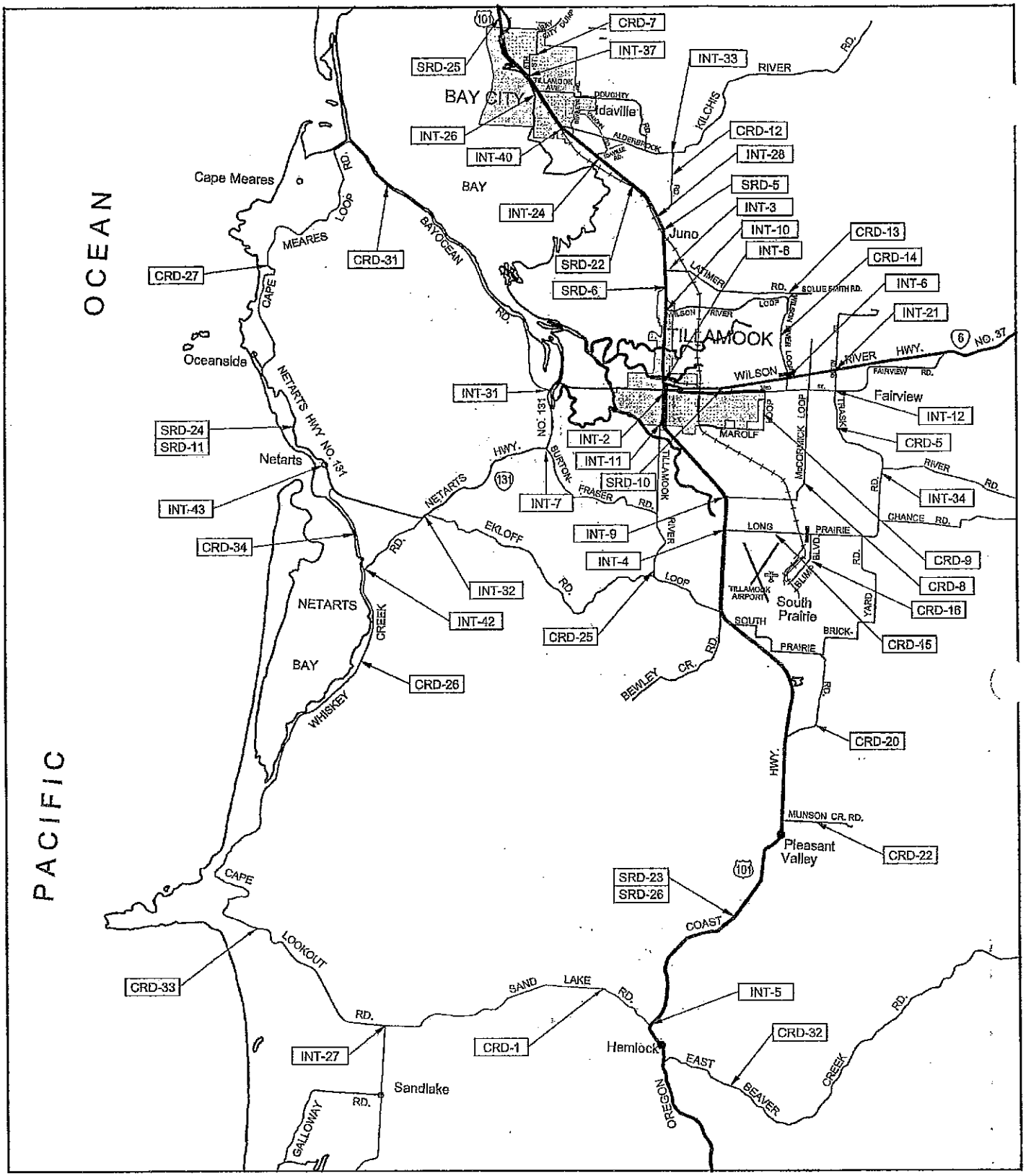

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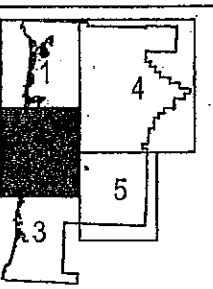
INT – #	INTERSECTION IMPROVEMENT
SRD – #	STATE ROADWAY SEGMENT IMPROVEMENT
CRD – #	COUNTY OR LOCAL ROAD IMPROVEMENT

TILLAMOOK COUNTY TRANSPORTATION SYSTEM PLAN

Figure 7-2



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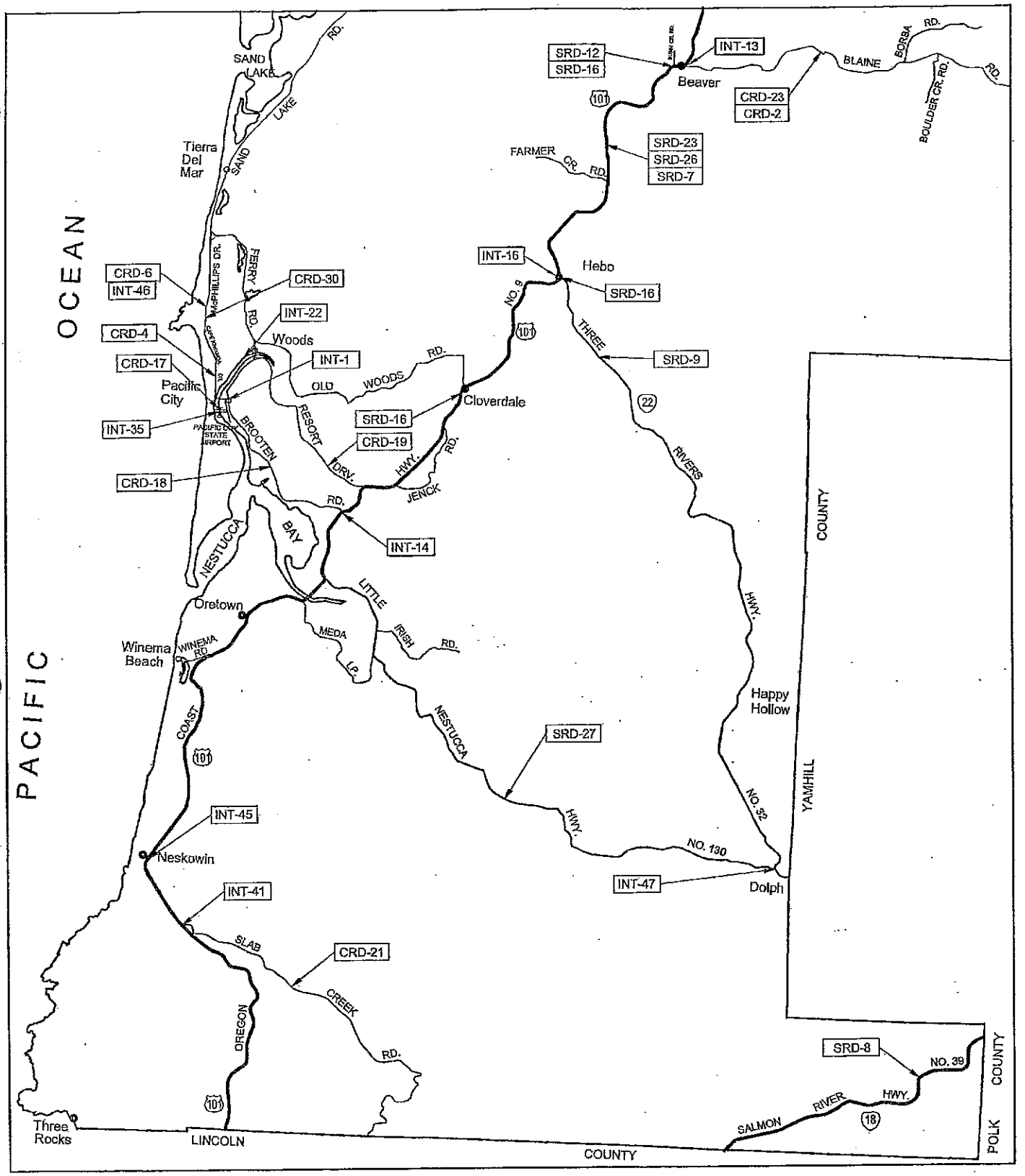
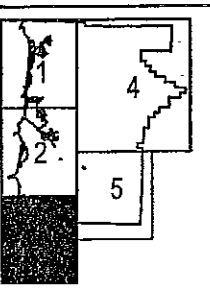


LEGEND

INT – #	INTERSECTION IMPROVEMENT
SRD – #	STATE ROADWAY SEGMENT IMPROVEMENT
CRD – #	COUNTY OR LOCAL ROAD IMPROVEMENT

TILLAMOOK COUNTY TRANSPORTATION SYSTEM PLAN

Figure 7-3



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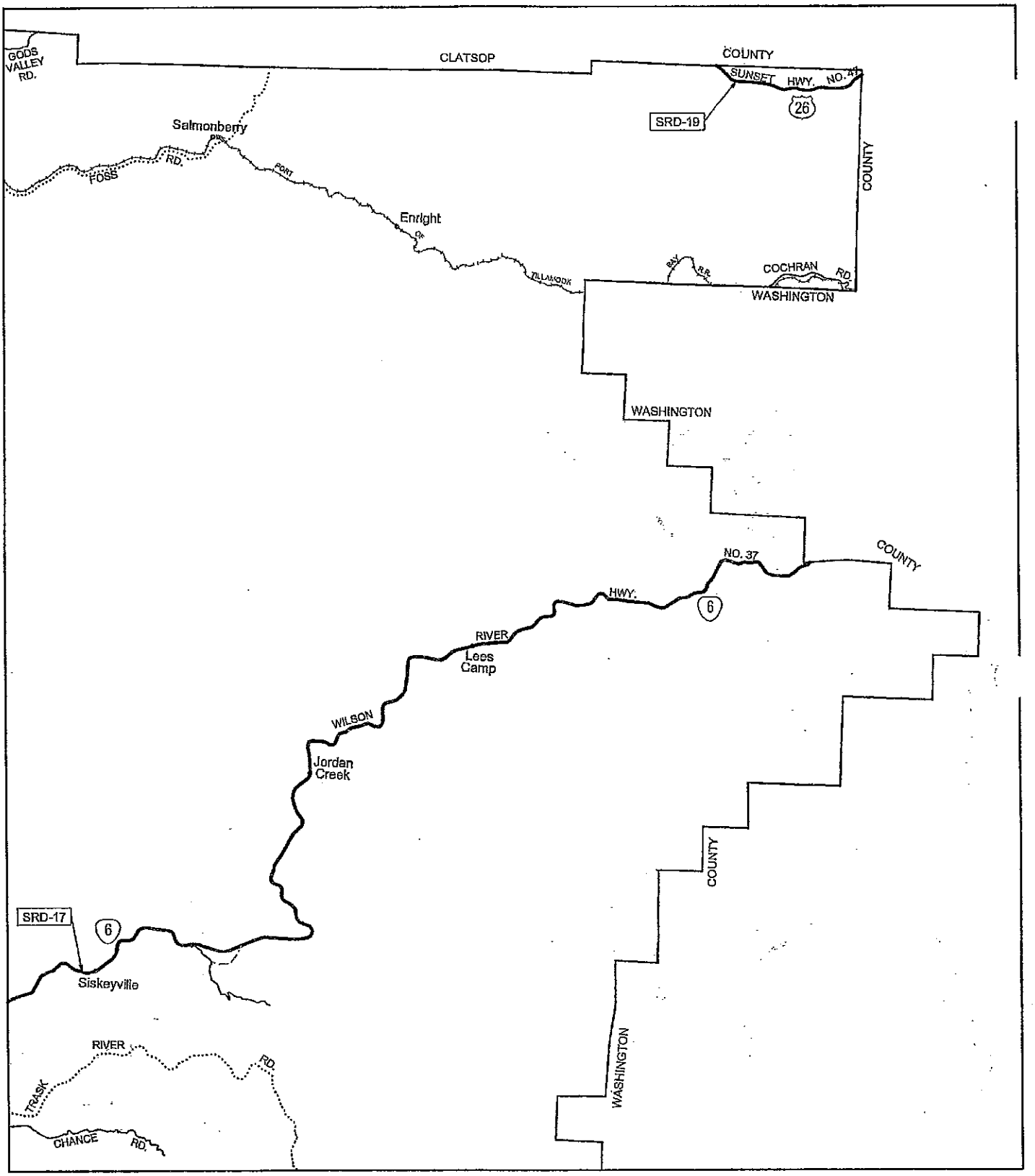

LEGEND

INT – #	INTERSECTION IMPROVEMENT
SRD – #	STATE ROADWAY SEGMENT IMPROVEMENT
CRD – #	COUNTY OR LOCAL ROAD IMPROVEMENT

TILLAMOOK COUNTY TRANSPORTATION SYSTEM PLAN

Figure 7-4

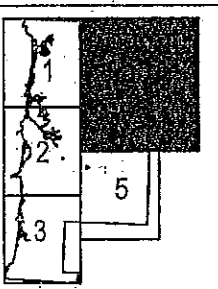

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TABLE 7-8
Parking Improvements

Project Number	Location and Description
P-1	Establish both on- and off-street parking facilities in Oceanside.
P-2	Establish on-street parking facilities on U.S. 101 in Cloverdale.
P-3	Improve pedestrian access and maintain parking and boat access in Pacific City at the Cape Kiwanda County parking lot.
P-4	Provide additional parking and increase pedestrian safety in Pacific City at the turn-around county parking lot.
P-5	Provide additional parking downtown in the downtown area of Pacific City.

TABLE 7-9
Pedestrian System Improvements

Project Number	Location and Description	Estimated Cost	Priority (1 to 4)
PB-1	U.S. 101: Milepost (MP) 43.17 to MP 43.25. Add sidewalk on right side of U.S. 101 (Note: this will likely be included in the overlay project on U.S. 101.).	$50,000	1
PB-2	Three Graces Area on U.S. 101 (Twin Rocks). Address parking/safety issues caused by tourists crossing U.S. 101 to view tidepools. Construct pedestrian overcrossing over U.S. 101.	[1]	1
PB-4	Pacific City. Signage and striping on bicycle/pedestrian system loops (Cape-Woods Loop, River Loop, Slough Loop, Pacific City Heights Loop, Bob Straub State Park Loop, Brooten Mountain Loop). Bikes on Roadway Signs should be installed in the short term. Additional loop signage could be installed after bike lane/shoulder widening projects are implemented.	$15,000	1
PB-5	Netarts Highway (131): MP 8.30 to MP 8.62. Add sidewalk on left side of Netarts Highway (131).	$175,000	2
PB-6	Netarts Highway (131): MP 8.45 to MP 8.62. Add sidewalk on right side of Netarts Highway (131).	$100,000	2
PB-7	Beaver, Hebo and Cloverdale. Improve bicycle and pedestrian safety on U.S. 101.	[2]	2
PB-8	Hebo. Improve bicycle and pedestrian safety on Oregon 22.	[2]	2
PB-9	Brooten Road. Add a pedestrian path on the west side and bike lanes on both sides of Brooten Road from Pacific Avenue to Woods Bridge.	$450,000	2
PB-11	Cape Kiwanda Drive. Construct a pedestrian pathway and bike lanes on both sides from Pacific Avenue to Cape Kiwanda.	$570,000	2
PB-14	Hebo. Construct sidewalk, curb and bike lanes on U.S. 101.	$370,000	2
PB-15	Pacific City. Public pedestrian beach access at Kiwanda Shores (assumes creation of new access point only).	$30,000	2
PB-16	Slab Creek Road. Construct pedestrian crosswalk and bike lanes near school.	$100,000	2
PB-17	South Prairie Road. Construct bicycle and pedestrian improvements near school, including crosswalk. (Note: potential for development has been identified along this roadway. This development should identify appropriate improvements to mitigate impacts. The priority and types of improvements on this section of roadway may changed based on the type of development.)	$100,000	2

TABLE 7-9
Pedestrian System Improvements

Project Number	Location and Description	Estimated Cost	Priority (1 to 4)
PB-18	Netarts Highway (131): MP 2.30 to MP 3.00. Add sidewalk on both sides of Netarts Highway (131).	$750,000	2
PB-19	Hebo. Crosswalks on U.S. 101 and Oregon 22.	$10,000	2
PB-20	U.S. 101 Manzanita through Wheeler. Develop a pedestrian and bicycle circulation strategy west of highway. Strategy could include off- and on-road facilities and connections to Nehalem River and Estuary and Nehalem Bay State Park.	[2]	3
PB-21	Wheeler. Develop a pedestrian connection between Wheeler and Paradise Cove.	[2]	3
PB-22	Oceanside. Develop pedestrian and bicycle paths throughout the community.	[2]	3
PB-23	Oceanside, Cape Meares, Netarts. Develop pedestrian and bicycle paths between these communities.	[2]	3
PB-24	Oregon 6 in Siskeyville. Improve bicycle and pedestrian safety on Oregon 6.	[2]	3
PB-25	Sunset Drive (Pacific City). Construct a pedestrian pathway and bike lanes on both sides from Pacific Avenue to State Park.	$290,000	3
PB-26	McPhillips Drive. Construct bike/pedestrian path to Tierra del Mar.	$280,000	3
PB-27	Sand Lake Road. Construct bike/pedestrian path from Woods to McPhillips Drive.	$370,000	3
PB-28	Hebo. Pedestrian and bicycle amenities: trash receptacles, illumination, benches, etc.	[2]	3
PB-29	Tillamook—3rd Street. Construct bike lanes and sidewalk on 3rd Street, east of Evergreen Drive to Trask River Road, repave roadway from Nestucca Avenue to city urban growth boundary (UGB). Provide marked crosswalks near Tillamook Fairgrounds with pedestrian area warning signs. Restripe crosswalks near Wilson Elementary/Goodspeed Park area on 3rd Street. Retrofit ramps along 3rd Street to Americans with Disabilities (ADA) compliance near Goodspeed Park and Wilson School.	$2,900,000	3
PB-30	Long Prairie Road. Construct sidewalks and bike lanes from U.S. 101 to Blimp Boulevard.	$2,200,000	4
PB-31	Blimp Boulevard. Construct sidewalks and bike lanes.	$1,300,000	4
PB-32	Old Woods Road. Construct bike/pedestrian path to Cloverdale.	$850,000	4
PB-33	Pacific City. Bicycle/Pedestrian Bridge Crossing over the Nestucca River.	$600,000+	4
PB-34	Hebo. Pedestrian path between U.S. 101, downtown, and the river.	[2]	4
PB-35	Pacific City. Nestucca River Pedestrian Path from Pacific Avenue to Woods.	$170,000	4
PB-36	Pacific City. Nestucca Ridge - Webb Park Pedestrian Path.	$190,000	4
PB-37	Pacific City. Webb Park - Thousand Trails - Energy Hill Pedestrian Trail.	$200,000	4
PB-38	Pacific City. McPhillips Beach Pedestrian Trail.	$200,000	4

[1] The cost for this project was included in Table 7-2 (Recommended State Roadway Segment Improvements).

[2] The project will need to be further refined before a cost can be estimated.

TABLE 7-10
Bicycle System Improvements

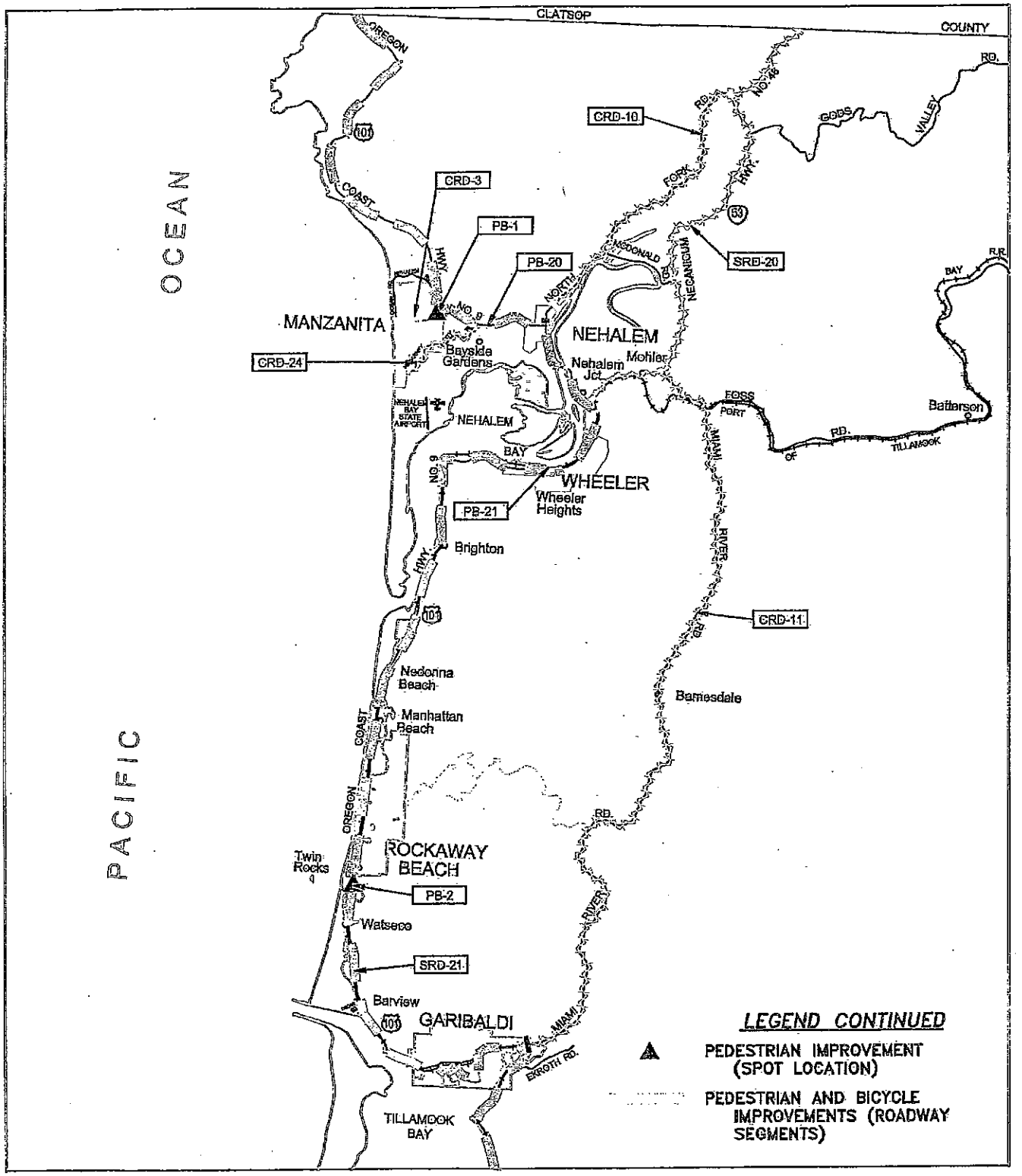
Project Number	Location and Description	Estimated Cost	Priority (1 to 4)
PB-3	Bicycle Parking in Pacific City and countywide at significant bicycle generators (for example, schools, parks).	Variable: $10,000+	1
PB-4	Pacific City. Signage and striping on bicycle/pedestrian system loops (Cape-Woods Loop, River Loop, Slough Loop, Pacific City Heights Loop, Bob Straub State Park Loop, Brooten Mountain Loop). Bikes on Roadway signs should be installed in the short term. Additional loop signage could be installed after bike lane/shoulder widening projects are implemented.	[1]	1
PB-7	Beaver, Hebo and Cloverdale. Improve bicycle and pedestrian safety on U.S. 101.	[2]	2
PB-8	Hebo. Improve bicycle and pedestrian safety on Oregon 22.	[2]	2
PB-9	Brooten Road. Add a pedestrian path on the west side and bike lanes on both sides of Brooten Road from Pacific Avenue to Woods Bridge.	[1]	2
PB-10	Brooten Road. Widen existing bike lane on west/south side of Brooten Road (from 4 to 6 feet) and construct bike lane on opposite side of road from Pacific Avenue to U.S. 101.	$650,000	2
PB-11	Cape Kiwanda Drive. Construct a pedestrian pathway and bike lanes on both sides from Pacific Avenue to Cape Kiwanda.	[1]	2
PB-12	Three Capes Scenic Route. Construct bike lanes and/or shoulders along the Three Capes Scenic Route where feasible. (Note: shoulders should be constructed along each of the county roadways as indicated in the Tillamook County TSP. In addition, bike lanes should be constructed in locations with steep upgrades where feasible in the short-term.)	[2]	2
PB-13	Oregon Coast Bike Route. Construct bike lanes and/or shoulders along Oregon Coast Bike Route where feasible. (Note: these improvements should be staged and coordinated with other roadway improvements along the route. In the short term, bike lanes should be constructed in locations with steep upgrades where feasible.)	[2]	2
PB-14	Hebo. Construct sidewalk, curb and bike lanes on U.S. 101.	[1]	2
PB-16	Slab Creek Road. Construct pedestrian crosswalk and bike lanes near school.	[1]	2
PB-17	South Prairie Road. Construct bicycle and pedestrian improvements near school, including crosswalk. (Note: potential for development has been identified along this roadway. This development should identify appropriate improvements to mitigate impacts. The priority and types of improvements on this section of roadway may changed on the basis of the type of development.)	[1]	2
PB-19	Hebo. Crosswalks on U.S. 101 and Oregon 22.	[1]	2
PB-20	U.S. 101 Manzanita through Wheeler. Develop a pedestrian and bicycle circulation strategy west of highway. Strategy could include off- and on-road facilities and connections to Nehalem River and Estuary and Nehalem Bay State Park.	[2]	3
PB-22	Oceanside. Develop pedestrian and bicycle paths throughout the community.	[2]	3
PB-23	Oceanside, Cape Meares, Netarts. Develop pedestrian and bicycle paths between these communities.	[2]	3
PB-24	Oregon 6 in Siskeyville. Improve bicycle and pedestrian safety on Oregon 6.	[2]	3
PB-25	Sunset Drive (Pacific City). Construct a pedestrian pathway and bike lanes on both sides from Pacific Avenue to state park.	[1]	3
PB-26	McPhillips Drive. Construct bike/pedestrian path to Tierra del Mar.	[1]	3
PB-27	Sand Lake Road. Construct bike/pedestrian path from Woods to McPhillips Drive.	[1]	3
PB-28	Hebo. Pedestrian and bicycle amenities: trash receptacles, illumination, benches, etc.	[2]	3

TABLE 7-10
Bicycle System Improvements

Project Number	Location and Description	Estimated Cost	Priority (1 to 4)
PB-29	Tillamook—3rd Street. Construct bike lanes and sidewalk on 3rd Street, east of Evergreen Drive to Trask River Road, repave roadway from Nestucca Avenue to city urban growth boundary (UGB). Provide marked crosswalks near Tillamook Fairgrounds with pedestrian area warning signs. Restripe crosswalks near Wilson Elementary/Goodspeed Park area on 3rd Street. Retrofit ramps along 3rd Street to Americans with Disabilities (ADA) compliance near Goodspeed Park and Wilson School.	[1]	3
PB-30	Long Prairie Road. Construct sidewalks and bike lanes from U.S. 101 to Blimp Boulevard.	[1]	4
PB-31	Blimp Boulevard. Construct sidewalks and bike lanes.	[1]	4
PB-32	Old Woods Road. Construct bike/pedestrian path to Cloverdale.	[1]	4
PB-33	Pacific City. Bicycle/Pedestrian bridge crossing over the Nestucca River.	[1]	4

[1] The cost for this project was included in Table 7-10.

[2] The project will need to be further refined before a cost can be estimated.

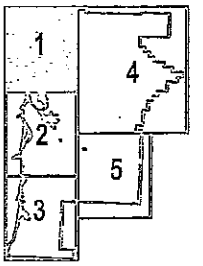


LEGEND

- SRD – # STATE ROADWAY SEGMENT IMPROVEMENT
- CRD – # COUNTY OR LOCAL ROAD IMPROVEMENT
- PB – # PEDESTRIAN AND BICYCLE IMPROVEMENT
- OREGON COAST BIKE ROUTE
- SHOULDER IMPROVEMENTS

TILLAMOOK COUNTY PEDESTRIAN AND BICYCLE PLAN

Figure 7-7



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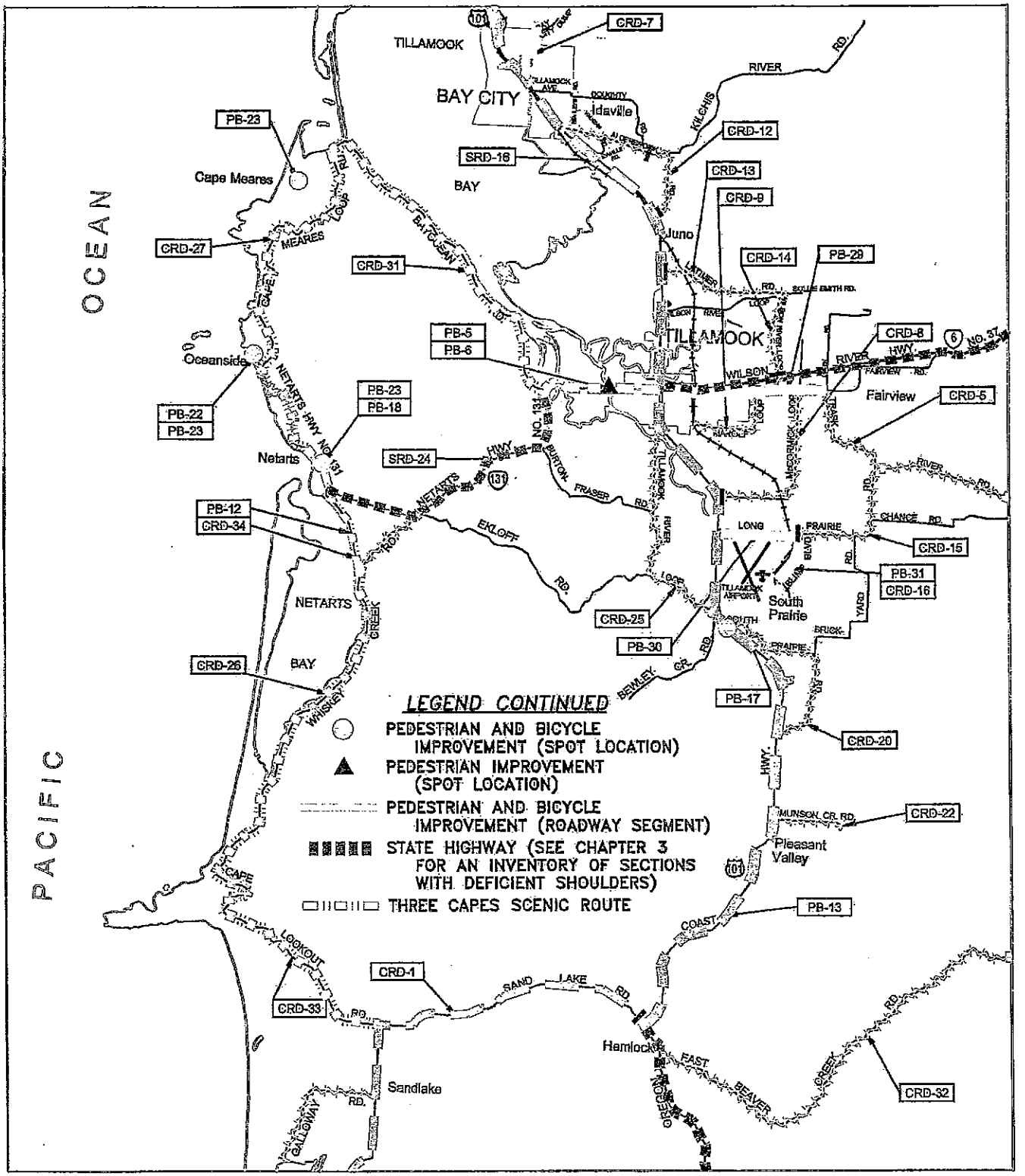
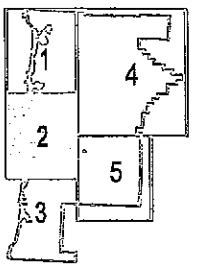


LEGEND

- SRD – # STATE ROADWAY SEGMENT IMPROVEMENT
- CRD – # COUNTY OR LOCAL ROAD IMPROVEMENT
- PB – # PEDESTRIAN AND BICYCLE IMPROVEMENT
- OREGON COAST BIKE ROUTE
- SHOULDER IMPROVEMENTS

TILLAMOOK COUNTY
PEDESTRIAN AND BICYCLE
PLAN

Figure 7-8



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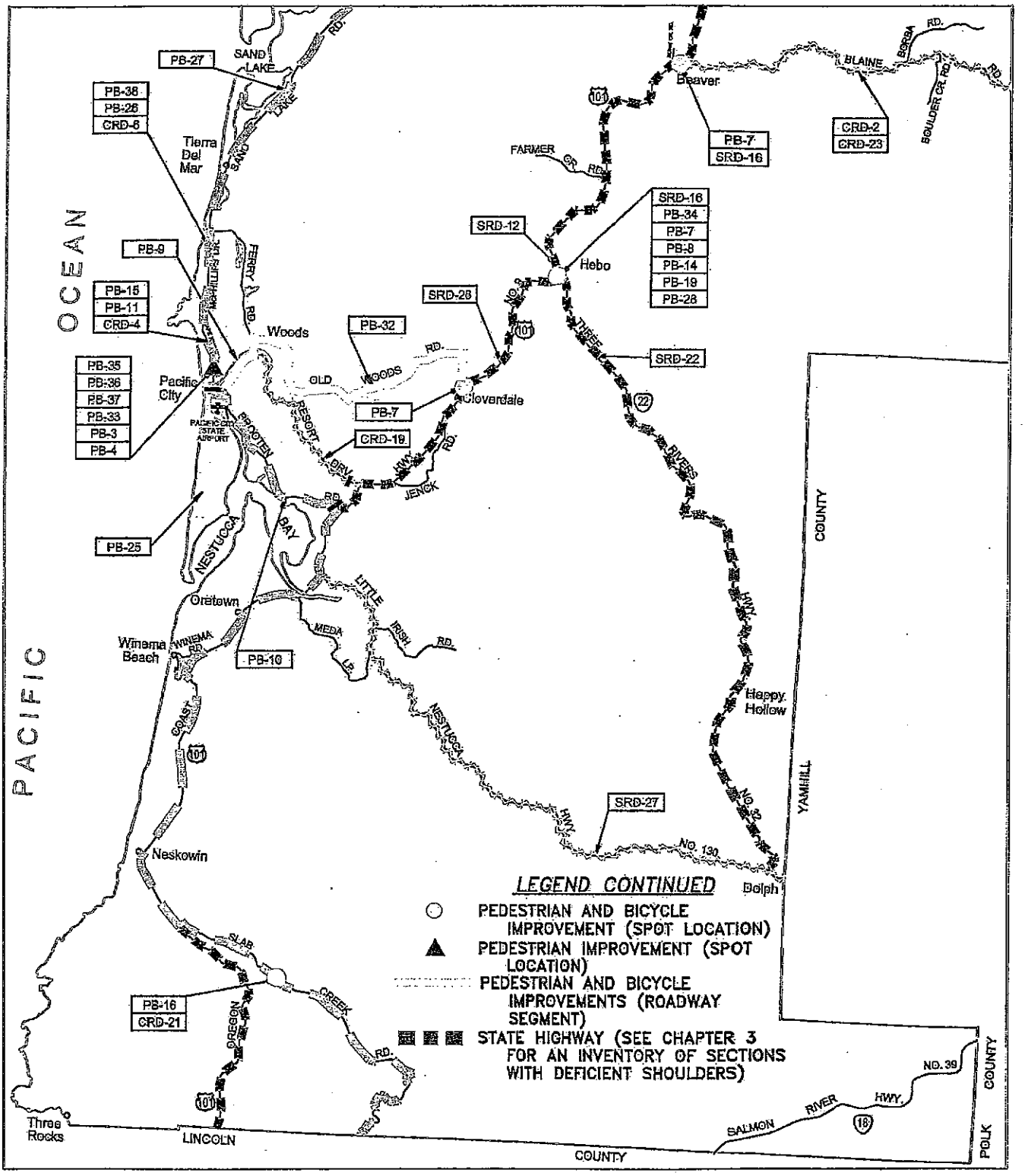


LEGEND CONTINUED

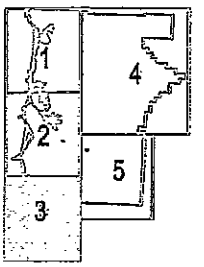
- PEDESTRIAN AND BICYCLE IMPROVEMENT (SPOT LOCATION)
- PEDESTRIAN IMPROVEMENT (SPOT LOCATION)
- PEDESTRIAN AND BICYCLE IMPROVEMENTS (ROADWAY SEGMENT)
- STATE HIGHWAY (SEE CHAPTER 3 FOR AN INVENTORY OF SECTIONS WITH DEFICIENT SHOULDERS)

LEGEND

- SRD – # STATE ROADWAY SEGMENT IMPROVEMENT
- CRD – # COUNTY OR LOCAL ROAD IMPROVEMENT
- PB – # PEDESTRIAN AND BICYCLE IMPROVEMENT
- OREGON COAST BIKE ROUTE
- SHOULDER IMPROVEMENTS

TILLAMOOK COUNTY PEDESTRIAN AND BICYCLE PLAN

Figure 7-9



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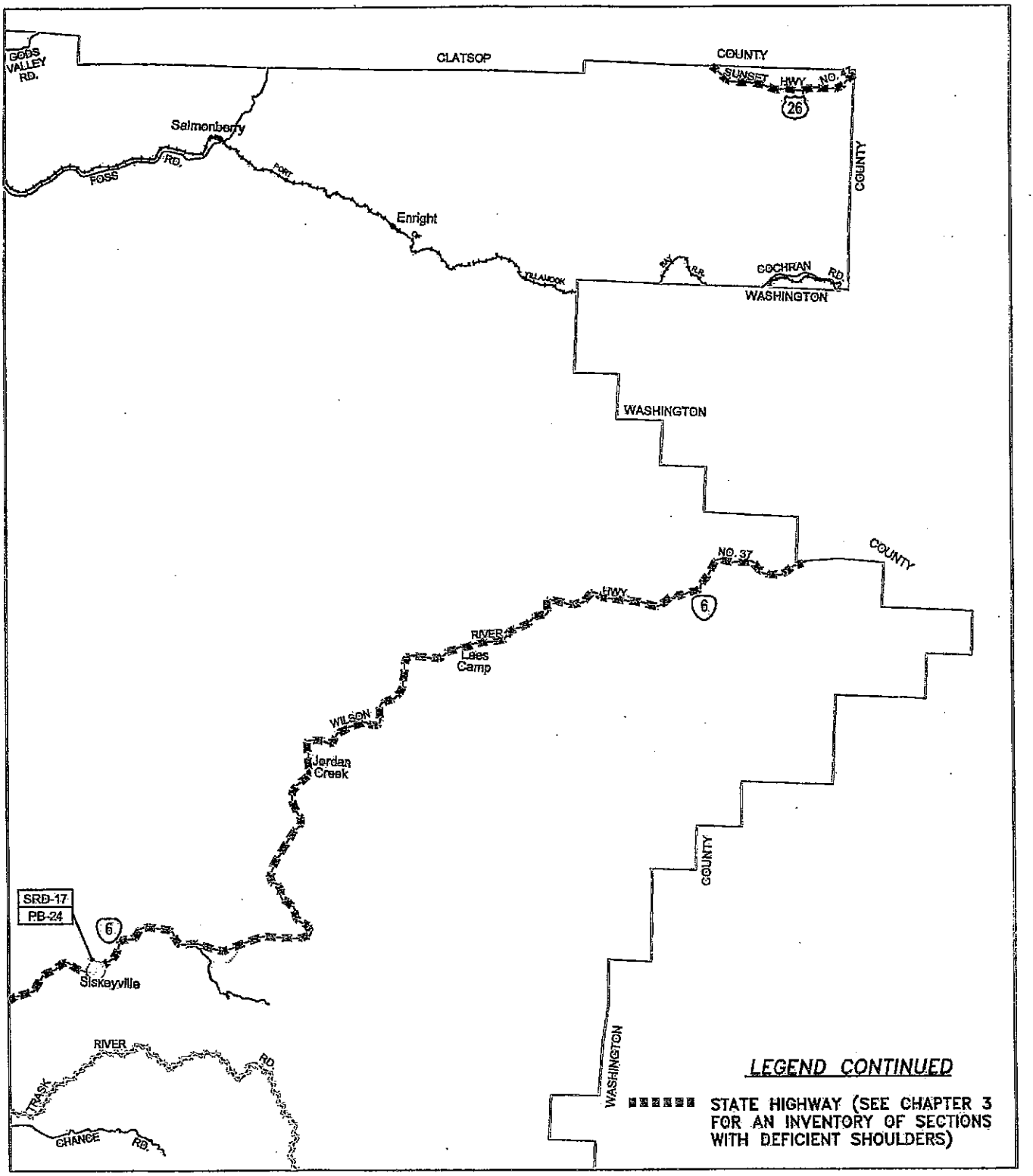
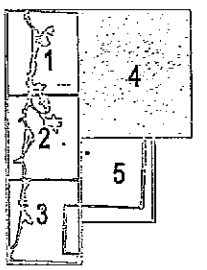


LEGEND

- SRD – # STATE ROADWAY SEGMENT IMPROVEMENT
- PB – # PEDESTRIAN AND BICYCLE IMPROVEMENT
- SHOULDER IMPROVEMENTS
- PEDESTRIAN AND BICYCLE IMPROVEMENT (SPOT LOCATION)

TILLAMOOK COUNTY
PEDESTRIAN AND BICYCLE
PLAN

Figure 7-10



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175948/Figure 7-10.dwg

TABLE 7-11
Tillamook County Sources of Transportation Funds
Fiscal Years 1997/1998 through 2005/2006

	1997/1998 Actual Budget	1998/1999 Actual Budget	1999/2000 Actual Budget	2000/2001 Actual Budget	2001/2002 Actual Budget	2002/2003 Projected Budget	2003/2004 Projected Budget	2004/2005 Projected Budget	2005/2006 Projected Budget
Beginning Balance	$608,905	$979,406	$689,827	$688,792	$655,083	$1,368,702	$527,228	$500,000	$500,000
Revenue Sources									
Motor Vehicle (State Gas Tax)	$1,241,119	$1,297,738	$1,342,648	$1,336,860	$1,291,609	$1,281,700	$1,280,000	$1,270,000	$1,260,000
USFS	$1,333,409	$1,279,248	$1,227,507	$1,176,988	$1,690,526	$1,707,430	$1,700,000	$1,700,000	$1,700,000
Interest	$42,593	$51,333	$40,861	$38,862	$26,382	$35,000	$33,000	$32,000	$31,000
Project Funds (OTIA, HBRR, FEMA, ER, grants)	$476,895	$323,160	$123,788		$78,756	$167,000	$1,287,000		
Federal Emergency Funds	$160,756	$3,789	$36,188	$104,409	$12,122				
STP Fund Exchange	$233,129		$120,386		$450,018	$187,900	$180,000	$178,000	$176,000
Miscellaneous	$374,118	$111,949	$114,674	$183,528	$180,545	$184,400	$180,000	$180,000	$180,000
Other: Transfer from General Fund				$140,000					
Total Revenue	$4,470,923	$4,046,623	$3,695,879	$3,669,439	$4,385,041	$4,932,132	$5,187,228	$3,860,000	$3,847,000
Expenditures									
Continuing Maintenance Activities & Support	$2,150,686	$2,853,178	$2,338,139	$1,942,985	$2,287,315	$3,605,675	$3,094,228	$3,001,000	$3,000,000
Preservation/Overlays	$695,390	$172,932	$282,899	$380,796	$513,199	$347,336	$340,000	$320,000	$308,000
Capital Improvement Projects									
inc. Road Construction	$79,338	$34,966	$96,370	$395,457	$90,665	$107,833	$74,000	$39,000	$39,000
inc. Bridge Replacement	$509,912	$295,720	$289,679		$41,103	$209,000	$1,093,000		
Slide & Flood Repair	$56,191			$6,680	$18,224	$135,060	$80,000		
Cash Carry Forward	$979,406	$689,827	$688,792	$655,083	$1,368,702	$527,228	$500,000	$500,000	$500,000
Total Expenditures	$4,470,923	$4,046,623	$3,695,879	$3,381,001	$4,319,208	$4,932,132	$5,181,228	$3,860,000	$3,847,000

TABLE 7-12
STIP and OTIA Funding in Tillamook County

YR	Bridge	PRES	MOD	OTIA Bridge	OTIA PRES	OTIA MOD	Salmon and Operations	SP PROG	Transit
02	$238,000	$2,533,000					$1,711,000	$6,500,000	$434,000
03				$145,772					$199,000
04		$3,990,000			$1,198,000		$1,060,000		
05	$1,691,000	$566,000	$3,895,000						
06		$1,417,000				$902,000			
07			$8,270,000	$1,259,985					

Source: 2002-2005 STIP, Draft 2004-2007 STIP.
OTIA = Oregon Transportation Investment Act.
STIP = Statewide Transportation Improvement Program.
PRES = Preservation Project.
MOD = Modernization Project.
SP PROG = Special Program Project.

TABLE 7-13
Transportation System Plan Improvements Costs

Type of Improvement	Priority 1	2	3	4	Total
State Improvements	$15,292,000	$9,100,000	$16,400,000	$52,200,000	$92,992,000
County Improvements	$7,250,000	$19,240,000	$10,370,000	$9,070,000	$45,930,000
Intersection Improvements (state and county)	$13,775,000	$6,900,000	$3,305,000	$2,355,000	$26,335,000
Bike and Pedestrian Improvements	$75,000	$3,305,000	$3,840,000	$5,710,000	$12,930,000