



**Sunset Empire Transportation District  
TRANSPORTATION ADVISORY COMMITTEE**

**MEETING AGENDA**

**THURSDAY NOVEMBER 28, 2018**

**10:00 AM**

**Astoria Transit Center, 900 Marine Drive Astoria, OR**

**AGENDA:**

1. CALL TO ORDER; PLEDGE OF ALLEGIANCE
2. INTRODUCTIONS
3. CHANGES TO AGENDA
4. NEW BUSINESS
  - a. Election of Chairperson and Vice Chairperson
  - b. Transportation Advisory Committee Bylaws
  - c. Presentation from Executive Director on Transit Funding
  - d. STIF Discretionary Grant Proposal
5. PUBLIC COMMENT (3-minute limit)
6. OTHER ITEMS

SUNSET EMPIRE TRANSPORTATION DISTRICT  
COMMONLY USED ACRONYM LIST  
NOVEMBER  
2018

|             |  |
|-------------|--|
| AASHTO      | AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS |
| AC          | ADVISORY COMMITTEE   |
| ACT         | ACTUAL   |
| ACCTS       | ACCOUNTS   |
| ADA         | AMERICANS WITH DISABILITIES ACT                                    |
| ADS         | ADVERTISEMENTS   |
| AP          | ACCOUNTS PAYABLE   |
| APTA        | AMERICAN PUBLIC TRANSPORTATION ASSOCIATION                         |
| AR          | ACCOUNTS RECEIVABLE  |
| ASC         | ASTORIA SENIOR CENTER  |
| ATU         | AMALGAMATED TRANSIT UNION  |
| BG          | BACKGROUND   |
| BLDGING     | BUILDING   |
| BOC         | BOARD OF COMMISSIONERS   |
| BOTL        | BUSING ON THE LOOKOUT  |
| BS          | BALANCE SHEET  |
| BUS REG FEE | BUS REGISTRATION FEE   |
| CCC         | CLATSOP COMMUNITY COLLEGE  |
| CCCHD       | CLATSOP CARE CENTER HEALTH DISTRICT                                |
| CCO         | COORDINATED CARE ORGANIZATION                                      |
| CK          | CHECK  |
| COMP        | COMPUTER   |
| CONF        | CONFERENCE   |
| CPCCO       | COLUMBIA PACIFIC COORDINATED CARE ORGANIZATION                     |
| CRS         | CLATSOP REHABILITATION SERVICES                                    |
| CSR         | CUSTOMER SERVICE REPRESENTATIVE                                    |
| CTAA        | COMMUNITY TRANSPORTATION ASSOCIATION OF AMERICA                    |
| CTE         | CENTER FOR TRANSPORTATION AND THE ENVIRONMENT                      |
| DHS         | DEPARTMENT OF HUMAN SERVICES                                       |
| DIST        | DISTRICT   |
| DLSM        | DRIVE LESS SAVE MORE   |
| DMAP        | DIVISION OF MEDICAL ASSISTANCE PROGRAM                             |
| DOJ         | DEPARTMENT OF JUSTICE  |
| DOT         | DEPARTMENT OF TRANSPORTATION                                       |
| DRT         | DEMAND RESPONSE TRANSPORTATION                                     |
| EQUIP       | EQUIPMENT  |
| FHWA        | FEDERAL HIGHWAY ADMINISTRATION                                     |
| FTA         | FEDERAL TRANSIT ADMINISTRATION                                     |
| GF          | GENERAL FUND   |
| HR          | HUMAN RESOURCES  |
| IGA         | INTERGOVERNMENTAL AGREEMENT  |
| INFO        | INFORMATION  |
| INT         | INTEREST   |

SUNSET EMPIRE TRANSPORTATION DISTRICT  
COMMONLY USED ACRONYM LIST  
NOVEMBER  
2018

|       |  |
|-------|--|
| IS    | INCOME STATEMENT   |
| ISN   | INTEGRATED SYSTEM NETWORK                                    |
| IT    | INFORMATION TECHNOLOGY                                       |
| LGIP  | LOCAL GOVERNMENT INVESTMENT POOL                             |
| LGPI  | LOCAL GOVERNMENT PERSONNEL INSTITUTE                         |
| LRCTP | LONG RANGE COMPREHENSIVE TRANSPORTATION PLAN                 |
| MAINT | MAINTENANCE  |
| MBRC  | MILES BETWEEN ROAD CALLS                                     |
| MISC  | MISCELLANEOUS  |
| MOS   | MONTH  |
| MOU   | MEMORANDUM OF UNDERSTANDING                                  |
| NADTC | NATIONAL AGING AND DISABILITY TRANSPORTATION CENTER          |
| NEMT  | NON-EMERGENT MEDICAL TRANSPORTATION                          |
| NRTAP | NATIONAL RURAL TRANSIT ASSISTANCE PROGRAM                    |
| NTI   | NATIONAL TRANSIT INSTITUTE                                   |
| NWACT | NORTHWEST AREA COMMISSION ON TRANSPORTATION                  |
| NWCA  | NORTHWEST COMMUNITY ALLIANCE (FORMERLY COAST REHABILITATION) |
| NWOTA | NORTHWEST OREGON TRANSIT ALLIANCE                            |
| NWRC  | NORTHWEST RIDE CENTER (NOW KNOWN AS RIDE CARE)               |
| OAR   | OREGON ADMINISTRATIVE RULES                                  |
| ODOT  | OREGON DEPARTMENT OF TRANSPORTATION                          |
| OHA   | OREGON HEALTH AUTHORITY                                      |
| OHP   | OREGON HEALTH PLAN   |
| OPTC  | OREGON PUBLIC TRANSPORTATION CONFERENCE                      |
| OPTIS | OREGON PUBLIC TRANSIT INFORMATION SYSTEM                     |
| OPTP  | OREGON PUBLIC TRANSPORTATION PLAN                            |
| OR    | OREGON   |
| ORS   | OREGON REVISED STATUTES                                      |
| OTA   | OREGON TRANSIT ASSOCIATION                                   |
| OTC   | OREGON TRANSPORTATION COMMISSION                             |
| P&L   | PROFIT AND LOSS  |
| PARA  | PARA-TRANSIT   |
| PCA   | PERSONAL CARE ATTENDANT                                      |
| PTAC  | PUBLIC TRANSPORTATION ADVISORY COMMITTEE                     |
| QE    | QUALIFIED ENTITIES   |
| QTR   | QUARTER  |
| RAC   | RULES ADVISORY COMMITTEE                                     |
| RC    | RIDE CARE  |
| REHAB | REHABILITATION   |
| RFP   | REQUEST FOR PROPOSALS  |
| RFQ   | REQUEST FOR QUOTES   |
| RIBTC | RURAL AND INTERCITY BUS TRANSPORTATION CONFERENCE            |
| RPTD  | RAIL AND PUBLIC TRANSIT DIVISION                             |

SUNSET EMPIRE TRANSPORTATION DISTRICT  
COMMONLY USED ACRONYM LIST  
NOVEMBER  
2018

|          |   |
|----------|---|
| SDAC     | SENIOR AND DISABLED ADVISORY COMMITTEE (ALSO KNOWN AS S&D)      |
| SDAO     | SPECIAL DISTRICTS ASSOCIATION OF OREGON                         |
| SDIS     | SPECIAL DISTRICTS INSURANCE SERVICES                            |
| SETD     | SUNSET EMPIRE TRANSPORTATION DISTRICT                           |
| SETD GF  | SUNSET EMPIRE TRANSPORTATION DISTRICT GENERAL FUND              |
| SETD GEN | SUNSET EMPIRE TRANSPORTATION DISTRICT GENERAL FUND              |
| SIP      | SERVICE IMPROVEMENT PROGRAM                                     |
| SSP/0401 | ACCOUNT FROM OREGON DEPARTMENT OF HUMAN SERVICES                |
| STF      | SPECIAL TRANSPORTATION FUND                                     |
| STIF     | STATEWIDE TRANSPORTATION IMPROVEMENT FUND                       |
| STIP     | SPECIAL TRANSPORTATION IMPROVEMENT PROGRAM                      |
| STP      | SURFACE TRANSPORTATION PROGRAM                                  |
| STS      | SUNSET TRANSPORTATION SERVICES (NAME CHANGE THAT DIDN'T HAPPEN) |
| TAC      | TECHNICAL ADVISORY COMMITTEE                                    |
| TAC      | TRANSPORTATION ADVISORY COMMITTEE                               |
| TAM      | TRANSIT ASSET MANAGEMENT  |
| TAT      | TRUCKERS AGAINST TRAFFICKING                                    |
| TECH     | TECHNOLOGY  |
| TGM      | TRANSPORTATION GRANTS MANAGEMENT                                |
| TO       | TRANSPORTATION OPTIONS  |
| TPAC     | TRANSPORTATION PLAN ADVISORY COMMITTEE                          |
| TPJCC    | TONGUE POINT JOB CORPS CENTER                                   |
| TRB      | TRANSPORTATION RESEARCH BOARD                                   |
| TSP      | TRANSPORTATION SYSTEMS PLAN                                     |
| YTD      | YEAR TO DATE  |
| ZEP      | ZERO EMISSION PROPULSION  |
| ZEBRA    | ZERO EMISSION BUS RESOURCE ALLIANCE                             |

Date: November 21, 2018

To: TAC

From: Jeff Hazen

Re: Agenda Item 1. Election of Chairperson and Vice Chairperson

Each fiscal year, the committee shall elect a Chairperson to preside over TAC meetings by motion. The committee will then need to elect a Vice Chairperson by motion who will preside over meetings in the absence of the Chairperson. Every person on the committee is eligible to be Chairperson or Vice Chairperson.

Staff is recommending that the committee elect a Chairperson by motion and then elect a Vice Chairperson by motion.

Date: November 21, 2018

To: TAC

From: Jeff Hazen

Re: Agenda Item 5.b Transportation Advisory Committee Bylaws

Attached are the bylaws that I have written for the TAC. These bylaws were written with guidance from ODOT Rail and Public Transit Division (RPTD). ODOT staff has approved the draft guidelines that are before you. They meet the requirements set forth by OAR Chapter 732, Division 40, Sections 0030 and 0035, Division 42, Section 0020, Division 44, Section 0025, ORS 184.751, and ORS 184.761(1).

The committee will review the bylaws and make any adjustments they deem necessary if they don't substantively change what is in the draft bylaws. Failure to have bylaws that meet all of the criteria set forth in the OAR's and ORS' listed above will result in a recommendation of STIF plan rejection. A rejection of a plan by the OTC will result in loss of funding for this cycle (2019-2021).

Staff recommends that the committee review the bylaws and make any adjustments they deem necessary and that a motion is made to recommend adoption of the TAC bylaws to the Board of Commissioners.



# Sunset Empire Transportation District

## *Transportation Advisory Committee*

# *BYLAWS*

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**SUNSET EMPIRE TRANSPORTATION DISTRICT**  
900 Marine Drive – Astoria, OR 97103  
Phone (503) 861-7433 -- Fax (503) 861-4299  
[www.ridethebus.org](http://www.ridethebus.org)

## PURPOSE OF THE ADVISORY COMMITTEE

The Sunset Empire Transportation District (SETD) Board of Commissioners (Board) has formed an Advisory Committee, known as the Transportation Advisory Committee (TAC) to advise and assist SETD in carrying out the purpose of the Statewide Transportation Improvement Fund (STIF) and prioritizing projects to be funded by STIF moneys as set forth under OAR Chapter 732, Division 40, Sections 0030 and 0035, Division 42, Section 0020, and Division 44, Section 0025.

The TAC also serves as the District's Special Transportation Fund Advisory Committee regarding reviewing and making recommendations to the SETD Board for the Oregon Department of Transportation's (ODOT) Special Transportation Fund (STF) and for FTA § 5310 grant funds.

## DEFINITIONS

The following definitions apply to terms used in these bylaws and the tasks of the Advisory Committee.

**Advisory Committee:** A committee formed by a Qualified Entity to assist the Qualified Entity in carrying out the purposes of the STIF Formula Fund and the Advisory Committee requirements specified in ORS 184.761(1). It shall also assist SETD in carrying out the purposes of the STF Formula Program and Discretionary Program.

**High Percentage of Low-Income Households:** Areas within the District boundaries with a household income at or below 200% of the current Federal Poverty Level, also known as the Federal Poverty Guideline. The Federal Poverty Level may be found here: <https://www.healthcare.gov/glossary/federal-poverty-level-FPL/> and here: <https://aspe.hhs.gov/poverty-guidelines>

**Area of Responsibility:** The geographic area for which SETD is responsible to provide STIF Formula Fund moneys is the geographic area within the jurisdictional boundaries of the county or counties in which any part of the District is located.

**Discretionary Fund:** Up to five percent of STIF funds to be disbursed to Public Transportation Service Providers, which includes Qualified Entities, through a competitive grant funding process, pursuant to ORS 184.758(1)(b).

**Governing Body:** The decision-making body or board of a Qualified Entity. For SETD, this is The Board of Commissioners.

**Intercommunity Discretionary Fund:** Up to four percent of STIF funds to be disbursed to Public Transportation Providers through a competitive grant funding process, pursuant to ORS 184.758 (1)(c).



**Project:** A public transportation improvement activity or group of activities eligible for STIF moneys and a plan or proposal for which is included in a STIF Plan or in a grant application to a Qualified Entity or the Agency. Examples of project types include, but are not limited to: discrete activities, such as purchasing transit vehicles, planning, or operations; and groups of activities for a particular geographic area or new service, such as a new route that includes purchase of a transit vehicle, and maintenance and operations on the new route.

**Public Transportation Service Provider:** A Qualified Entity or a city, county, Special District, Intergovernmental Entity, or any other political subdivision of municipal or Public Corporation that provides Public Transportation Services.

**Public Transportation Services:** Any form of passenger transportation by car, bus, or other conveyance, either publicly or privately owned, which provides service to the general public (not including charter, sightseeing, or exclusive school bus service) on a regular and continuing basis. Such transportation may be for purposes such as health care, shopping, education, employment, public services, personal business, or recreation.

**Qualified Entity:** A county in which no part of a Mass Transit District or Transportation District exists, a Mass Transit District, a Transportation District, or an Indian Tribe.

**STIF Formula Fund:** Up to 90 percent of the Statewide Transportation Improvement funds to be disbursed to Qualified Entities conditioned upon the Oregon Transportation Commission's approval of a STIF Plan, pursuant to ORS 184.758(1)(a).

**STIF or Statewide Transportation Improvement Fund:** The fund established under ORS 184.751.

**STIF Plan:** A public transportation improvement plan that is approved by a Governing Body and submitted to Oregon Department of Transportation, Rail and Public Transit Division for review and approval by the Oregon Transportation Commission for the Qualified Entity to receive a share of the STIF Formula Fund.

**STF Formula Fund:** Fund to support transportation services for seniors and people with disabilities.

**STF Discretionary Grant:** Discretionary funds are distributed through a competitive grant program and to projects of statewide importance defined by the Oregon Transportation Commission.

## COMMITTEE TASKS

The Advisory Committee will:

- Advise SETD on the development process of the STIF Plan and the STF Plan
- Review the proposed distribution of §5310 Formula Program and STF Formula Program moneys and make recommendations to SETD

- Review STF Discretionary Grant proposals and make recommendations to SETD
- Recommend to SETD any changes to the proposed distribution of STF Formula Program moneys or STF Discretionary Grant applications it considers necessary
- Review and prioritized projects proposed for inclusion in the STIF Plan and recommend a funding amount for each project
- Advise on the development of a definition for “high percentage of low-income households
- Review and recommend projects to receive STIF Discretionary Funds within SETD’s area of responsibility
- Review and recommend projects to receive STIF Intercommunity Discretionary Funds within SETD’s area of responsibility
- Advise SETD regarding opportunities to coordinate STIF funded projects with other local or regional transportation programs and services to improve transportation service delivery and reduce gaps in service

STIF Formula Fund recommendations from the TAC will be considered by the Board in preparation of a STIF Plan.

Discretionary Fund and Intercommunity Discretionary Fund recommendations from the TAC will be considered by ODOT when awarding STIF discretionary grants.

In carrying out its purpose the committee shall:

- Provide a public forum for the discussion of SETD services and maintain communications with groups representing the various ridership groups, such as: commuters, students, low income residents, individuals with limited English proficiency (LEP), and seniors and/or individuals with disabilities.

Convey community views on transportation matters affecting persons who utilize the transit services to the SETD Board.

- Assist in the dissemination of information about transportation services to the various ridership groups, such as: commuters, students, low income residents, limited English speaking individuals, individuals with limited English proficiency (LEP), and seniors and/or individuals with disabilities, throughout the District’s service area.

## **COMMITTEE MEMBERSHIP**

A list of current members and the interests they represent is attached to these bylaws and will be updated as new appointments are made. Member contact information is considered private and will not be disclosed to any third party unless permission has been provided to do so.

## **Number of members**

TAC shall be composed of nine (9) members.

## **Appointment process**

Members will be recruited and recommended through procedures established by the SETD Board. The SETD Board will appoint members.

## **Membership criteria**

TAC members must meet the following criteria.

- Be knowledgeable about the public transportation needs of residents or employees located with SETD's area of responsibilities.
- Be a person who is a member of or represents one or more of the following:
  - Local governments, including land use planners
  - Public Transportation Service Providers or Non-profit entities that provide public transportation services (Mandatory)
  - Neighboring Public Transportation Providers
  - Employers
  - Public Health, social and human service providers
  - Transit users
  - Transit users who depend on transit for accomplishing daily activities
  - Individuals age 65 or older or people with disabilities (Mandatory)
  - Representative of seniors
  - Representative of people with disabilities
  - Low-income individuals (Mandatory)
  - Social equity advocates
  - Environmental advocates
  - Bicycle and pedestrian advocates
  - People with limited English proficiency
  - Educational institutions
  - Major destinations for users of public transit

## **Terms of Office**

- The term of each member shall be for two (2) years, except the SETD Board representative who shall serve at the pleasure of the SETD Chair.
- Terms shall begin on July 1 and end on June 30 two years later. Terms shall be staggered, so that only a portion of the terms will end each year on June 30.
- Members may apply and be considered for reappointment through the established nomination and appointment process.
- Members can serve for an indefinite number of terms.

- Should a member need to resign from the TAC, they may do so by informing the Executive Director of SETD in writing. At this time, SETD may fill the vacancy by the appointment process.

### **Condition of termination**

SETD may end the membership of a committee member under the following conditions.

- If a TAC Member fails to attend two regular meetings within a one-year period without excuse, SETD will consider this a voluntary resignation and may fill the vacancy by the appointment process.

## **COMMITTEE OPERATIONS AND PROCEDURES**

### **Meeting frequency and location**

The TAC will meet, at a minimum, twice a year. Additional meetings may be necessary to complete the work of the committee. The meetings will be held at the Astoria Transit Center unless otherwise announced.

### **Meeting agenda**

TAC meeting agendas and will be provided to members approximately seven days prior to the meeting. Background materials may be included with the agenda for prereading and meeting preparation.

### **Public notice of meetings**

Public notice of meetings will be posted seven days in advance. Notification will be made via social media, website, news media, fliers at transit facilities, and any other means deemed necessary.

### **Public engagement**

Meeting agendas will include time for public comment. Comments can be verbal or written. Comments may be collected via email or through the website. Online surveys may be generated and information booths at community events may be utilized to gather public input.

### **Meeting records**

Meeting discussions and outcomes will be documented by the Executive Assistant and made publicly available via the website.

Written copies of meeting materials will be available to the public for no less than six years, pursuant to OAR 732-040-0030(4)(b).

## **ROLES AND RESPONSIBILITIES**

The TAC is advisory to SETD's Board. To ensure the success of the group, the following roles have been identified.

### **Governance**

A Chairperson and Vice Chairperson shall be selected by the committee at its first meeting after July 1 of each year. If there is a vacancy in these two positions, the committee shall appoint a replacement. The Chairperson and Vice Chairperson may be removed by the committee with a majority vote.

The Chairperson will be responsible for officiating the meeting. They will ensure that there is sufficient time during the meeting to discuss agenda items. They will ensure that discussion on agenda items is on topic, productive and professional. The Vice Chairperson will have the same responsibilities if the Chairperson is absent.

The Executive Director or his/her designee will be the facilitator of the meetings. The Executive Director designee shall prepare agendas for the TAC. The Executive Assistant will assist in the preparation of the meeting packets and shall post the public notices. The Executive Assistant will take the minutes of the meetings and post them.

The TAC has no formal delegated powers of authority to represent SETD or commit to the expenditure of any funds. The TAC will submit recommendations to the Board of SETD.

SETD will include information in the STIF Plan about how the TAC was consulted when developing the STIF Plan and, if applicable, an explanation on why the TAC recommendation was not adopted by the Board of SETD.

### **Members**

Members of the TAC are asked to:

- Come prepared to achieve meeting objectives described in the published agenda
- Listen and appreciate a diversity of views and opinions
- Actively participate in the group
- Focus on the agreed scope of the group operation
- Attend all meetings in a timely manner
- Notify the Executive Director if unable to attend a meeting
- Support and respect each other
- Not speak to the media on behalf of the group unless consent has been provided in writing from SETD and agreed to by the TAC

## **Meeting attendance**

For meetings to take place in an effective way, a minimum of five members must be present. A majority of the members then appointed to the TAC shall constitute a quorum for the purpose of conducting business.

Meeting attendance is mandatory unless previously arranged with the Executive Director. Proxy representation is not permitted.

## **Conflict of interest**

Any apparent, potential, or perceived conflict of interest in matters that may be considered by the TAC should be declared to the Executive Director to ensure the group's future accountability, transparency, and success. A member shall not vote on any funding decision in which they are an applicant or representing an organization for funds.

## **Actions**

- A. All actions of the TAC shall be a motion passed by a majority of the members present and voting. When appropriate for clarification purposes or requested by a member, the Chair shall restate each motion immediately following its introduction.
- B. In situations where extensive discussion or debate occurs following its introduction of a motion, or when an amendment(s) is/are made to a motion, the Chair shall restate each motion immediately prior to calling for the vote. Following the vote, the Chair shall announce whether the motion carried or was defeated.

## **COMMITTEE STIF REVIEW PROCESS**

The TAC shall advise SETD on the development of the STIF Plan process and prioritize projects proposed to receive STIF Formula Funds.

- May conduct public engagement activities
- May request data
- Review all projects proposed for STIF Plan inclusion
- Recommend projects for STIF Plan inclusion
- Consider the criteria outlined in OAR 732-042-0020
- Advise staff on how to coordinate STIF-funded projects
- Develop processes for ongoing monitoring
- Committee decision making process, e.g. voting, consensus, ranking

## **STIF Formula Funds**

TAC members are required to consider the following criteria when reviewing STIF Formula Fund Projects, as described in OAR 732-0042-0020:

- Whether the Project would:
  - Increase the frequency of bus service to communities with a high percentage of Low-Income Households
  - Expand bus routes and bus services to serve communities with a high percentage of Low-Income Households
  - Reduce fares for public transportation in communities with a high percentage of Low-Income Households
  - Result in procurement of buses that are powered by natural gas or electricity for use in areas with a population of 200,000 or more
  - Improve the frequency and reliability of service connections inside and outside the Qualified Entity's service area.
  - Increase coordination between Public Transportation Service Providers to reduce fragmentation in the provision of public transportation service
  - Expand student transit services for students in grades 9 through 12
- Whether the Project would maintain and existing, productive service
- The extent to which the Project goals meet public transportation needs and are a responsible use of public funds
- Other factors to be determined by the Qualified Entity or Advisory Committee

## **STIF Discretionary and Intercommunity Discretionary Funds**

The TAC shall advise SETD on the review of grant applications for acceptance, rejection, or prioritization for funding from the Discretionary Fund and Intercommunity Discretionary Funds, consistent with OAR 732-044-0025.

- SETD staff will provide Discretionary Fund and Intercommunity Discretionary Funds grant applications to the TAC for review
- TAC shall make recommendations on the applications to the Oregon Transportation Commission

Advisory Committee members are required to consider the following criteria when reviewing projects under the discretionary STIF Funds as described in OAR 732-044-0025:

- Supports the purpose, as applicable, of the Discretionary Fund or the Intercommunity Discretionary Fund, as described in OAR 732-044-0000, which includes:
  - The Discretionary Fund is intended to provide a flexible funding source to improve public transportation in Oregon. It is not a source of ongoing operations funding
  - The Intercommunity Discretionary Fund is for improving connections between communities and between communities and other key destinations important for a connected Statewide Transit Network

- Improves public transportation service to Low-Income Households
- Improves coordination between Public Transportation Service Providers and reduces fragmentation of Public Transportation Services
- Consistent with Oregon Public Transportation Plan goals, policies, and implementation plans, including:
  - Integrated public transportation planning where affected communities planned or partnered to develop proposed Projects
  - Technological innovations that improve efficiencies and promote a seamless and easy to use Statewide Transit Network
  - Advancement of State greenhouse gas emission reduction goals
  - Support or improvement of a useful and well-connected Statewide Transit Network
- Does not substantially rely on discretionary state funding beyond a pilot phase for operations projects
- Supports geographic equity or an ability to leverage other funds (these factors apply when all other priorities are held equal)
- Meets any additional criteria established by the Commission

## **Bylaws**

The TAC will maintain written bylaws that include, but are not limited to, name and purpose, committee membership criteria, appointment process, terms of office for the committee members, general procedures of the committee, member duties, meeting schedule, public noticing requirements and engagement processes, and the STF Plan, §5310 Plan, and STIF Plan development processes and general decision-making criteria.

These bylaws may be amended by a majority vote of both the TAC and the SETD Board. Prior to action of the SETD Board, all amendments will be reviewed and approved by the TAC.



## TRANSPORTATION ADVISORY COMMITTEE ROSTER

| <b>POSITION #</b> | <b>NAME</b>        | <b>REPRESENTING</b>                 | <b>TERM EXP</b> |
|-------------------|--------------------|-------------------------------------|-----------------|
| 1                 | Larry Miller       | Seniors*                            | 6/30/20         |
| 2                 | Patrick Preston    | Human Services Provider             | 6/30/20         |
| 3                 | Margaret Chenowith | Disabled User*                      | 6/30/20         |
| 4                 | Chris Breitmeyer   | Educational Institutions            | 6/30/20         |
| 5                 | Lin Anderson       | Low Income                          | 6/30/21         |
| 6                 | Barbara Carson     | Seniors                             | 6/30/21         |
| 7                 | Tita Montero       | Local Government                    | 6/30/21         |
| 8                 | Doug Pilant        | Neighboring Public Transit Provider | 6/30/21         |
| 9                 | Bryan Kidder       | Public Transportation Provider*     | 6/30/21         |

\*Mandatory

Date: November 21, 2018

To: TAC

From: Jeff Hazen

Re: Agenda Item 5.c Presentation from Executive Direction on Transit Funding

I will be giving a presentation on how transit is funded and how the Statewide Transportation Improvement Fund came to be and how it works. Attached is a copy of the presentation you can use to follow along and take notes.



**Public Transportation Funding Overview**  
November 28, 2018  
Transportation Advisory Committee



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**Public Transportation Organizing Principles**

-  • Access
-  • Availability
-  • Connectivity
-  • Economic Development



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**Oregon Public Transportation Funding Sources**

- 10+ separate federal and state funding sources
- FTA—Programs may have narrow purpose, nearly all require local match, strict requirements
- State—Flex FHWA discretionary funds, state general fund, cig. tax, lottery proceeds, ID cards
- Local Sources—Payroll tax, purchased service, fare box, local general fund, social services, volunteer labor



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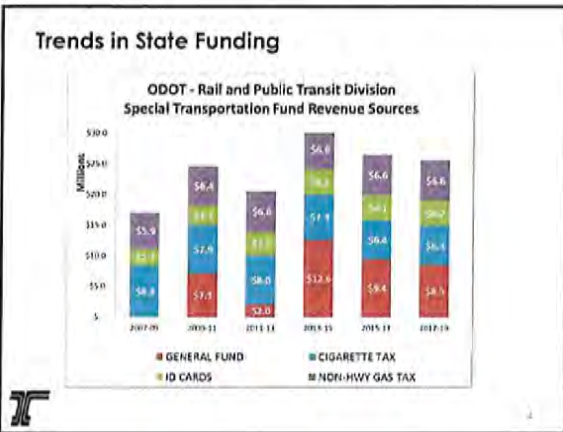
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### §5310 Enhanced Mobility for Seniors and Individuals with Disabilities

- Oregon legislature supplements FTA funds with transfer from FHWA STP funds
- STP funds
  - Allocated by formula based on population
  - Discretionary at local/lead agency level
  - Examples of eligible activities include capital vehicles, facilities, maintenance, purchased service
- FTA funds
  - Allocated through ODOT discretionary process in 2017-19 biennium
  - Eligible activities include capital and operations




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### §5311 Formula Grants for Rural Areas

**Purpose**

- Supports public transportation services in rural areas with populations of less than 50,000

**Examples of eligible activities**

- Capital vehicles, equip. facilities, and maintenance
- Operations
- Planning

**Formula based program**

- Based on revenue miles and ridership




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### Oregon State Special Transportation Fund



#### Purpose

- Maintain, expand, or develop transportation services for seniors and people with disabilities

#### Examples of eligible activities

- Any capital, operating or administrative public transportation project
- Can be used to meet local match requirements for other federal funds

#### Funding process

- Funds allocated by formula and discretionary
- Local/lead STF agencies solicit, prioritize projects and submit application to ODOT




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### Transit Network and Intercity Discretionary

#### Purpose

- Support Oregon's statewide transit network by funding longer distance intercity and regional projects

#### Examples of eligible activities

- Capital projects that support key transit hubs, such as vehicles, shelters, and maintenance
- Operations
- Planning for regional and related connector services

#### Funding process\*

- State discretionary solicitation
  - STIF Discretionary (5%)
  - Statewide Transit Network Program
    - STIF Intercommunity Fund (4%)
    - 5311(F)




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### Other USDOT and State Funding Sources/Programs

- 55304 Statewide Planning—Transit master plans
- 55339 Bus and Bus Facilities—Buses, facilities, amenities, preventative maintenance for rural and small urban
- Statewide planning projects—Oregon Public Transportation Plan, local transportation coordinated plans, system development plans, safety and asset management plans
- FHWA projects—Transportation options rideshare and information outreach; STIP Enhance, Fix-it; planning
- Other ODOT program—ConnectOregon: Facilities, park and ride, access to transit infrastructure\*\*




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**Statewide Transportation Improvement Fund (STIF)**  
Oregon House Bill 2017 (HB2017)

- Robust Transportation Bill

**Employee Transit Tax**

- 1/10<sup>th</sup> of 1% of payroll
- Collection began on July 1
- Based on where employee works
- FT minimum wage earner pays \$.43 per week



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**Statewide Transportation Improvement Fund (STIF)**



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**Statewide Transportation Improvement Fund (STIF)**

**Funds**

- Formula Fund: 90% returned to Qualified Entities
- Discretionary Fund: 5% to public transportation service providers based on a competitive grant process
- Intercommunity Discretionary Fund: 4% to public transportation providers to improve public transportation between two or more communities based on a competitive grant process
- Technical Resource Center: 1% to ODOT to establish a statewide public transportation technical resource center to assist public transportation service providers in rural areas and for ODOT to administer STIF



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**Statewide Transportation Improvement Fund (STIF)**  
**Formula Fund Requirements**

- Qualified Entities (QE) must establish an Advisory Committee with membership requirements
- QE must confer with its Advisory Committee
- The STIF Plan must be complete and adequately explain how the QE will accomplish the goals of the Projects in the STIF Plan
- The STIF Plan must contain all of sections and elements listed in OAR 732-042-0015(1), (2), and (3)
- The QE must substantively adhere to STIF accountability requirements during a previous funding cycle



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**Statewide Transportation Improvement Fund (STIF)**  
**STIF Plan Contents**  
**A STIF plan includes:**

- Project descriptions
- A summary of planned and prior expenditures by QE and PTSPs
- The amount of funding allocated to the seven areas of emphasis/criteria
- Advisory Committee information
- QE and PTSP accountability methods
- Record of Governing Body adoption of STIF Plan
- Remediation strategies if QE failed to comply with approved STIF Plan in the past two years



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**Statewide Transportation Improvement Fund (STIF)**  
**STIF Plan Contents – Projects**  
**Projects in the STIF must include:**

- Project name, description, funding level, and budget
- Description of how the project will **improve/expand** or maintain existing service
- Amount of funding and anticipated benefits and measurable outcomes specific to seven criteria
- Local Plan(s) from which the project was derived
- Consistent with Oregon Public Transportation Plan
- Minimum of 1% must be spent on student transit for grades 9-12, to extent practicable



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**Statewide Transportation Improvement Fund (STIF)**  
**Advisory Committee Review of Projects**

- PTSPs submit project proposals to QE's Advisory Committee for review
- Advisory Committee reviews projects per bylaws, including public meetings
- Advisory Committee recommends priority of approved projects, considering the following:
  - Does the Project address the seven criteria
  - Does the Project maintain and existing service
  - Do the Project goals meet public transportation needs
  - Are projects a responsible use of public funds
  - Other factors to be determined by the QE or Advisory Committee such as geographical equity



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**Statewide Transportation Improvement Fund (STIF)**  
**Decision-Making and Commission Approval**

- Advisory Committee reviews and advises Qualified Entity governing body on project prioritization
- Governing body of QE approves STIF Plan
- ODOT reviews STIF Plan for completeness
- PTAC Subcommittee reviews and recommends to PTAC
- PTAC reviews and recommends to OTC
- OTC decides whether to accept PTAC's recommendation



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**Statewide Transportation Improvement Fund (STIF)**  
**Reasons for Commission Rejection**  
**Some reasons OTC may reject a STIF Plan include:**

- QE failed to establish or confer with an Advisory Committee or the committee did not meet rule requirements
- STIF Plan is incomplete or does not adequately explain how to accomplish Project goals, including accountability methods
- STIF Plan does not contain the sections and elements listed in OAR 732-042-0015(1), (2), and (3)
- QE failed to expend STIF Formula Funds in compliance with a prior approved STIF Plan



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**Statewide Transportation Improvement Fund (STIF)**  
**Reporting and Accountability**

- STIF Plans must include quantifiable estimated service outcomes
- QEs will submit quarterly progress reports on expenditures and actual outcomes
- There are minimum required measures for certain project types, such as number of rides and miles of service for operations projects
- QEs must submit budgets, financial audits, and undergo periodic compliance reviews by ODOT using an independent third-party consultant



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**Statewide Transportation Improvement Fund (STIF)**  
**Reporting Requirements**

- In addition to General reporting requirements specified in 732-040-0025, QEs must submit quarterly reports on expenditures and outcomes
- ODOT will reconcile disbursements against expenditures
- Excess funds may be carried forward by QE



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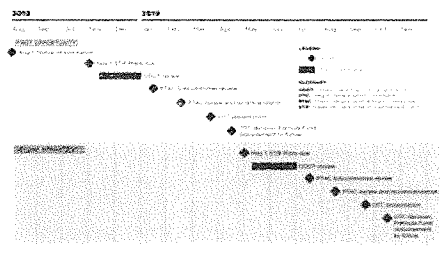

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**Statewide Transportation Improvement Fund (STIF)**

**Statewide Transportation Improvement Fund  
 FORMULA FUND SCHEDULE**

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**Statewide Transportation Improvement Fund (STIF)**  
OTC Investment Priorities  
Discretionary and Statewide Transit Network

- Improve transit for vulnerable populations
- Improve coordination between providers
- Fill gaps in the Statewide network
- Reduce greenhouse gas emissions and improve public health
- Encourage sustainable funding plans
- Maintain fleet condition
- Improve use of active transportation



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**Statewide Transportation Improvement Fund (STIF)**

| Funding Sources                   | Amount   |
|-----------------------------------|----------|
| STIF Discretionary Fund (5%)      | \$10.9 M |
| Statewide Transit Network Program | \$10.0M  |
| STIF Intercommunity Fund (4%)     | \$8.7M   |
| FTA 55311(f)                      | \$1.3M   |



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**Statewide Transportation Improvement Fund (STIF)**

**Eligible Match Sources**

- Eligible match sources vary by fund source
- **STIF Discretionary and Intercommunity**  
Federal, other state public transportation, and local funds; private contributions; and in-kind labor
- **FTA Section 5311(f)**  
Non-federal funds, except fare box revenue



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**Statewide Transportation Improvement Fund (STIF)**

Match Amounts  
 STIF Discretionary and Intercommunity Funds

- 20% match
- 10% match for projects that
  - o Predominantly serve or provide access to rural communities
  - o Serve an area outside of a Public Transportation Service Provider's geographic jurisdiction
  - o Fill a significant gap in the Statewide Transit Network
  - o Provide statewide benefits, or benefits to multiple PTSPs




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**Statewide Transportation Improvement Fund (STIF)**

- Project Selection Process
- Applications due Feb. 1, 2019
- ODOT reviews for eligibility and completeness
- Area Commissions on Transportation and STIF
- Advisory Committees review
- ODOT Project Selection Committee scores and ranks
- Public Transportation Advisory Committee recommends to OTC
- OTC reviews and decides which projects will be awarded funds
- ODOT notifies applicants of award decision, August 2019




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**Statewide Transportation Improvement Fund (STIF)**

**Evaluation Criteria**

| Focus Area   | STIF Discretionary Weight | Statewide Network Weight |
|--|---------------------------|--------------------------|
| Equity and Public Transportation Service to Low-income Households<br><small>OTPF goal: Equity</small>  | 20%                       | 10%                      |
| Coordination of Public Transportation Services<br><small>OTPF goal: Communications, Collaboration, and Coordination</small>                            | 10%                       | 30%                      |
| Statewide Transit Network Connections<br><small>OTPF goals: Mobility and Public Transportation User Experience, Accessibility and Connectivity</small> | 10%                       | 30%                      |




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**Statewide Transportation Improvement Fund (STIF)**

**Evaluation Criteria**

| Focus Area   | STIF Discretionary Weight | Statewide Network Weight |
|--|---------------------------|--------------------------|
| <b>Environmental and Public Health</b><br>OTIP goals: Environmental Sustainability/Health  | 15%                       | 10%                      |
| <b>Sustainable Funding</b><br>OTIP goal: Funding and Strategic Investment  | 20%                       | 10%                      |
| <b>Safety, Security, and Community Livability</b><br>OTIP goals: Safety and security; Community livability and economic vitality | 25%                       | 10%                      |




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- Statewide Transportation Improvement Fund (STIF)**  
**Examples of Projects that Support Statewide Transit Network Needs, Derived from the OTP**
- Partner with other agencies to efficiently fill gaps in the statewide network, which could include assuming management of ODOT contracted services
  - Support and explore use of emerging open source data standards, such as GTF3-ride and GTF3-flex
  - Expand uniform electronic passenger fare payment systems
  - Reduce greenhouse emissions through electrification, low- or no-emission fleet expansion
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- Statewide Transportation Improvement Fund (STIF)**  
**New Funding Means Some New Requirements**
- Legislative emphasis on accountability
  - Meaningful outcome measures and benefits
  - Rides, miles, low-income households served, low and no emission vehicles
  - Gaps in statewide network filled
  - Improved coordination between providers to reduce fragmentation of services
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# Statewide Transportation Improvement Fund



## Improving public transportation for Oregonians

With the passage of House Bill 2017, Keep Oregon Moving, the Oregon Legislature made a significant investment in transportation to help advance the things that Oregonians value—a vibrant economy, strong communities, high quality of life, a clean environment, and safe, healthy people. This historic investment in Oregon's transportation system will produce benefits for decades to come.

### Multiple benefits

A centerpiece of Keep Oregon Moving is the Statewide Transportation Improvement Fund (STIF). This fund provides a new dedicated source of funding to expand public transportation to access jobs, improve mobility, relieve congestion and reduce greenhouse gas emissions around Oregon.

### Public transportation investments

A new state payroll tax of one-tenth of 1 percent funds STIF transportation improvements in Oregon. The average employee will contribute less than \$1 per week to generate \$115 million per year for better public transportation.

Section 122 of House Bill 2017 allocates the new revenue across four programs.

### Formula program

90 percent of STIF funds will be distributed to qualified entities based on taxes paid within their geographic area, with a minimum amount of \$100,000 per year to each qualified entity.

### Discretionary program

5 percent of STIF funds will be awarded to eligible public transportation providers based on a competitive grant process.

### Intercommunity Discretionary program

4 percent of STIF funds will be used to improve public transportation between two or more communities based on a competitive grant program.

### Technical resource center

ODOT will use 1 percent of STIF funds to create a statewide resource center to assist public transportation providers in rural areas with training, planning and information technology and fund ODOT administration of STIF.

### New rules for stable funds

A Rules Advisory Committee and public input informed the development of new rules to guide the use and distribution of STIF funds. The Oregon Transportation Commission (OTC) approved the rules, which became effective July 1, 2018.

## Implementation

### Formula program

Public Transportation Service Providers may apply for STIF Formula funds through their local Qualified Entity. A Qualified Entity is a county in which no part of a mass transit district or transportation district exists, a mass transit district, a transportation district or an Indian Tribe.

There are two application opportunities in the first STIF funding cycle with two corresponding submittal deadlines. After 2018, there will only be one application opportunity per cycle.

### Discretionary programs

Public Transportation Service Providers may apply directly for STIF Discretionary funds. Providers also may apply directly for STIF Intercommunity Discretionary and Federal Transit Administration 5311(f) funds through the integrated Statewide Transit Network Program solicitation.

## Learn more

### Visit the STIF website

Sign up for email updates and find the most up-to-date information and planning guidance on the STIF website:

[www.oregon.gov/ODOT/RPTD/Pages/STIF.aspx](http://www.oregon.gov/ODOT/RPTD/Pages/STIF.aspx)

### Find funding opportunities

ODOT will post STIF funding opportunities online as they become available: [www.oregon.gov/ODOT/RPTD/Pages/Funding-Opportunities.aspx](http://www.oregon.gov/ODOT/RPTD/Pages/Funding-Opportunities.aspx)



### Contact ODOT

Send your questions to Karyn Criswell, ODOT STIF implementation project manager:

[karyn.c.criswell@odot.state.or.us](mailto:karyn.c.criswell@odot.state.or.us)

For more information on House Bill 2017 and Keep Oregon Moving:

[www.oregon.gov/ODOT/Pages/HB2017.aspx](http://www.oregon.gov/ODOT/Pages/HB2017.aspx)

## Initial application schedules

|  | Formula Program -<br>First opportunity | Formula Program -<br>Second opportunity | Discretionary and<br>Statewide Transit<br>Network programs |
|--|--|---|--|
| <b>Notice of solicitation</b>                                | Aug. 1, 2018                           | Aug. 1, 2018                            | Nov. 1, 2018   |
| <b>Applications due</b>                                      | Nov. 1, 2018                           | May 1, 2019                             | Feb. 1, 2019   |
| <b>Oregon Transportation<br/>Commission Funding Decision</b> | April 2019                             | October 2019                            | August 2019  |

For Americans with Disabilities Act or Civil Rights Title VI accommodations, translation/interpretation services, or more information call 503-731-4128, TTY (800) 735-2900 or Oregon Relay Service 7-1-1.





## Statewide Transportation Improvement Fund Formula Fund Allocation Estimates, **DRAFT, April 11, 2018**

### Introduction

The Statewide Transportation Improvement Fund (STIF) employee payroll tax of one-tenth of one percent will fund public transportation improvements in Oregon. The new tax, which goes into effect on July 1, 2018, will be imposed on Oregon residents and residents of other states that work in Oregon.

Ninety (90) percent of the revenue from this tax will be distributed by formula to Qualified Entities (QEs), who are required to coordinate with Public Transportation Service Providers (PTSPs) in their area of responsibility to develop a sub-allocation method and estimates as a starting point for local decision-making. This **planning level** forecast provides a revenue estimate to assist QEs with developing STIF Plans.

### Estimate Assumptions

The **forecast is conservative** because the tax is new and we lack historical data to predict future revenues. The level of taxpayer compliance is also uncertain. ODOT will only distribute the revenue it receives, which may be more or less than this estimate, up to the QEs-approved STIF Plan funding limit.

The table on page 2 summarizes the estimated Formula Fund revenues available to each QE based on the date of distribution by fiscal year. The estimate for Fiscal Year 2019 (July 1, 2018-June 30, 2019) includes two quarters of revenue. Updated estimates for the Formula, Discretionary and Intercommunity Discretionary funds for FY 2019 (two quarters) through FY2021 are summarized in the table below.

| Estimated Payroll Distribution    | Q3, Q4 of FY 2019-FY 2021 |
|-----------------------------------|---------------------------|
| Formula Fund                      | \$194.5 M                 |
| Discretionary Fund                | \$10.8 M                  |
| Intercommunity Discretionary Fund | \$8.6 M                   |

Distributions will occur quarterly, contingent on Oregon Transportation Commission approval of the QE's service improvement plan (STIF Plan). This estimate will be updated annually with the state revenue forecast.

### Estimate Calculation Method

- Gross revenue is multiplied by projected tax payer compliance rate, assumed to begin at 75% and improve each quarter
- Department of Revenue collection and administration costs are deducted from the gross revenue
- The result is multiplied by 90% to determine the projected Formula Fund net total
- Note that the remaining 10% is dedicated to the Discretionary Fund (5%), Intercommunity Discretionary Fund (4%), and the Technical Resource Center (1%), which also funds ODOT administration of STIF Program
- The projected net total is multiplied by the QE payroll shares resulting in QE revenue estimates
- QE payroll shares are calculated using the most current annual payroll data from Oregon Employment Department, with adjustments to ensure each QE receives the minimum annual allocation of \$100,000

See page 2 for table with Estimated Revenue Available for Distribution to each QE by Fiscal Year.



See page 1 for Estimate Assumptions and Estimate Calculation Method.

| <b>Estimated Revenue Available for Distribution to each QE by Fiscal Year</b> |                      |                      |                      |
|---|----------------------|----------------------|----------------------|
| <b>Qualified Entity (QE)</b>  | <b>FY 2019</b>       | <b>FY 2020</b>       | <b>FY 2021</b>       |
| Baker County  | \$ 68,000            | \$ 154,000           | \$ 176,000           |
| Basin Transit Service District w/ out of district                             | \$ 305,000           | \$ 693,000           | \$ 784,000           |
| In district   | \$ 251,000           | \$ 571,000           | \$ 645,000           |
| Out of district   | \$ 54,000            | \$ 122,000           | \$ 139,000           |
| Benton County   | \$ 674,000           | \$ 1,531,000         | \$ 1,732,000         |
| Burns Paiute Tribe  | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Columbia County   | \$ 149,000           | \$ 337,000           | \$ 381,000           |
| Confederated Tribes of Coos, Lower Umpqua and Siuslaw                         | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Confederated Tribes of Grand Ronde Community of Oregon                        | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Confederated Tribes of Siletz Indians   | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Confederated Tribes of the Umatilla Indian Reservation                        | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Confederated Tribes of Warm Springs   | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Coos County   | \$ 304,000           | \$ 689,000           | \$ 780,000           |
| Coquille Indian Tribe   | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Cow Creek Band of Umpqua Tribe of Indians                                     | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Crook County  | \$ 100,000           | \$ 225,000           | \$ 254,000           |
| Curry County  | \$ 79,000            | \$ 178,000           | \$ 202,000           |
| Deschutes County  | \$ 1,183,000         | \$ 2,685,000         | \$ 3,037,000         |
| Douglas County  | \$ 530,000           | \$ 1,203,000         | \$ 1,361,000         |
| Gilliam County  | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Grant County Transportation District  | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Harney County   | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Hood River County Transportation District                                     | \$ 179,000           | \$ 404,000           | \$ 458,000           |
| Jefferson County  | \$ 88,000            | \$ 200,000           | \$ 226,000           |
| Josephine County  | \$ 332,000           | \$ 756,000           | \$ 853,000           |
| Klamath Tribes  | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Lake County   | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Lane Transit District w/out of district                                       | \$ 2,297,000         | \$ 5,216,000         | \$ 5,899,000         |
| In district   | \$ 2,179,000         | \$ 4,947,000         | \$ 5,595,000         |
| Out of district   | \$ 118,000           | \$ 268,000           | \$ 303,000           |
| Lincoln County  | \$ 232,000           | \$ 527,000           | \$ 596,000           |
| Linn County   | \$ 664,000           | \$ 1,508,000         | \$ 1,705,000         |
| Malheur County  | \$ 158,000           | \$ 358,000           | \$ 405,000           |
| Morrow County   | \$ 98,000            | \$ 221,000           | \$ 250,000           |
| Rogue Valley Transportation District w/ out of district                       | \$ 1,255,000         | \$ 2,850,000         | \$ 3,223,000         |
| In district   | \$ 1,145,000         | \$ 2,599,000         | \$ 2,939,000         |
| Out of district   | \$ 110,000           | \$ 251,000           | \$ 283,000           |
| Salem Area Mass Transit District w/ out of district                           | \$ 2,739,000         | \$ 6,219,000         | \$ 7,035,000         |
| In district   | \$ 1,962,000         | \$ 4,455,000         | \$ 5,039,000         |
| Out of district Marion County   | \$ 581,000           | \$ 1,319,000         | \$ 1,491,000         |
| Out of district Polk County   | \$ 196,000           | \$ 446,000           | \$ 505,000           |
| Sherman County  | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Sunset Empire Transportation District   | \$ 236,000           | \$ 535,000           | \$ 606,000           |
| Tillamook County Transportation District                                      | \$ 126,000           | \$ 287,000           | \$ 325,000           |
| Tri County Metropolitan Transportation District w/ out of district            | \$ 19,653,000        | \$ 44,622,000        | \$ 50,468,000        |
| In district   | \$ 18,793,000        | \$ 42,670,000        | \$ 48,261,000        |
| Out of district Clackamas County  | \$ 649,000           | \$ 1,474,000         | \$ 1,668,000         |
| Out of district Multnomah County  | \$ 19,000            | \$ 44,000            | \$ 51,000            |
| Out of district Washington County   | \$ 191,000           | \$ 433,000           | \$ 490,000           |
| Umatilla County   | \$ 412,000           | \$ 935,000           | \$ 1,059,000         |
| Union County  | \$ 132,000           | \$ 300,000           | \$ 339,000           |
| Wallowa County  | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Wasco County  | \$ 149,000           | \$ 340,000           | \$ 385,000           |
| Wheeler County  | \$ 50,000            | \$ 100,000           | \$ 100,000           |
| Yamhill County  | \$ 496,000           | \$ 1,127,000         | \$ 1,275,000         |
| <b>Total Statewide</b>  | <b>\$ 33,438,000</b> | <b>\$ 75,700,000</b> | <b>\$ 85,414,000</b> |

FY 2019 (July 1, 2018 – June 30, 2019) includes two quarters of revenue. District totals may not add up due to rounding.

Date: November 21, 2018

To: TAC

From: Jeff Hazen

Re: Agenda Item 5.d STIF Discretionary Grant Proposal

We are going to submit a STIF Discretionary Grant to fund an intercity route from Astoria to Portland on Highway 30. Currently, we are a subcontractor to Columbia County Rider on this route that they received funding for through a §5311(f) discretionary award. We operate the northern part of the route with our buses going to Rainier twice a day to meet up with their bus that serves Rainier to Portland. We also partnered with them during the last biennium with the same arrangement.

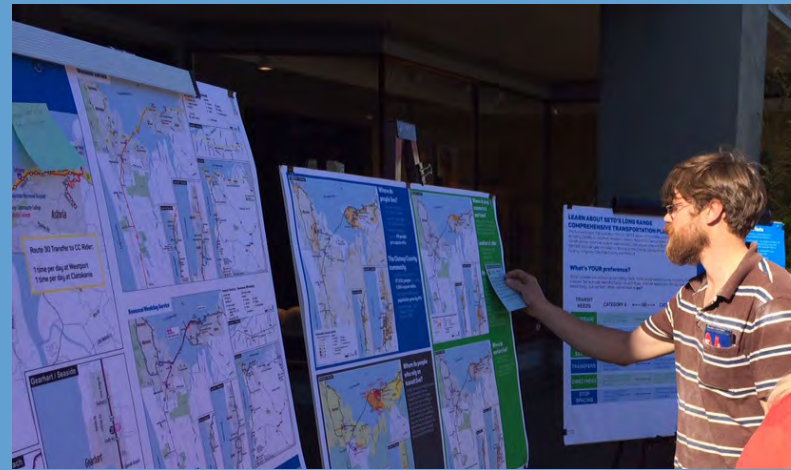
Due to circumstances with their operations, I have determined that it would be in our best interest for SETD to submit the grant proposal for this intercity route and to operate the route entirely by our buses. I will go into more detail during the meeting about the challenges that Columbia County has. It will be beneficial for riders because they will not have a layover in Rainier and they won't have to change buses. This will make for a shorter trip than it currently is.

This grant application is due on February 1<sup>st</sup>, so we will be putting together the application over the next several weeks in order to submit it prior to the deadline. We are going to be requesting funding to include four round trips a day, seven days a week. We will also be requesting a new bus as part of this grant application.

Staff is recommending that the TAC approve moving forward with this project to maintain affordable travel from Astoria to Portland.

# SUNSET EMPIRE TRANSPORTATION DISTRICT LONG-RANGE COMPREHENSIVE TRANSPORTATION PLAN

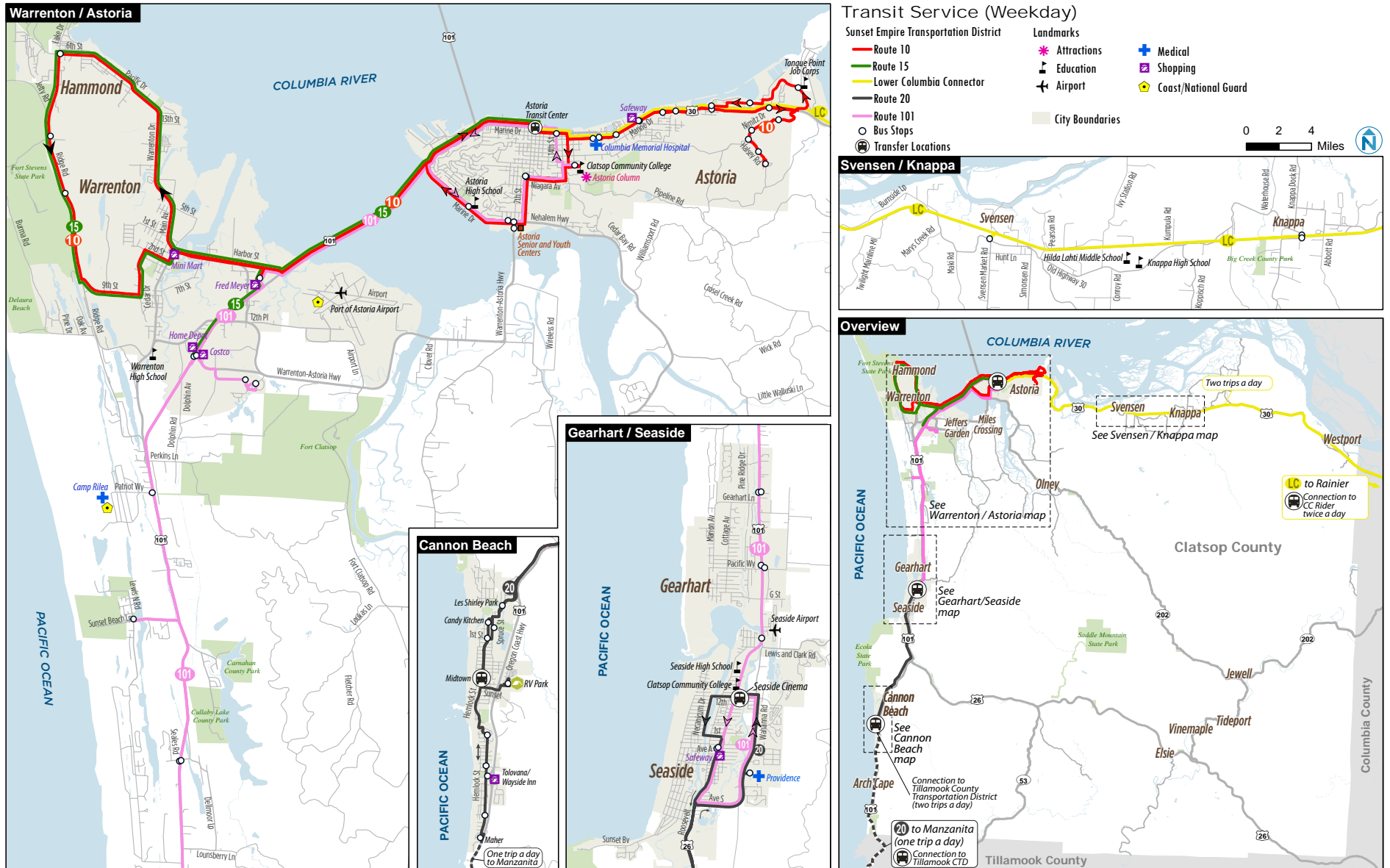
## Executive Summary October 2016



The Sunset Empire Transportation District (SETD) sits at a major opportunity point in its history. SETD operates public transportation to the population centers of Clatsop County along the U.S. 30 and U.S. 101 corridors, and also provides connections to Columbia and Tillamook Counties. Fixed-route ridership growth to 198,582 trips per year and a high percentage of commuting trips by transit compared to neighboring communities speak to the appetite for existing services. The growing tourism sector continues attracting year-round visitors and permanent residents, and this market is increasingly interested in public transportation options. SETD has also proven itself to be a prudent public investment; in comparing SETD to other transit providers in the region, SETD's service efficiency and cost efficiency levels are at or better than average.

SETD operates five fixed routes (operating on a set route and set schedule), ADA paratransit for those with disabilities, and Dial-A-Ride service. The agency also houses the Medicaid brokerage for the region, provides travel training, and supports implementation of the Oregon Transportation Options (TO) plan by staffing a TO coordinator tasked with promoting commute options. SETD operates a fleet of 21 vehicles, employs 40 staff, and has an annual operating budget of \$3.26 million (FY 13-14). Fixed-routes, which are the focus of this project, cost \$869,000 per year to operate. In general, service runs from 6 am to 9 pm. SETD's core services of Routes 10, 101, and 20 operate hourly, while Route 15 provides 11 trips per day and Route 30, runs two trips per day to Rainier.

FIGURE 1. CURRENT WEEKDAY YEAR-ROUND SYSTEM MAP



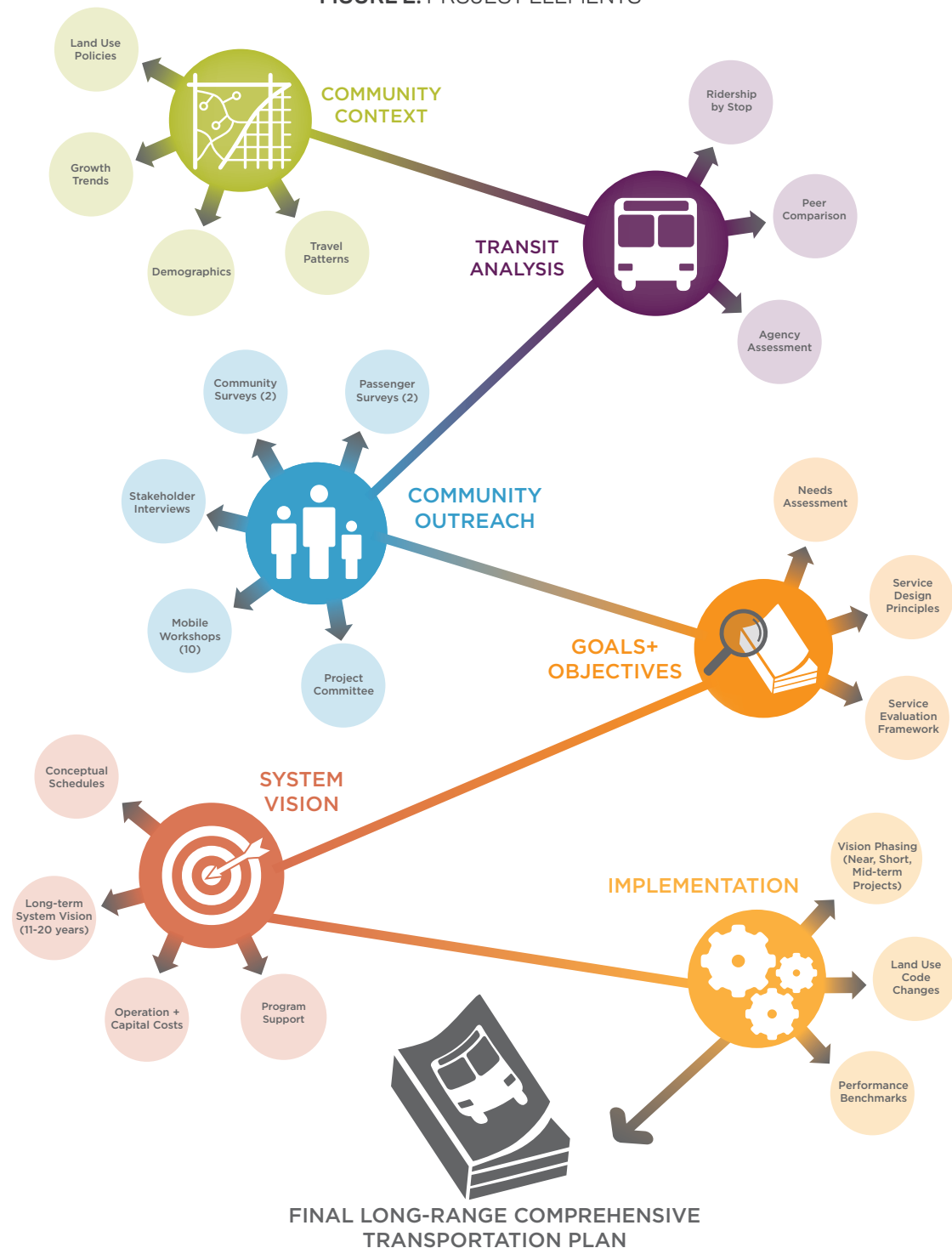
On weekends, routes 10, 101, and 20 do not run. Pacific Connector runs between the Transit Center and Cannon Beach 3 times per day. Route 21 serves Seaside to Cannon Beach. During summer months, additional services include two seasonal routes when cruise ships are docked in Astoria and the Seaside Streetcar Trolley. Route 21 in Cannon Beach runs daily (weekday and weekend).

In 2015-2016, SETD undertook preparation of this Long-Range Comprehensive Transportation Plan (LRCTP) to better serve existing riders and broaden its reach to a larger market of users. Resulting recommendations include changes to route structures, schedules, passenger information, vehicles, and performance tracking, all working toward the goal of making transit in Clatsop County more convenient and reliable. Arriving at these recommendations required extensive analysis and outreach to ensure the team created fiscally-sound services that will be embraced by riders, non-riders, and SETD staff. Figure 2 summarizes how the technical and outreach elements of the project came together to create a community needs assessment that directly informs recommendations. The full project report includes detailed findings and can be viewed at [http://www.ridethebus.org/Assets/dept\\_1/pm/pdf/setd%20lrctp%20vol%20i.pdf](http://www.ridethebus.org/Assets/dept_1/pm/pdf/setd%20lrctp%20vol%20i.pdf)

### KEY FINDINGS

- Service generally covers where people need to go. Current riders are very satisfied with service coverage.
- Riders want additional service hours (evenings and weekends), more frequent service, and later evening service.
- Most current riders have no working vehicle and are employed full or part-time.
- Non-riders want better regional connections.
- Non-riders are open to trying transit (25% have used TriMet in Portland and 20% have used Northwest Point bus service).
- Service schedules and maps are confusing to non-riders.
- Service reliability (buses arriving on time) is a problem, especially in the summer.
- Service operates cost-efficiently compared to peers.
- Community organizations and employers exist who can become transit partners.

FIGURE 2. PROJECT ELEMENTS



# LONG-TERM SYSTEM VISION

By 2035, SETD envisions a network of routes that create short, direct connections between population centers. Increased trips available to regional locations (Columbia and Tillamook Counties), restructured service (Route 15 circulator through the Warrenton retail area) and new service (route serving U.S. Business 101) will respond to growth patterns and rider needs.

## VISION HIGHLIGHTS

### Seaside Local Service

- Local Seaside Circulator in addition to Trolley

### U.S. Business 101 Corridor

- Link Warrenton business district to Astoria via developing Miles Crossing area

### Columbia County Connections

- Connection in Rainier to CC Rider (Longview and St. Helens/Portland) four times every day

### Tillamook County Connections

- Connection at Midtown Cannon Beach to Tillamook County Transportation District four times every day

### U.S. 30 Corridor / SETD Route 30

- Svensen/Knappa - 6 trips per weekday and weekend
- Rainier – 4 trips per weekday and weekend
- Shopper Shuttle 1 day per week

### Astoria-Seaside Corridor / SETD Route 101

- Streamlined service through Warrenton & Seaside
- Extends to Avenue U in Seaside, covering more of Seaside
- Travel time savings:

| Trip  | Direction  | Current Travel Time | Future Travel Time | Minutes Saved     |
|---|------------|---------------------|--------------------|-------------------|
| Seaside Cinema to Astoria Transit Center    | Northbound | 55 minutes          | 37 minutes         | <b>18 minutes</b> |
| Seaside Cinema to Clatsop Community College | Northbound | 50 minutes          | 41 minutes         | <b>9 minutes</b>  |
| Astoria Transit Center to Seaside Cinema    | Southbound | 40 minutes          | 33 minutes         | <b>7 minutes</b>  |

### Seaside-Cannon Beach / SETD Route 20

- Streamlined service through Seaside
- Better transfer with Route 101 (shorter transfer times)

### Astoria Local Service / SETD Route 10

- Shorter, more direct routes serving east and west Astoria
- Timed connections with Route 101 at Transit Center
- Travel time savings for eastern Astoria residents:

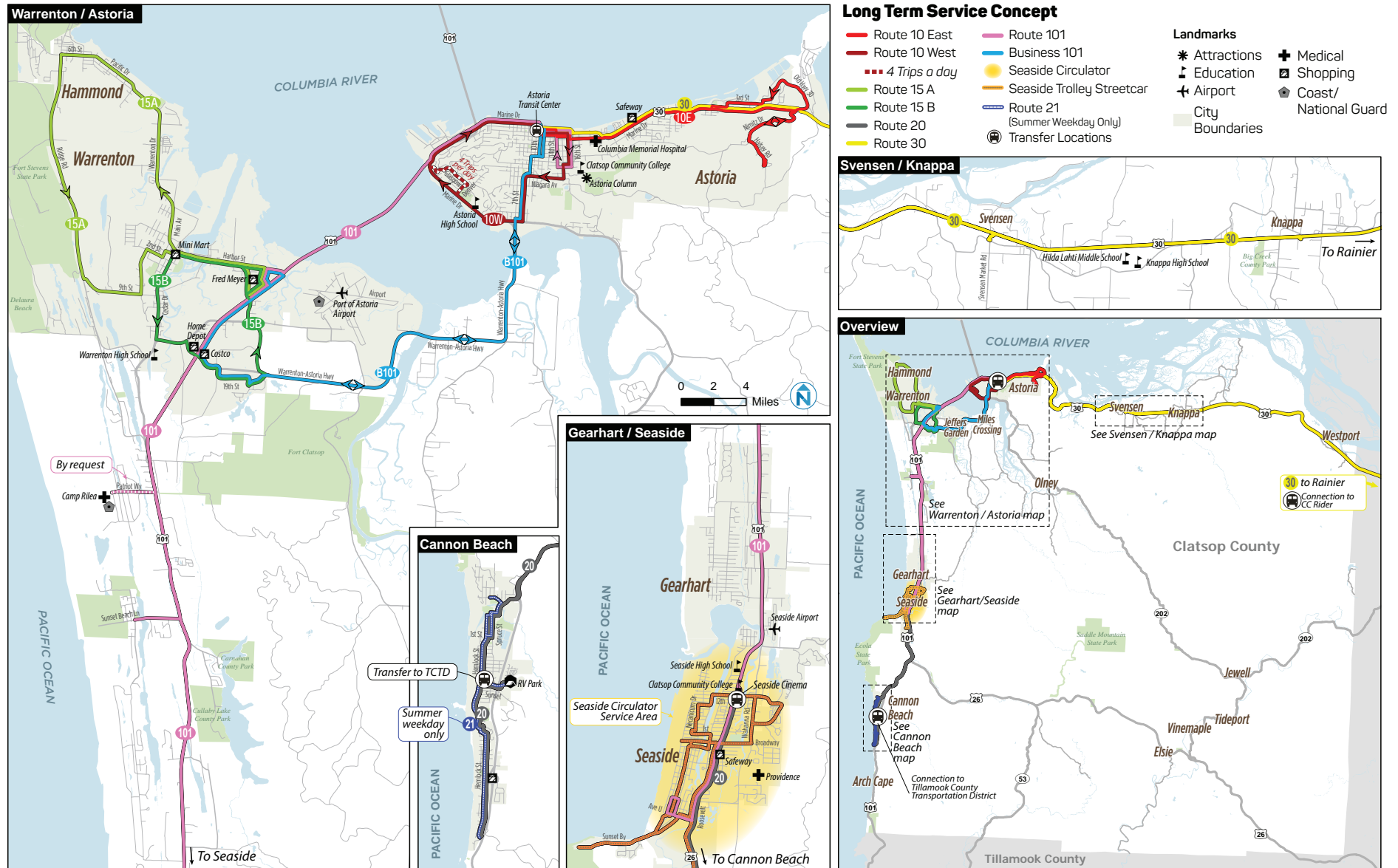
| Trip                          | Direction | Current Travel Time    | Future Travel Time     | Minutes Saved     |
|-------------------------------|-----------|------------------------|------------------------|-------------------|
| Emerald Heights to Fred Meyer | Westbound | 68 minutes, 1 transfer | 30 minutes, 1 transfer | <b>38 minutes</b> |

### Warrenton-Hammond Local Service / SETD Route 15

- Shorter, more direct routes serving Warrenton/Hammond and Costco/Walmart areas
- Double the service at Fred Meyer and the Warrenton Mini-Mart (very high ridership locations)
- Consistent service levels weekday and weekend:

| Service Area   | Current Weekday Trips | Future Weekday Trips | Current Weekend Trips | Future Weekend Trips |
|----------------|-----------------------|----------------------|-----------------------|----------------------|
| Hammond        | 8                     | 22                   | 6                     | 15                   |
| Walmart/Costco | 30                    | 22                   | 6                     | 15                   |

FIGURE 3. LONG-TERM SYSTEM VISION (11-20 YEARS)



**SCHEDULE HIGHLIGHTS**

- Weekday service running from 5:45 am–10 pm
- Weekday buses arrive every 60 minutes
- Astoria-Warrenton-Hammond-Seaside-Cannon Beach service runs every 30 minutes during morning and afternoon peak times
- Weekend service runs from 7 am-10 pm
- Weekend buses arrive every 60–120 minutes
- Consistent routes during weekdays and weekends

# PHASING AND PRIORITIZATION

The system vision will be implemented over a time frame of 10-20 years, but discrete steps toward the vision can be realized in smaller time increments. The public and the project committee prioritized the steps toward implementing the vision, which were then categorized into four phases. Figure 4 graphically depicts weekday and weekend service by phasing, and Figure 5 describes these changes. Figure 6 includes operating cost estimates for each phase.

**FIGURE 4. SERVICE PHASING MAP**





**FIGURE 5. SERVICE PHASING**

|   | Existing   | Near-Term: 0-1 Years   | Short-Term: 2-4 Years   | Mid-Term: 5-10 Years  | Long-Term: 11-20 Years  |
|---|--|--|---|---|---|
| <b>Regional</b>   |  |  |   |   |   |
| Lower Columbia: Route 30/Lower Columbia Connector (LCC) | <ul style="list-style-type: none"> <li>• 2 daily trips Astoria-Rainier</li> </ul>  | <ul style="list-style-type: none"> <li>• Brand LCC as Route 30 (LCC)</li> </ul>  | <ul style="list-style-type: none"> <li>• Add 2 weekday short trips to MERTS, Svensen/Knappa</li> <li>• Consider shopper shuttle to Svensen/Knappa</li> </ul>  |   | <ul style="list-style-type: none"> <li>• Add 2 weekday and weekend trips Astoria-Rainier</li> <li>• Add 2 weekend short trips to MERTS, Svensen/Knappa</li> </ul> |
| Astoria–Seaside: Route 101/Pacific Connector (PC)       | <ul style="list-style-type: none"> <li>• 60–120 min weekday service</li> <li>• 3 weekend trips (branded as Pacific Connector)</li> </ul> | <ul style="list-style-type: none"> <li>• Reroute to stay on northern W. Marine Drive in Astoria with extension up to Clatsop Community College</li> <li>• Brand weekend PC as Route 101 (PC)</li> <li>• Add fourth weekend trip</li> </ul> | <ul style="list-style-type: none"> <li>• Reduce travel time by eliminating deviations to Ensign Lane</li> <li>• Extend to Avenue U &amp; Beach Drive in Seaside</li> <li>• More frequent weekend service</li> </ul>                               | <ul style="list-style-type: none"> <li>• 60 min weekday all-day service</li> <li>• Earlier weekend and later evening service</li> <li>• Bidirectional routing on U.S. 101 in Seaside</li> <li>• Improve transfers with Route 20</li> <li>• Remove Wahanna Road service</li> </ul> | <ul style="list-style-type: none"> <li>• Consider more frequent weekday peak service</li> <li>• Consider later evening weekend service</li> </ul>                 |
| Seaside – Cannon Beach: Route 20 and 21                 | <ul style="list-style-type: none"> <li>• 60 min weekday</li> <li>• 60 min weekend (2½ hour midday gap)</li> </ul>                        | <ul style="list-style-type: none"> <li>• Brand as Route 20 (PC) on weekends</li> <li>• 60 min weekday</li> <li>• 60 min weekend (all-day)</li> <li>• Remove Necanicum Drive routing</li> </ul>   | <ul style="list-style-type: none"> <li>• Improve transfers with Route 101</li> </ul>  | <ul style="list-style-type: none"> <li>• Earlier weekend and later evening service</li> <li>• Bidirectional routing on U.S. 101 in Seaside</li> </ul>   | <ul style="list-style-type: none"> <li>• Consider more frequent weekday peak service</li> <li>• Consider later weekend service</li> </ul>                         |
| Cannon Beach - Manzanita: Routes 20 and 21              | <ul style="list-style-type: none"> <li>• 3 trips/day (1 by SETD, 2 by TCTD)</li> </ul>   |  |   | <ul style="list-style-type: none"> <li>• Add 1 trip/day (4 trips total-operated by TCTD)</li> </ul>   |   |
| <b>Local</b>  |  |  |   |   |   |
| Astoria: Route 10                                       | <ul style="list-style-type: none"> <li>• 60 min, 1 route</li> <li>• No local weekend service</li> </ul>                                  | <ul style="list-style-type: none"> <li>• Break Route 10 into 2 shorter routes (10E, 10W)</li> <li>• Service to interior of Astoria Head Start (four trips per weekday)</li> </ul>  | <ul style="list-style-type: none"> <li>• Weekend local service on 10E</li> </ul>  | <ul style="list-style-type: none"> <li>• Additional weekend service (10E, 10W)</li> <li>• Additional weekday evening service</li> </ul>   | <ul style="list-style-type: none"> <li>• Additional frequency or coverage (flex-route)</li> <li>• Consider later evening weekend service</li> </ul>               |
| Warrenton: Route 15                                     | <ul style="list-style-type: none"> <li>• 11 trips / day</li> <li>• Some trips are part of Route 10</li> </ul>                            | <ul style="list-style-type: none"> <li>• Brand all trips as Route 15</li> </ul>  | <ul style="list-style-type: none"> <li>• Separate from Route 30</li> <li>• Split into two routes: service to Hammond (15A), short loop to Costco/Walmart area (15B)</li> <li>• Hourly weekday service</li> <li>• Weekend local service</li> </ul> | <ul style="list-style-type: none"> <li>• Additional weekend service</li> <li>• Additional weekday evening service</li> </ul>  | <ul style="list-style-type: none"> <li>• Consider later evening weekend service</li> </ul>  |
| Seaside:  | <ul style="list-style-type: none"> <li>• Seasonal Streetcar Trolley</li> </ul>   |  |   | <ul style="list-style-type: none"> <li>• Implement Seaside Circulator</li> </ul>  | <ul style="list-style-type: none"> <li>• Consider later evening weekend service on circulator</li> </ul>  |

# SERVICE CHANGE HIGHLIGHTS - WHAT TO EXPECT IN THE NEXT FOUR YEARS

This section showcases some of the changes riders can expect over the near (0-1 year) and short (2-4 years) time frames.

## NEAR-TERM / COST-NEUTRAL

### Warrenton-Hammond Local Service

#### SETD Route 15

- Brand all service in Warrenton-Hammond as Route 15

### Astoria-Seaside-Cannon Beach Weekend Service

#### SETD Pacific Connector & Route 21

- Rebrand Pacific Connector as Route 101: Pacific Connector
- Rebrand Route 21 as Route 20
- Add a fourth trip between Astoria-Cannon Beach
- Close 3-hour gap in midday Cannon Beach service

### U.S. 30 Corridor

#### SETD Route 30

- Rebrand as Route 30: Lower Columbia Connector

### ROUTE 101 IN ASTORIA



### Astoria-Seaside Corridor

#### SETD Route 101

- Streamline service through Astoria to reduce travel time, service overlap
- Route on U.S. Business 101 to avoid summer congestion on Youngs Bay Bridge

### Seaside-Cannon Beach Corridor

#### SETD Route 20

- Streamline service through Seaside (very low ridership on Necanicum Drive)

### Astoria Local Service

#### SETD Route 10

- Provide shorter, more direct routes serving east and west Astoria
- Provide service to Head Start four times per day

### ROUTE 10 EAST



### ROUTE 10 WEST

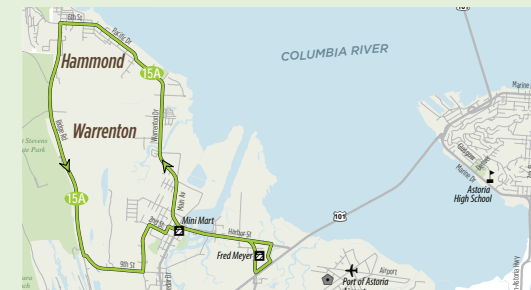


## SHORT-TERM

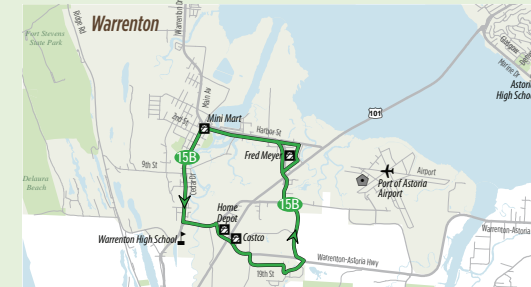
### Astoria-Warrenton-Hammond-Seaside (Routes 15 and 101)

- Use separate vehicles for Route 15 and Route 30 to achieve schedule flexibility
- Split Route 15 into two pieces:
  - Warrenton/Hammond (Route 15A)
  - Ensign Lane retail area (Route 15B)
- Run hourly
- Streamline Route 101. Extend to Avenue U in Seaside.

### ROUTE 15A



### ROUTE 15B



## IT TAKES MORE THAN BUSES ON THE STREET....

The operation of service must be complemented by information, outreach, safe and secure bus stops, and other elements that support when and where bus routes run including:

- Marketing and information
  - Establish ongoing community outreach
  - Update service maps
  - Provide real-time passenger information
- Better vehicles – Purchase low-floor vehicles for easier boarding
- Bus stops - Add bus stop signs to scheduled stops and add bus shelters to high ridership locations
- Roadways - Add pedestrian crossings
- Park & Ride - Establish in north and south ends of Seaside
- Partnerships –Seek out community partners such as employers and colleges
- Land Use –Support transit with code updates affecting development review, sidewalks, parking, urban design, and other elements that help make transit attractive



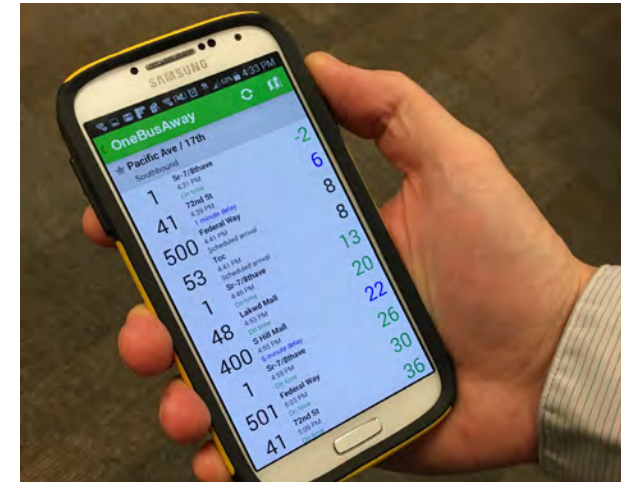
Low-floor small transit vehicles can provide easier boarding for passengers.

Source: Beaver County Transit Authority (BCTA)

FIGURE 6. ANNUAL FIXED-ROUTE OPERATING COSTS BY PHASE

|                 | Service Hours |            | Operating Cost |             | Approx. Impl. Year |
|-----------------|---------------|------------|----------------|-------------|--------------------|
|                 | Additional    | Cumulative | Additional     | Cumulative  |                    |
| Existing (2014) | 16,224        | 16,224     | \$869,000      | \$869,000   | 2014               |
| Near-Term       | 100           | 16,324     | \$6,000        | \$875,000   | 2017               |
| Short-Term      | 4,140         | 20,464     | \$225,000      | \$1,100,000 | 2020               |
| Mid-Term        | 9,820         | 30,284     | \$535,000      | \$1,635,000 | 2026               |
| Long-Term *     | 15,930        | 46,214     | \$871,000      | \$2,506,000 | 2036               |

Note: \* Long-term is considered a flexible service plan to be implemented based on future needs and service standards.



One Bus Away app provides for real-time arrival information for Pierce Transit in Pierce County, WA.

Source: Nelson\Nygaard



# SUNSET EMPIRE TRANSPORTATION DISTRICT

## **For More Information**

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# Sunset Empire Transportation District Long-Range Comprehensive Transportation Plan Volume I

September 2016





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# 1 WHY A LONG-RANGE PLAN?

The Sunset Empire Transportation District (SETD) sits at a major opportunity point in its history. After a financial collapse in 2011, SETD has since stabilized with steadily rising ridership and new leadership. Having regained its footing, the agency can now embark on a strategic planning effort to understand transit's role in the community and plot a course for transit's evolution during the next 20 years.

SETD serves the main population centers of Clatsop County along the U.S. 30 and U.S. 101 corridors, and also provides connections to Columbia and Tillamook Counties. SETD operates five fixed routes, ADA paratransit, and Dial-A-Ride service. The agency also houses the Medicaid brokerage for the region, provides travel training, and supports implementation of the Oregon Transportation Options plan by staffing a TO coordinator tasked with promoting commute options.

The current ridership market primarily consists of “transit-dependent” people who do not have another form of transportation. Key goals of this project include making service more convenient for existing riders, understanding community transportation needs to expand the ridership base, and connecting people both within Clatsop County as well as throughout the region.

Several transportation, demographic, and economic trends make transit a particularly meaningful public investment for Clatsop County at this time:

- Growth along the U.S. 101 corridor, especially in Warrenton and Seaside, continues to add density levels supporting public transportation. A Walmart development in Warrenton will have major impacts on travel demand.
- The county already exhibits a fairly high percentage of commuters traveling by transit compared to neighboring counties, showing both interest in bus service as well as potential for more ridership.
- Parking crunches in Cannon Beach and, to a lesser extent, in Seaside, have community and business leaders interested in promoting transit as a way of maintaining access.
- The county has a high percentage of low-income people who do not have alternate transportation options. While jobs, especially in the tourism market, are growing, affordable housing is becoming scarce. People who work in Cannon Beach or Seaside are increasingly finding housing in Warrenton or Hammond. This housing-jobs geographic separation is especially challenging for low-income residents.
- The summer tourism season continues lengthening into the “shoulder season” of spring and fall, meaning increased tourism-based employment year-round and a need for regional transportation to Clatsop County's coast.
- SETD joined a regional alliance called Northwest Connector focused specifically on reaching the tourism market and linking the Portland region to the coast via transit.

Stakeholders and the public generally agree that current routes match *where* major population centers and trip patterns are today; however, bus service may not be running *when* people need it (such as in late evening or weekends) or at a frequency that can attract more riders.

The Plan focuses on Clatsop County, addresses a 20-year planning horizon and incorporates the following process:

- Existing conditions analysis including documenting background conditions, travel patterns, and demographic trends.
- Transit network assessment including ridership and productivity levels. A peer review of similar systems was used to help benchmark SETD's performance.
- Extensive community outreach including community surveys, transit rider surveys, and mobile outreach events.
- Creation of goals and objectives with input from the Transportation Project Advisory Committee and the public.
- Drafting of service opportunities based upon outreach and technical analysis.
- Validation of goals and objectives by creating an evaluation framework to assess efficacy of service opportunities.
- Final recommendations for immediate, short, medium, and long-term service changes that will meet the community's vision for transit in a fiscally reasonable way.

All technical memorandum documenting the project process in detail can be found in Volume II of the Long-Range Comprehensive Transportation Plan.

## 2 THE CLATSOP COUNTY COMMUNITY & REGION

Clatsop County’s previous planning efforts, demographics, employment, and economic characteristics paint a picture of the community and the market for public transportation.

### PLANNING CONTEXT

#### Documents Reviewed

- Previous planning efforts provide background information on trends and priorities for the state, county, and communities within SETD’s service area. The following documents were reviewed:
- Sunset Empire Comprehensive Transportation Plan, 2001
- Clatsop County Comprehensive Plan, 2012
- Astoria Comprehensive Plan, 2010
- Seaside Transportation System Plan, 2010
- Transportation Planning Rule (TPR) (OAR 660-012)
- Sunset Empire Transportation District Coordinated Human Services Transportation Plan, 2011
- Astoria Transportation System Plan, 2013
- The North by Northwest Connector Plan, 2013
- Sunset Empire Public Involvement Plan, LEP, Title VI, 2014
- Clatsop County Transportation System Plan, 2015
- Sunset Empire Strategic Prioritization Plan, 2012 (strategies updated 2015)

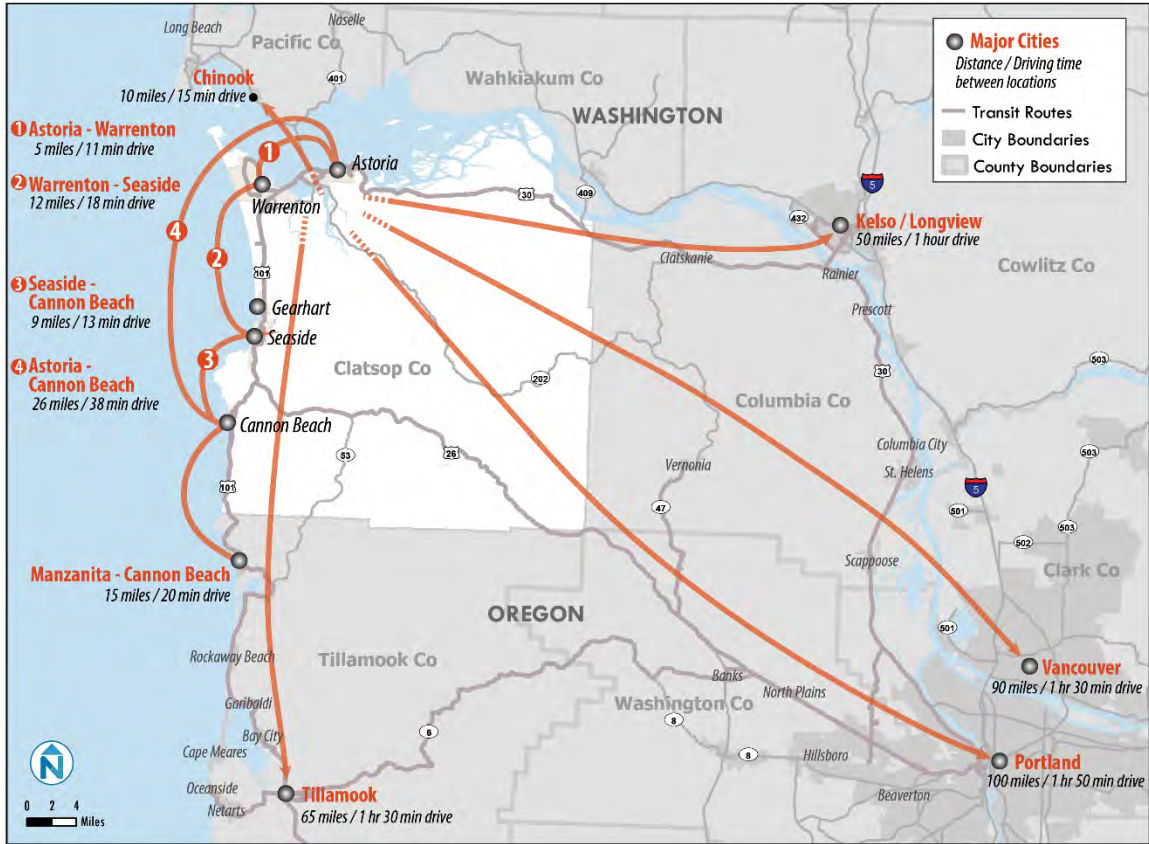
For additional demographic, travel pattern, and community destinations maps, see Volume II, Section A.

### CLATSOP COUNTY COMMUNITIES

Clatsop County lies in the northwest corner of Oregon, covering 1,084 square miles (Figure 2-1). Much of the county is rural and heavily forested, with an overall average population density of 45 persons per square mile (less than a tenth of a person per acre). The relative proximity to Portland (approximately 100 miles from Astoria and 80 miles from Seaside) attracts many tourists and visitors to the popular coastal communities. The City of Astoria also provides the only crossing of the Columbia River for nearly 60 miles, creating an important connection to Washington State via the Astoria-Megler Bridge.

Many of the coastal cities in Clatsop County are known for their tourism, arts, and outdoor recreation. As a result, during the summer months U.S. 30, U.S. 101, and the Youngs Bay Bridge experience spikes in traffic resulting in congestion and bus delays.

Figure 2-1 Clatsop County in Regional Context



## MARKET ANALYSIS

Successful fixed-route public transportation (service running on a set path with time points) achieves highest efficiency levels in communities where clusters of people and destinations exist. Population and employment are key factors that make transit financially efficient.

### Population Today and Tomorrow

- Incorporated communities comprise about 65% of Clatsop County’s population, while 35% of residents live in unincorporated areas. Between 2010 and 2015, Clatsop County grew at an average annual rate of 0.4%, less than the statewide rate of growth of 1% annually. Annual growth within the county was uneven, with Warrenton and Seaside growing at slightly higher rates (0.7% and 0.4%, respectively) than Astoria, Cannon Beach, and Gearhart (0.2%). Nearly a quarter of the County’s growth occurred in Warrenton. Population in unincorporated communities grew at the same rate as incorporated communities, which presents challenges for public transportation as customers are more widely dispersed. None of the incorporated communities lost population.



- Figure 2-3 shows Clatsop County’s population density. Density matters because public transportation operates more effectively and cost-efficiently when serving clusters of people and destinations. Oregon’s Office of Economic Analysis 2013 projections estimate that Clatsop County’s population will grow to 40,521 by 2035, a 7% increase. This is much smaller than the statewide prediction of a 24% increase.

## Transit-Dependent Population

In rural places like Clatsop County, transit service often carries a large share of persons who are “transit-dependent,” or have no personal transportation options. Transit provides this population with a crucial lifeline to jobs, services, family and friends, and medical providers. Analyzing concentrations of the transit-dependent – older adults (65+), youth under 17, people with low incomes, people with disabilities, those with limited English proficiency, and households without a vehicle – reveals places where transit would likely find customers, or a market for transit.

Clatsop County is, on average, both older and poorer than the statewide and national averages. The county has a greater proportion of persons with disabilities, but fewer residents with limited English-speaking ability. More than 25% of Cannon Beach residents are older adults. Astoria, Seaside, and Warrenton have high levels of low-income individuals. Seaside contains a high percentage of zero-vehicle households (Figure 2-2).

Figure 2-2 Demographic Information on Clatsop County Communities, 2013

| Geography                       | Total Population | % of County | Older Adults (65+) | Youth (10-17) | Low-Income Population [1] | Zero-Vehicle Households | Population with Disabilities [2] | Population with Limited English [3] |
|---------------------------------|------------------|-------------|--------------------|---------------|---------------------------|-------------------------|----------------------------------|-------------------------------------|
| United States                   | 311,536,594      | -           | 13%                | 11%           | 32%                       | 9%                      | 15%                              | 4.5%                                |
| Oregon                          | 3,868,721        | -           | 14%                | 10%           | 33%                       | 8%                      | 16%                              | 3.5%                                |
| Clatsop County                  | 37,157           | -           | 18%                | 9%            | 36%                       | 9%                      | 21%                              | 1.7%                                |
| <b>Incorporated Communities</b> |                  |             |                    |               |                           |                         |                                  |                                     |
| Astoria                         | 9,518            | 26%         | 17%                | 9%            | 41%                       | 9%                      | 18%                              | 2.8%                                |
| Seaside                         | 6,455            | 17%         | 18%                | 8%            | 39%                       | 18%                     | 26%                              | 1.3%                                |
| Warrenton                       | 5,057            | 14%         | 12%                | 11%           | 42%                       | 8%                      | 23%                              | 0.3%                                |
| Cannon Beach                    | 1,553            | 4%          | 26%                | 4%            | 37%                       | 12%                     | 23%                              | 4.4%                                |
| Gearhart                        | 1,513            | 4%          | 22%                | 12%           | 22%                       | 2%                      | 17%                              | 0.3%                                |

Note: The table presents data from all cities within Clatsop County. Low-Income populations are defined by households making up to 185% of the poverty level. This definition is consistent with Oregon WIC Policy 612. [1] Percentage of population for which poverty status is determined. [2] Age 18 or older. [3] Age 5 or older who speak English “less than well”.

Source: U.S. Census Bureau, 2009-13 American Community Survey 5-year Estimates

## Transit Propensity Index

A transit propensity index of these demographic factors was created to understand aggregate need by Census Block Group (Figure 2-4). These segments of the population classified as “high” on the index are more likely to depend on transit for their transportation needs, and the map shows where the highest densities of these populations are located in Clatsop County. The locations with the highest propensity to use transit are found in northwest Astoria and southeast Seaside. These

populations tend to be located near social services and multifamily housing. Moderate to high transit propensity exists in the rest of Seaside and the western and eastern portions of Astoria. This tool does not mean that other areas of the county do not need transit; rather, it provides a way of understanding the types of public transportation that could meet needs in different parts of the county.

Figure 2-3 Population Density



**Population Density (2010)**

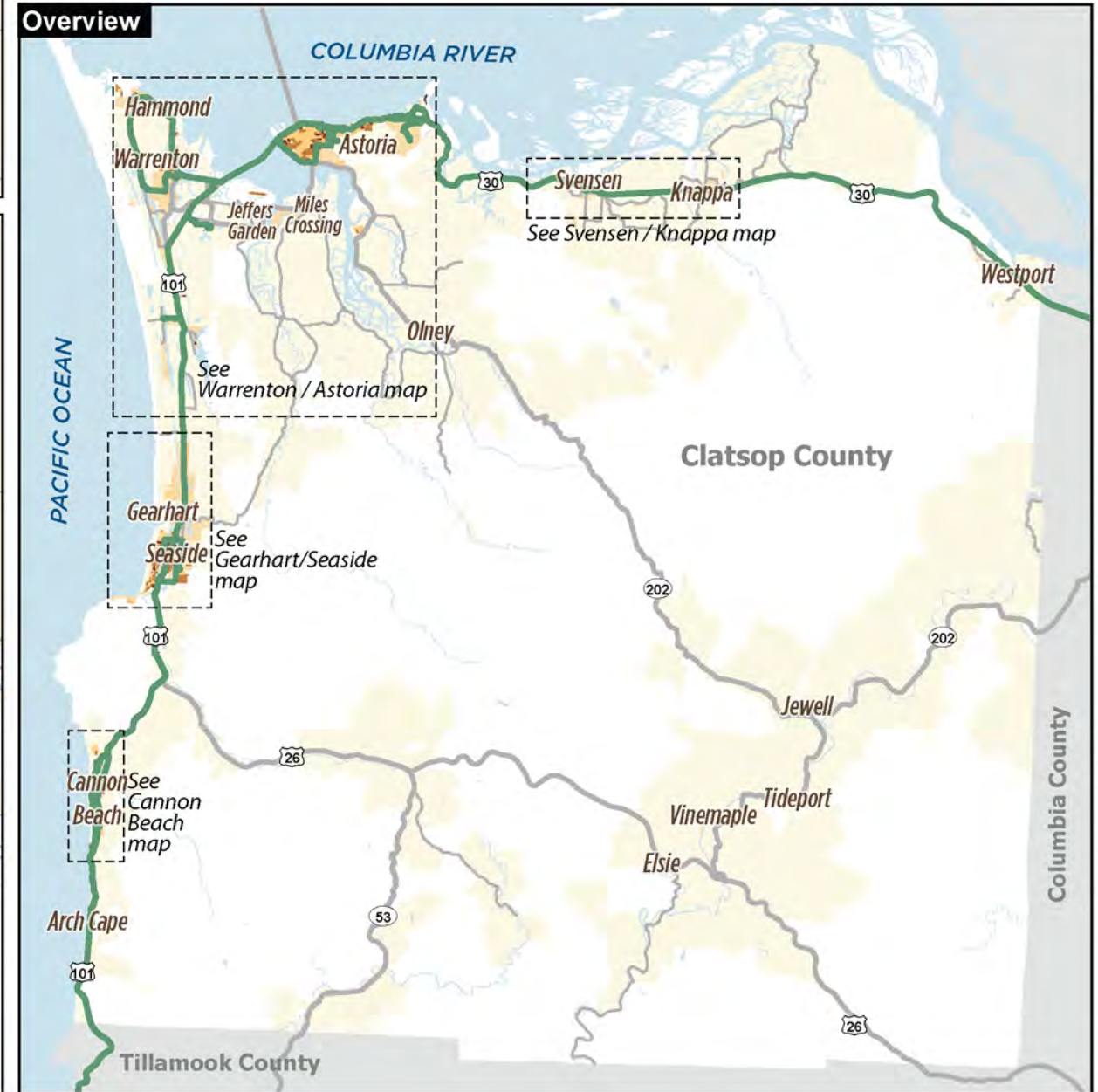
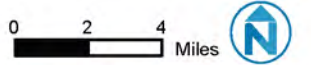
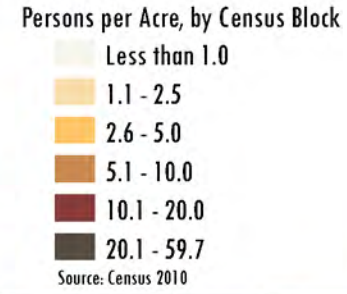
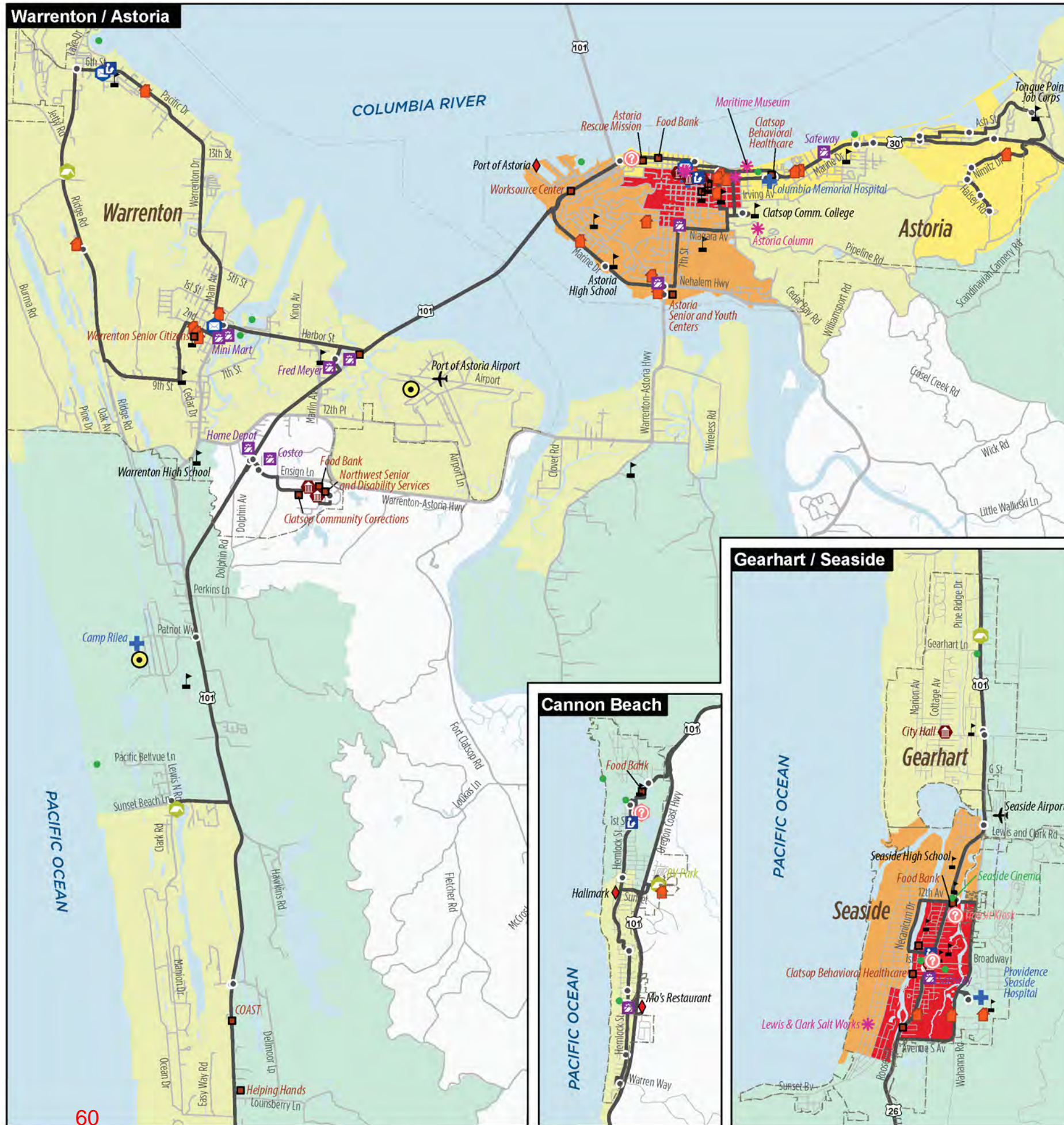


Figure 2-4 Transit Propensity Index Results



**Transit Propensity Index (2009 - 2013)**

Low  
High

\*Transit Propensity Index is based on combined densities of households whose income is less than 185% of poverty line, persons with disabilities, older adults aged 65+, youth aged 10 through 17, and zero vehicle households  
Data Source: U.S. Census Bureau, 2009-2013 American Community Survey 5-Year Estimates

|                              |                        |                              |
|------------------------------|------------------------|------------------------------|
| ✈ Airport                    | ♦ Major Employer       | 🏕 Campground                 |
| 🎓 Education                  | 👤 Coast/National Guard | 🌳 Recreation                 |
| 🏛 Government                 | 📖 Library              | 🌸 Attraction                 |
| 🏠 Social Services            | 🏥 Medical              | 📍 Information                |
| 🛒 Grocery/Shopping           | 📧 Post Office          | —●— Transit Routes and Stops |
| 🏠 Multifamily/Senior Housing |                        | ▭ City Boundaries            |



## TRAVEL PATTERNS

### General Flows

Travel demand model data provide information about the overall size of travel markets. Figure 2-5 provides trip origin-destination data from the Astoria-Warrenton Travel Demand model for the average weekday in a future year of 2035. It indicates that:

- Most of the travel in the Astoria-Warrenton area is either within or between Astoria and Warrenton.
- The U.S. 101 corridor, serving south Clatsop County, is a significantly larger travel market than the U.S. 30 corridor east of Astoria.
- Nearly 3,900 round trips occur between Pacific County and the Astoria/Warrenton area.

In addition, the model projects 2,150 projected round trips between the Miles Crossing area along US 101 Business and Astoria/Warrenton in the peak summer season, with the Astoria end of the corridor carrying approximately 1.5 times as many trips as the Warrenton end.

Figure 2-5 Trip Origin-Destination Pairs, Average Weekday, 2035

| From   To                  | Astoria | Warrenton | U.S. 101 South | Astoria-Megler (WA) Bridge | U.S. 30 East |
|----------------------------|---------|-----------|----------------|----------------------------|--------------|
| Astoria                    | 30,812  | 7,171     | 1,645          | 3,150                      | 1,608        |
| Warrenton                  | 7,175   | 11,744    | 3,278          | 737                        | 278          |
| U.S. 101 South             | 1,645   | 3,278     | -              | 1,299                      | 1,333        |
| Astoria-Megler (WA) Bridge | 3,150   | 737       | 1,299          | -                          | 272          |
| U.S. 30 East               | 1,608   | 278       | 1,341          | 268                        | -            |

Source: Astoria-Warrenton Travel Demand Model

### Work Flows

According to U.S. Census Bureau Longitudinal Employer-Household Dynamics (LEHD) data, nearly half of Clatsop County residents work within the county (46%), and relatively few travel to adjacent coastal counties for work. Approximately 8% of county residents work in Portland, 2.2% work in Salem, and almost 2% work in Hillsboro. Approximately 56% of Clatsop County workers live outside the county. The largest concentrations of commuters from outside the county travel from Portland (2.1%) and Longview (1.1%).

Many of the county’s largest employers are located in the northern part of the county and within city limits. Large employers listed in Figure 2-6 represent a range of industries, including logging, medical services, higher education, and government. Although not represented among the largest employers, tourism is a major industry in the county, particularly in coastal areas. The retail and leisure/hospitality sectors are both the largest and the fastest growing employment categories.<sup>1</sup>

<sup>1</sup> Oregon Employment Department, <https://www.qualityinfo.org/northwest-oregon>

Figure 2-6 Large Employers in Clatsop County

| Employer                    | Location   | Employer                      | Location |
|-----------------------------|------------|-------------------------------|----------|
| Georgia Pacific/ Wauna Mill | Clatskanie | Tongue Point Job Corps Center | Astoria  |
| Columbia Memorial Hospital  | Astoria    | Clatsop Community College     | Astoria  |
| Providence Seaside Hospital | Seaside    | City of Astoria               | Astoria  |
| Clatsop County              | Astoria    | Clatsop Care Center           | Astoria  |
| Fred Meyer                  | Warrenton  | Bornstein Seafoods            | Astoria  |

Source: NW Oregon Transit Alliance Regional Transit Program, Market Analysis Report, May 2012

The major concentrations of employment in the county are generally located in proximity to transit. However, transit hours of operation and schedules may not be matched to employee shift times. A cluster of large retailers are located in Warrenton (including Costco, Fred Meyer, Home Depot, and a future Walmart location) which is both an employment and retail destination. Existing transit service, however, ends at 10 p.m. while stores like Fred Meyer are open until 11 p.m., meaning schedules do not match employee shift times. At the same time, providing public transportation in a small community later than 10 p.m. is fairly rare, and the community must weigh the cost of providing service with potential ridership served.

**Clatsop County Mode Share**

A total of 1.6% of Clatsop County workers take public transit to work. This is about a quarter of the statewide average, but compared to other counties in the Northwest Connector alliance, Clatsop Counties transit mode share is higher than Columbia and Tillamook Counties (0.9%), about the same as Lincoln County (1.7%), and slightly lower than more urban Benton County (2.4%).

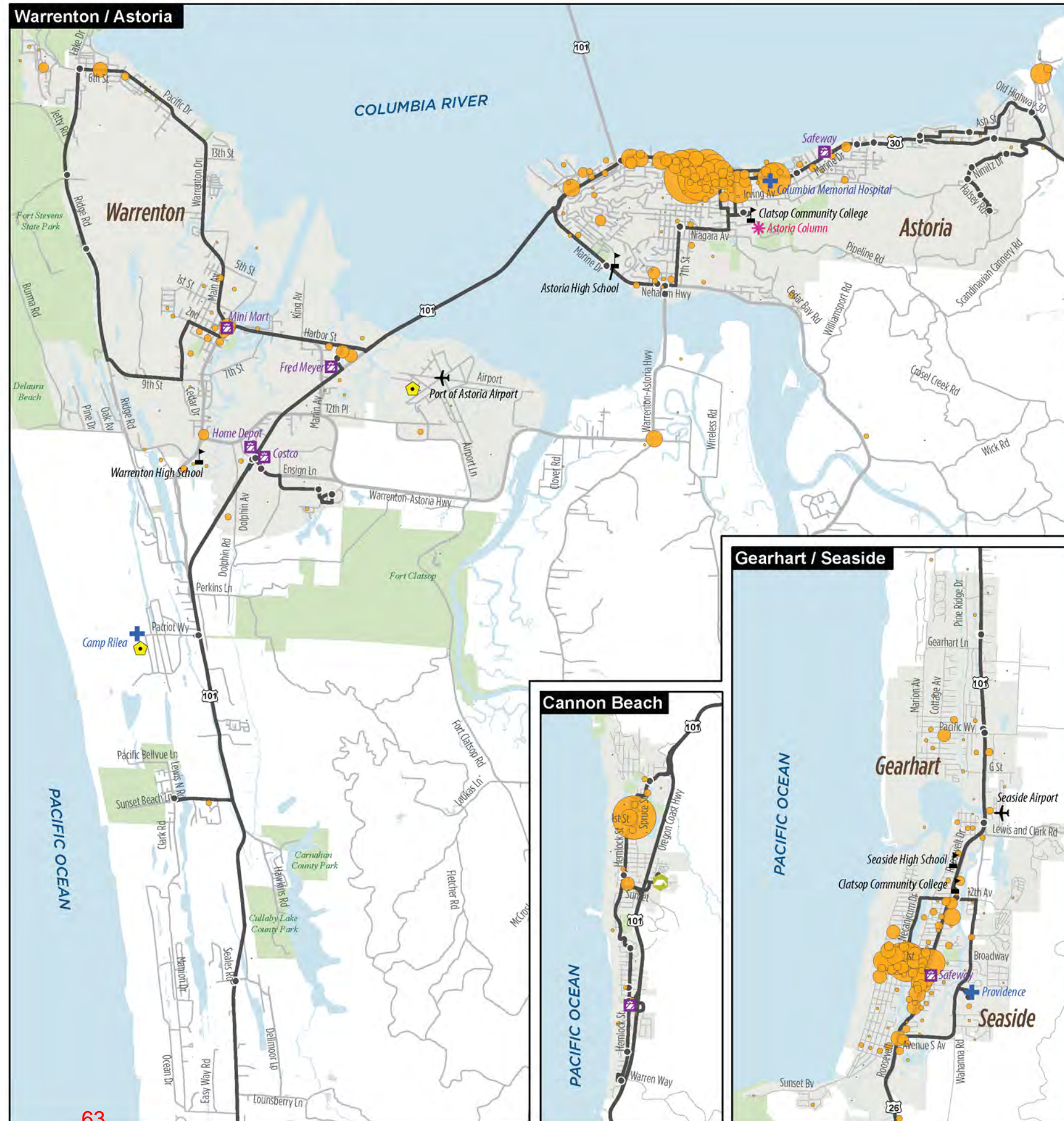
A slightly smaller share of Clatsop County residents drive alone to work than the statewide average (71% versus 72%), but higher than average shares of workers carpool (13% versus 10%) and walk to work (7% versus 4%). This may indicate that workers would be willing to consider and use transit for commuting if it served workers at the times and locations they need. Clatsop County also has a slightly larger than average percent of the population who works from home, particularly in Cannon Beach – 14% versus the statewide average of 6%.

**Employee Work and Home Locations**

Figure 2-7 and Figure 2-8 show the more detailed work and home locations of those employed in Clatsop County to see if transit can serve local employment needs. Figure 2-7 shows that Clatsop County jobs are located primarily in the communities along U.S. 30, U.S. 101, and in the Warrenton area. Major employment centers and work locations are generally served by transit routes, although there are exceptions such as Miles Crossing, Warrenton High School, and west of U.S. 101 in Gearhart or Seaside.

Figure 2-8 shows that home locations of Clatsop County workers are generally clustered within communities and often near a transit line. The exception is along OR 202 (Nehalem Highway), where clusters of residents live, but currently lack transit service. In Seaside, many workers live several blocks west of the U.S. 101, beyond a convenient walk to transit.

Figure 2-7 Work Locations of Clatsop County Residents



**Where Workers who Live in Clatsop County Work (2011)**

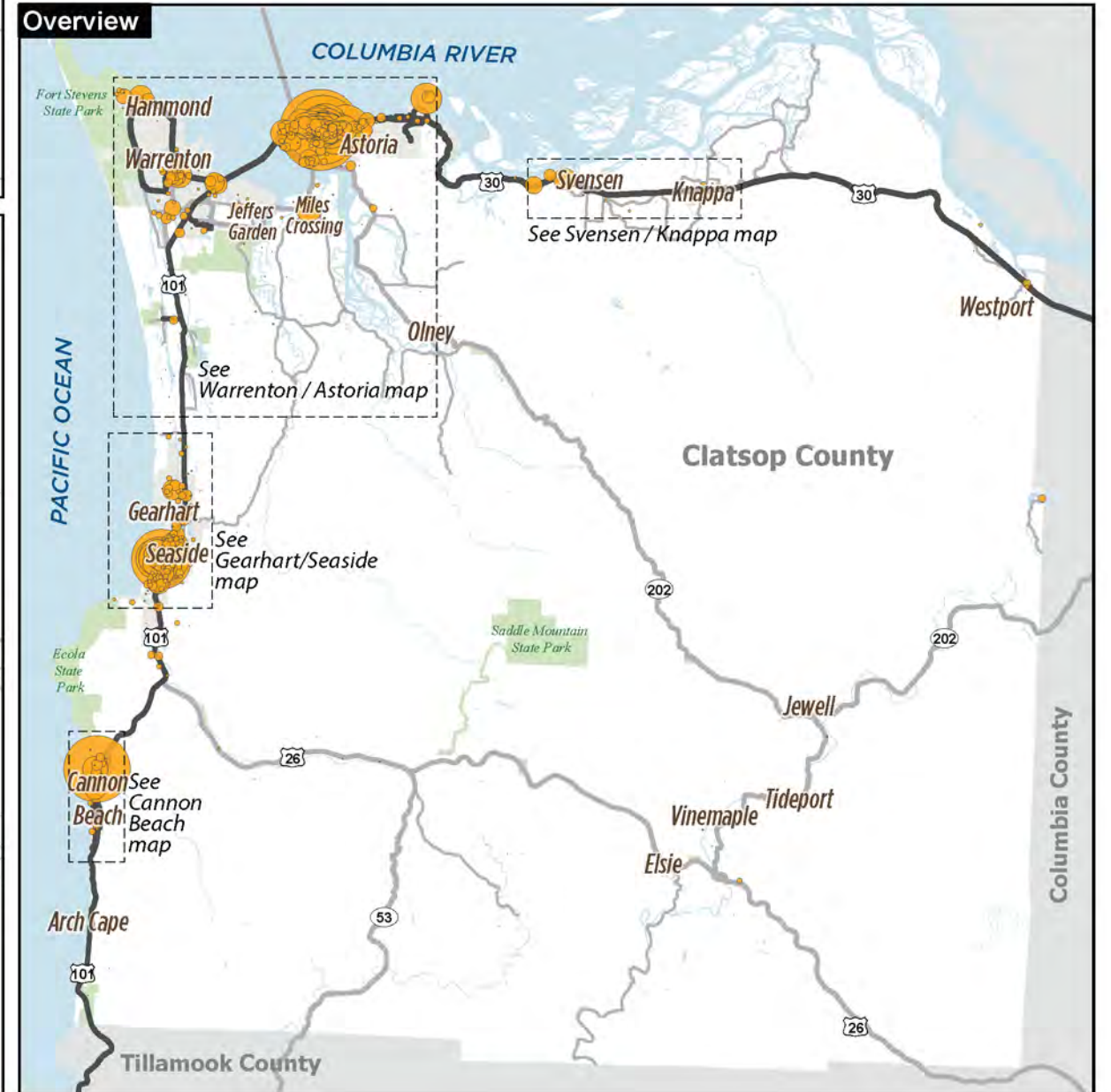
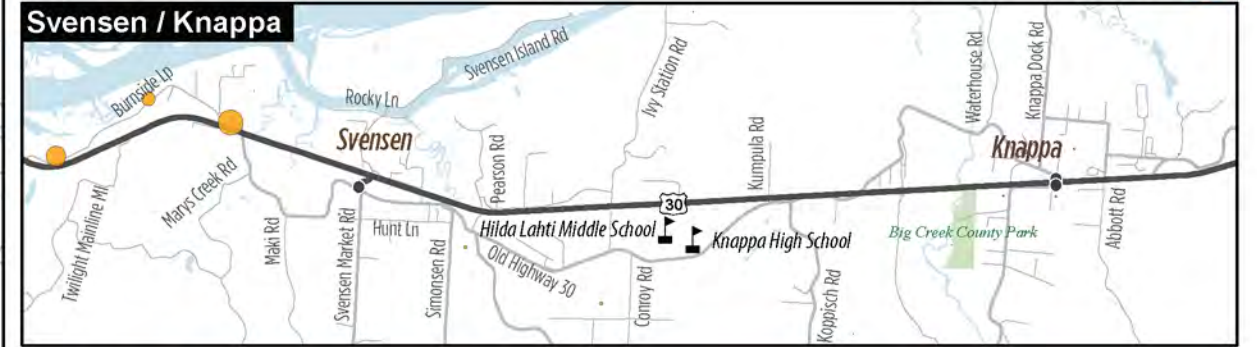
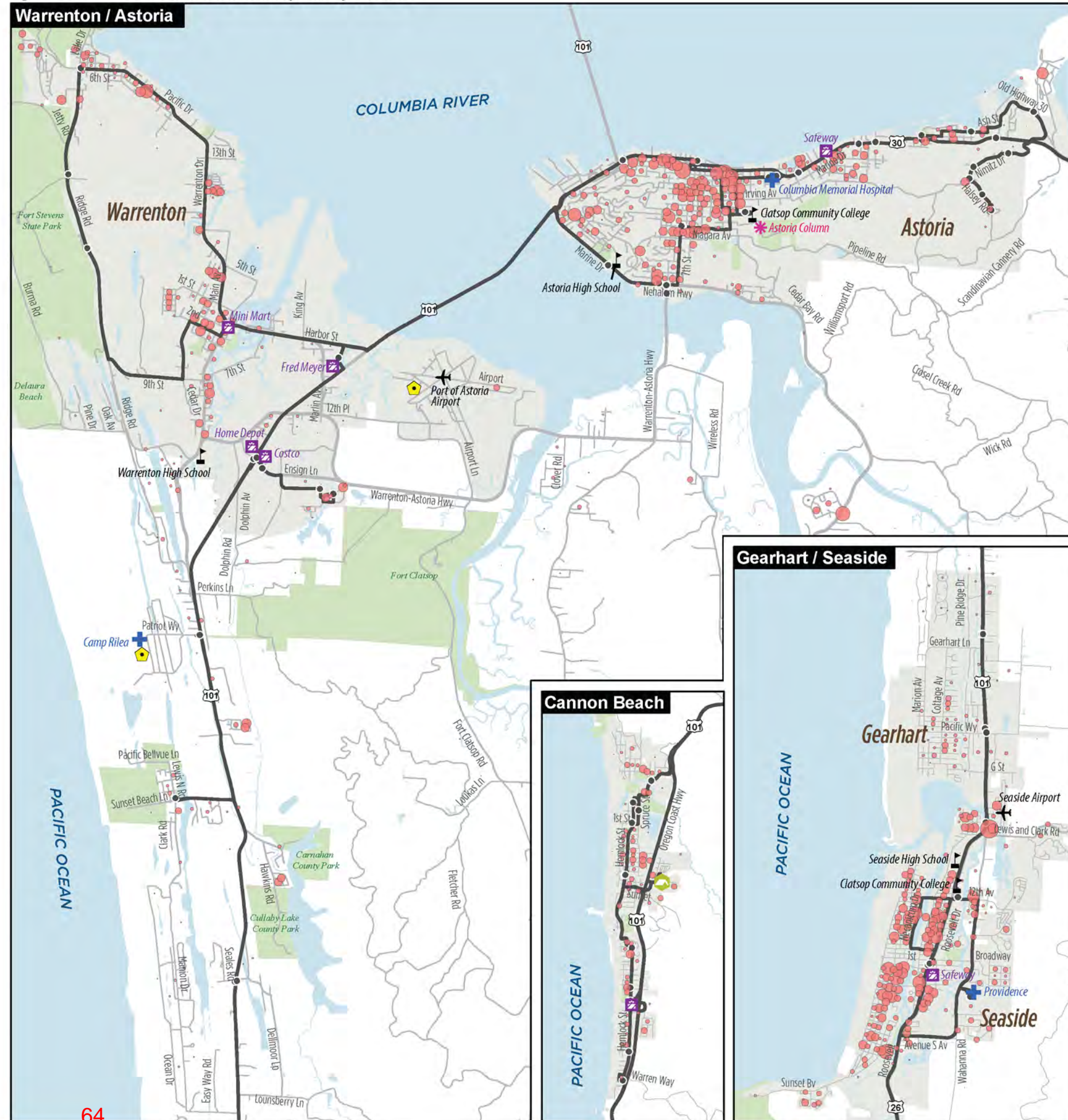
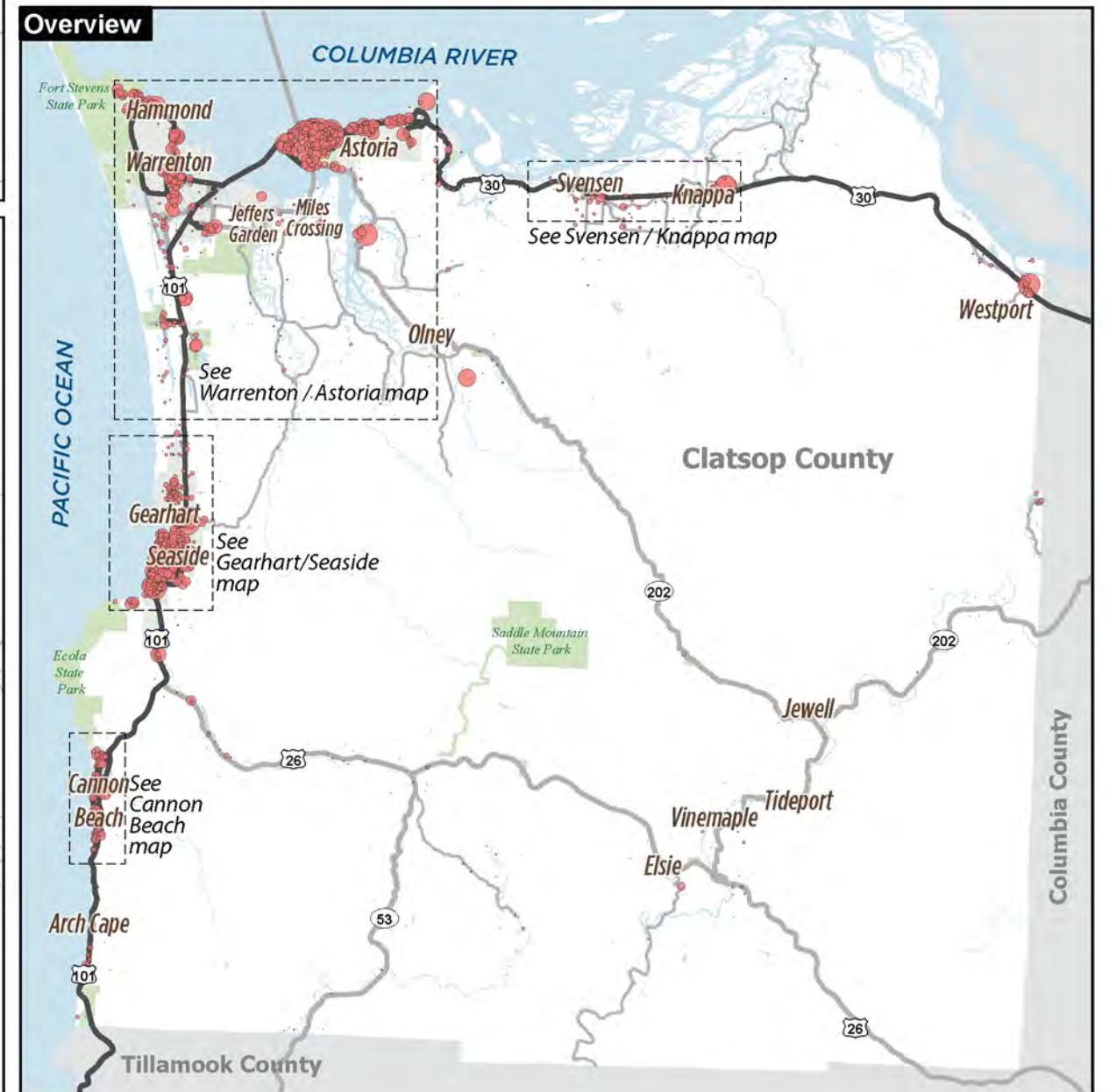
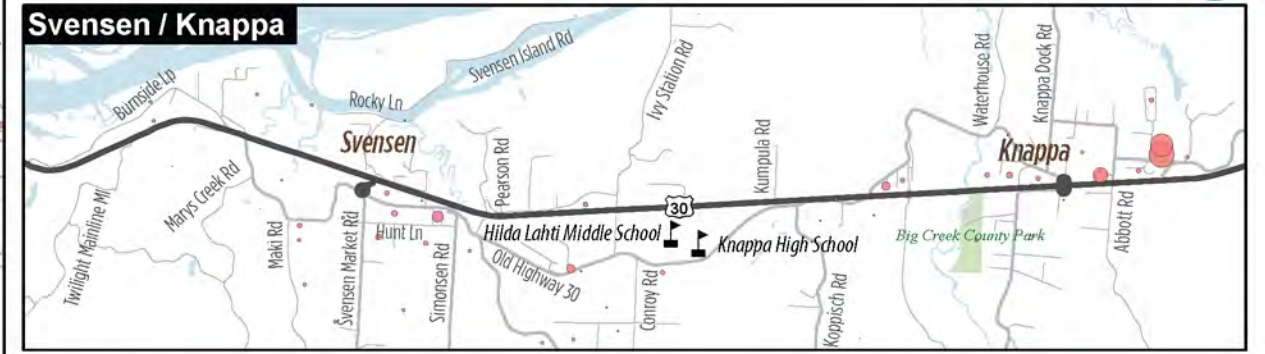


Figure 2-8 Home Locations of Clatsop County Workers



**Where Workers who Work in Clatsop County Live (2011)**





## COMMUNITY DESTINATIONS

Major destinations in Clatsop County attract all users for daily or occasional needs. These include educational institutions (e.g., Clatsop Community College, Tongue Point Job Corps, MERTS), recreational parks and historic landmarks, medical services, jobs, shopping, and housing.<sup>2</sup>

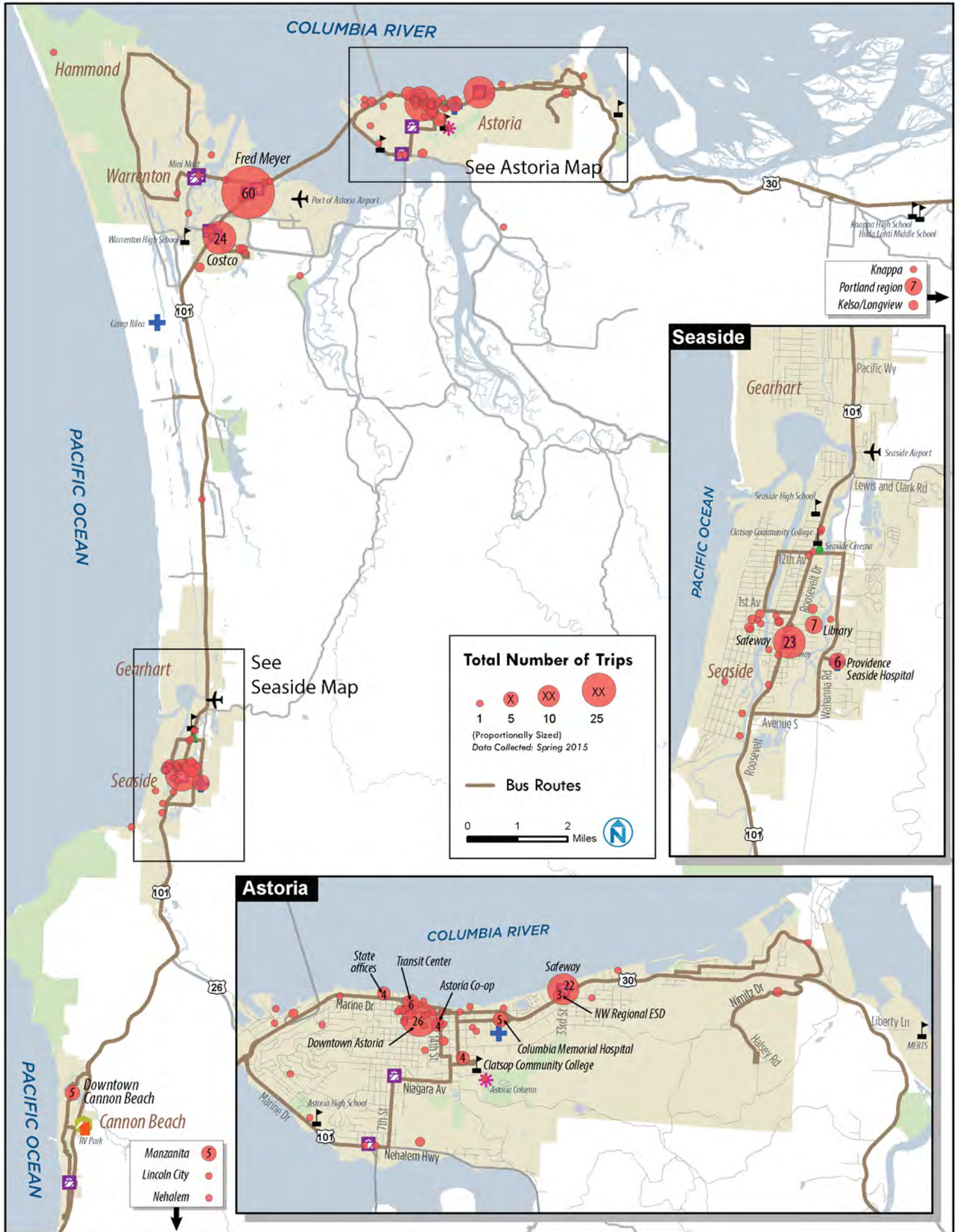
### Community Survey

An initial survey of the overall community was conducted to understand travel patterns. A total of 144 responses were collected during this first survey effort. Respondents were asked to list their top three destinations and current mode of access to these places (Figure 2-9). While most of the destinations in Astoria lie along the fixed-route network, several destinations in the interior of the city are not currently covered by transit. In Seaside, destinations south of 1<sup>st</sup> Avenue and west of U.S. 101 are not served by transit. In Warrenton, stretches of the Fort Stevens Highway south of the Mini Mart to Warrenton High School are currently not served.

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<sup>2</sup> Data sources include ESRI, Clatsop County, an inventory compiled for the Clatsop County TSP, and additional activity centers compiled by the project team from websites and other sources.

Figure 2-9 Community Destinations



## TRANSIT RIDER FLOWS

SETD staff conducted a survey of current riders aboard buses in May and July 2015 to capture a typical weekday and weekend schedule during both the year-round and summer tourist season. In addition, SETD staff tracked boardings and alightings by stop and tracked on-time performance.

### Trip Origins and Destinations

Passengers were asked where they started and will end their trip. Figure 2-10 illustrates travel patterns between and within communities. Trips starting and ending in Astoria comprised the highest share of trips. Aside from trips between Warrenton and Astoria, few respondents from outside Astoria named Astoria as their final destination; however, numerous regional trips started in Astoria. Trips within Seaside and Cannon Beach—as well as trips between Seaside and Cannon Beach—also comprised a high share of trips. Some respondents reported traveling as far as Kelso, Ilwaco, and Tillamook.

A handful of people used SETD to travel just within Cannon Beach, where most destinations are clustered along Hemlock Street west of U.S. 101. The town's 3-mile length makes Cannon Beach well-suited for use of transit in-town, since destinations may be too far to walk between. Cannon Beach also has a high percentage of older adults.

Figure 2-11 shows origin and destination locations in more detail for the May survey. In most cases, passengers are starting or ending their trips fairly close to the bus routes. The exception is in Gearhart and Seaside, where some respondents reported going to destinations well off of U.S. 101.

Taken together, these travel pattern data reveal common destinations shared by all users (Safeway Astoria, Fred Meyer, Downtown Astoria, Downtown Seaside, Clatsop Community College, Costco, and Downtown Cannon Beach) as well as destinations unique to transit riders (Emerald Heights, Tongue Point, Astoria Transit Center, Peter Pan, Downtown Warrenton, Hammond, Sunset Beach, Short Stop).

Figure 2-10 Transit Rider Origin and Destination Pairs by Community (May 2015)

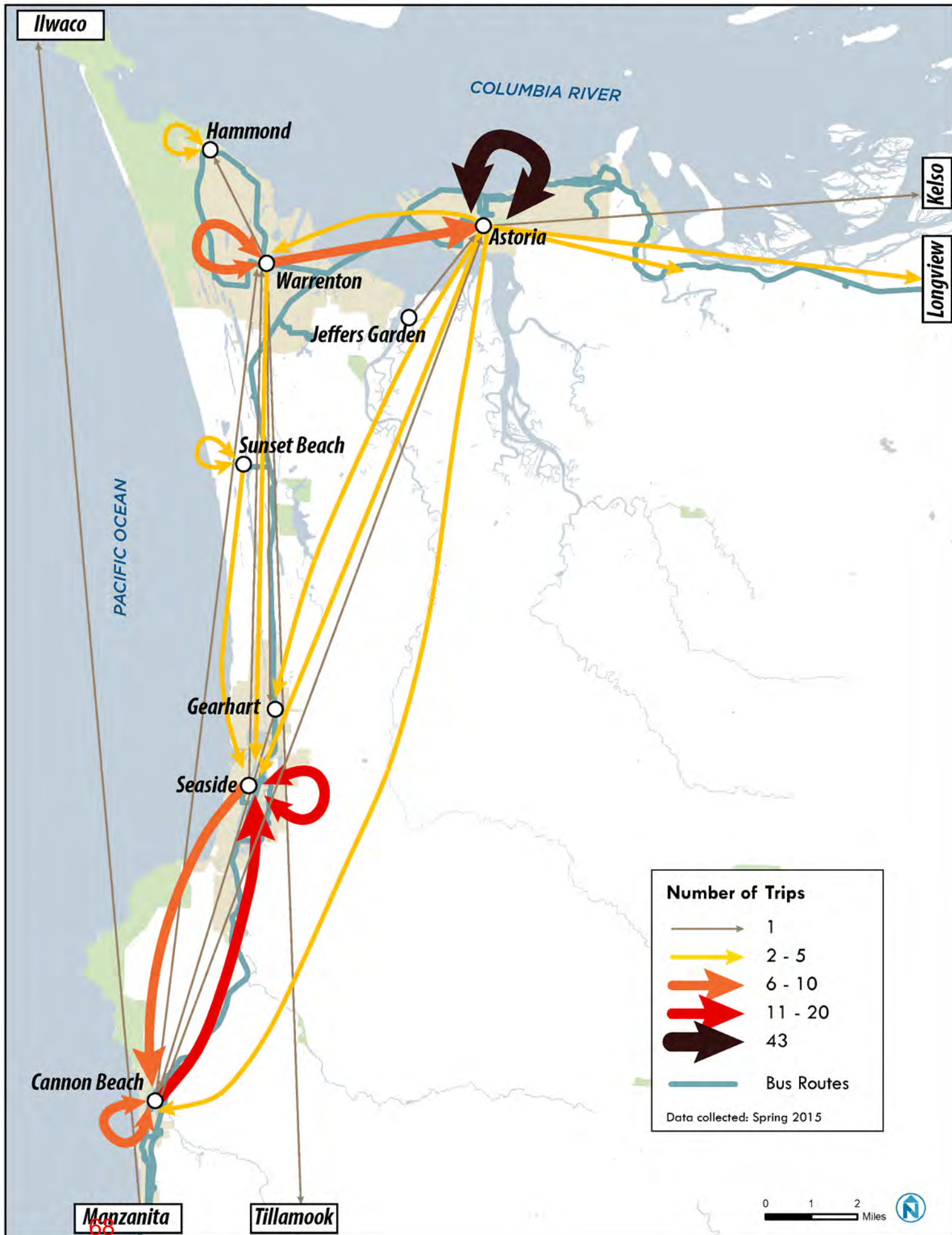
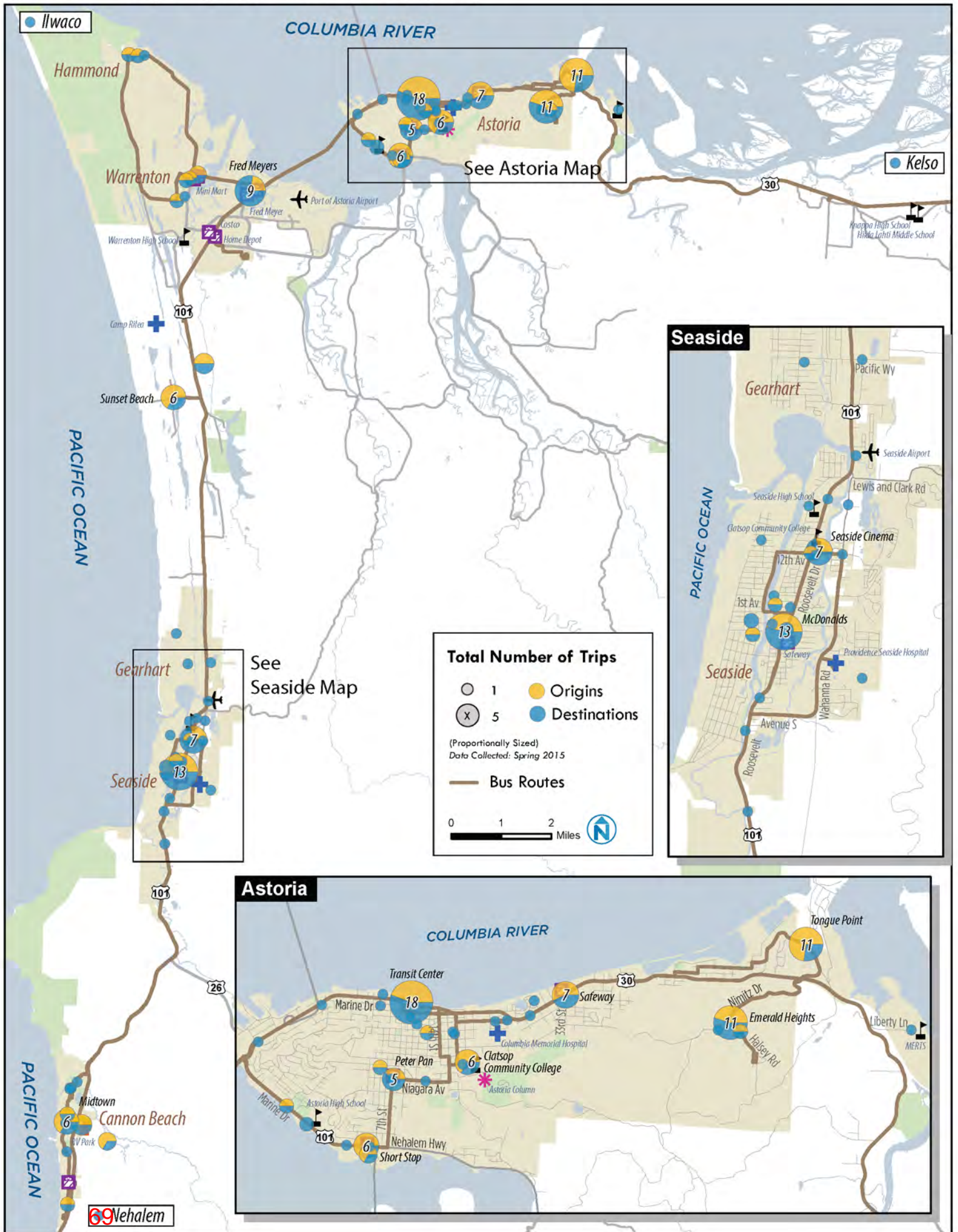


Figure 2-11 Transit Rider Origins and Destinations (May 2015)



## LAND USE

The best transportation plan is a land use plan. Transit cannot succeed without a concentration of residents, jobs and/or customers, and how population moves itself is based entirely on land use. The location of homes, jobs, grocery stores, shopping malls, and other destinations determines how easily a person can access places, the length of the trip, and the directness of the route. Greenfield development, destinations far from main roads, and low-density zoning all inhibit transit’s success. The zoning code, comprehensive plan language, and development review process ultimately have the power to link land use and transportation. See Volume II Section E for more details on land use codes and policies.

Figure 2-12 Density and Level of Transit Service Supported



## Zoning

Clatsop County’s Comprehensive Plan guides land use and development in coordination with the community plans of each urban area. Each city’s Comprehensive Plan and associated zoning code create zoning text and maps that identify land uses and an Urban Growth Boundary (UGB). The UGB demarcates land appropriate for annexation and urban development based upon a 20-year population projection.

Local development codes describe the characteristics of the zoning categories throughout Clatsop County. Broad categories include several types of residential zones, non-residential zones such as commercial or industrial, and mixed-use zones allowing both residential and non-residential uses to be combined on a site. As a county with several parks and oceanic resources, zoning for aquatic conservation and wetlands is also common. In general, the largest communities of Clatsop County include some high-density residential, commercial areas, retail districts, and low-density housing.

Figure 2-13 shows residential densities allowed in the zoning codes. Astoria’s density metrics all meet or exceed thresholds for 60-minute service, as do most of the moderate or higher density metrics in other jurisdictions (the exception is the intermediate-density zone in Warrenton).

Figure 2-13 Residential Land Use Types by City (Clatsop County)

| City                      | Residential Land Use Type              | Density  |
|---------------------------|--|--|
| Astoria <sup>3</sup>      | R1 – Low Density Residential Zone      | 8 units / acre   |
|                           | R2 – Medium Density Residential Zone   | 16 units/acre  |
|                           | R3 – High Density Residential Zone     | 26 units/acre  |
|                           | CR – Compact Residential Zone          | 24 units/acre  |
| Warrenton <sup>4</sup>    | R-40: Low Density Residential          | >10,000 sq ft/lot [approx 4 units/acre];<br>>40,000 sq ft/lot (with on-site sewage)  |
|                           | R-10: Intermediate Density Residential | >10,000 sq ft/lot [approx 4 units/acre]  |
|                           | R-M: Medium Density Residential        | >7,000 sq ft/single-family detached;<br>[approx. 6 units/acre]<br>>2,500 sq ft/single-family attached<br>[approx. 17 units/acre] |
|                           | R-H: High Density Residential          | 5 units/acre   |
| Seaside <sup>5</sup>      | R-1: Residential Low Density           | 5 units/acre   |
|                           | R-2: Residential Medium Density        | 10 units/acre  |
|                           | R-3: Residential High Density          | 20 units/acre  |
| Cannon Beach <sup>6</sup> | RVL: Residential Very Low Density Zone | 1 unit/acre  |
|                           | RL: Residential Lower Density Zone     | 4 units/acre   |
|                           | R1: Residential Moderate Density Zone  | 8 units/acre   |
|                           | R2: Residential Medium Density Zone    | 11 units/acre  |
|                           | R3: Residential High Density Zone      | 15 units/acre  |

### Transit-Supportive Code

Linking land use and transportation requires folding transit considerations into business as usual – development review, zoning update, and comprehensive plan policies.

### Zoning

A scan of zoning codes reveals little support for transit in current land use policies. No mention of transit is included in Seaside or Cannon Beach codes. Astoria code includes transit integration in Article 7, related to parking:<sup>7</sup>

- In lieu of providing on-street parking, a development could pay the city (\$180 per year) that the city could put toward transit

<sup>3</sup> City of Astoria Development Code, Article 2, Use Zones.

<sup>4</sup> City of Warrenton Development Code, Title 16.

<sup>5</sup> Code of Ordinances of the City of Seaside, Chapter 158, Zoning Ordinance. Updated September 2004.

<sup>6</sup> Zoning Ordinance of the City of Cannon Beach. As amended through January 2011.

<sup>7</sup> City of Astoria Development Code / Zoning Ordinances.

- Off-street parking reductions if adjacent to bus stop served by 15-min or better service

Additional code language presents opportunities to fully integrate all modes into land use decisions. Strategies such as shared parking (to allow for park and ride), bike parking, street-fronting design, mixed-uses, and others can be explored.

### **Comprehensive Plan Policies**

An assessment of comprehensive plan policies was conducted to determine how well planning documents meet the following three best practices for transit-supportive policies:

- Reflect the objectives and recommendations from the SETD Transportation Plan;
- Provide consistency with State transportation planning rules related to transit; and
- Generally support and promote transit in communities within the SETD service area.

The assessment includes the primary jurisdictions in the SETD service area, including Clatsop County, Astoria, Warrenton, and Seaside. Guidance for recommended policy language is also applicable to smaller communities throughout the county. Gearhart, for example, has just begun an update to its Transportation System Plan (TSP), and incorporate recommended policies into that process. Existing policies were compared against 11 recommended policies drawn from the Oregon Transportation Planning Rule (TPR) and other local TSPs. The number of goals and objectives addressing each recommended policy was noted to understand policy consistency across jurisdictions (Figure 2-14).

Overall, some degree of consistency exists between jurisdictions' existing policies and the policies recommended in Figure 2-14; however, in most cases policy language offers general rather than direct guidance supporting transit.

In the larger jurisdictions (Clatsop County, Astoria, Warrenton), policies are more comprehensive than smaller jurisdictions. Even so, existing policies do not provide the level of specificity and direction that the recommended policies provide. Clatsop County and Astoria completed updates of their TSPs in 2015 and 2013, respectively, Warrenton is in the process of updating its TSP, and Gearhart has just begun the process.

Seaside and Cannon Beach have less extensive transit-related policies. Seaside policies are broad and general regarding multimodal transportation and transit, while Cannon Beach policies are minimal overall. Seaside's TSP was updated in 2010, and may possibly undergo an update in the next five years. Cannon Beach has been seeking funding for a TSP update.



Sunset Empire Transportation District

Figure 2-14 Assessment of Policy Consistency

| Recommended Policy   | Clatsop County <sup>8</sup>                         | Astoria <sup>9</sup>  | Warrenton <sup>10</sup>  | Seaside <sup>11</sup>                                    | Cannon Beach <sup>12</sup> |
|--|---|---|--|--|----------------------------|
| 1. The [City/County] will facilitate provision of transit service to its community members, with special attention to members who may be classified as “transit dependent” due to factors such as age, income, or disabilities.  | Goal 4<br>Policy 4b<br>Policy 9d                    | Goal 1, Objective 2<br>Goal 2<br>Goal 2, Objective 5<br>Goal 5<br>Goal 5, Objective 1 | Goal 1<br>Goal 1, Objective 5<br>Goal 4<br>Goal 4, Objective 2<br>Goal 6<br>Goal 6, Objectives 1, 2, and 3 | Goal 2<br>Goal 3<br>Goal 3, Policy 2                     | Policy 9                   |
| 2. The Sunset Empire Transportation District Long Range Comprehensive Transportation Plan provides the policy and implementation direction for [City/County] transit planning, which includes route development, financing, and physical improvements necessary to maintain and improve public transit service for [City/County] residents, businesses, and visitors.  | Goal 4<br>Policy 4b<br>Goal 9<br>Policy 9d          | Goal 7<br>Goal 7, Objective 2   | Goal 1<br>Goal 4<br>Goal 4, Objective 2<br>Goal 6<br>Goal 6, Objective 3                                   | Goal 2<br>Goal 3<br>Goal 3, Policy 2<br>Goal 4, Policy 3 | Policy 10                  |
| 3. The [City/County] will work with Sunset Empire Transportation District to appropriately site new transit stops and park-and-ride lots within the [city/county] in support of the district-wide public transit system, with an emphasis on sites that are safe and convenient for riders. Transit improvements within the [city/county] shall be guided by the findings and recommendations of the Sunset Empire Transportation District Long Range Comprehensive Transportation Plan. | Goal 4<br>Policies 4a and 4b<br>Goal 9<br>Policy 9d | Goal 2<br>Goal 5<br>Goal 5, Objective 4<br>Goal 7<br>Goal 7, Objectives 1 and 2       | Goal 3, Objective 2<br>Goal 4<br>Goal 4, Objectives 1 and 2<br>Goal 5, Objective 11<br>Goal 11             | Goal 1<br>Goal 3<br>Goal 3, Policy 2<br>Goal 4, Policy 3 | Policy 10                  |
| 4. The [City/County] will work to Improve safety for transit riders through measures such as providing enhanced  |   | Goal 1  | Goal 4   | Goal 1   | Policy 2                   |

<sup>8</sup> Goals and policies from the Clatsop County Comprehensive Plan, Goals and Policies (Last Amended 2015) currently govern and were referred to.

<sup>9</sup> Goals and objectives from the 2013 Astoria Transportation System Plan, Volume 2, Section D: Memo 3 – Goals, Objectives, and Evaluation Criteria currently govern and were referred to.

<sup>10</sup> Goals and policies from the 2004 City of Warrenton Transportation System Plan currently govern and were referred to. Transportation policies from the City of Warrenton Comprehensive Plan (Last Amended 2011) also govern, but were not found to be relevant to this assessment.

<sup>11</sup> Goals and policies from the 2010 City of Seaside Transportation System Plan currently govern and were referred to. Transportation policies from the City of Seaside Comprehensive Plan (Adopted 1983, Last Amended 1996) also govern, but were not found to be relevant to this assessment.

<sup>12</sup> Policies from the City of Cannon Beach Comprehensive Plan (Last Amended 2012) currently govern and were referred to.

Sunset Empire Transportation District

| Recommended Policy  | Clatsop County <sup>8</sup>                             | Astoria <sup>9</sup>   | Warrenton <sup>10</sup>   | Seaside <sup>11</sup>  | Cannon Beach <sup>12</sup> |
|---|---|--|---|--|----------------------------|
| <i>roadway crossings, restricting transit stops from being sited where there are existing driveways, and restricting driveways from being located near an existing or planned transit stop.</i>   |   | Goal 1, Objective 2  | Goal 4, Objective 2<br>Goal 11<br>Goal 11, Objectives 2 and 3   | Goal 1, Policy 2   | Policy 10                  |
| <i>5. The [City/County] will participate in Sunset Empire Transportation District's efforts to promote and implement rideshare (e.g., carpool/vanpool) programs for reducing commuter vehicular travel demand on US 101. The [City/County] will establish development requirements that provide preferential parking for ridesharing and allow parking areas to be used for park-and-ride/rideshare facilities.</i> | Goal 4<br>Policy 4a<br>Goal 9<br>Policy 9d              | Goal 2<br>Goal 5<br>Goal 5, Objectives 1 and 4<br>Goal 7<br>Goal 7, Objectives 1, 2, and 3 | Goal 4<br>Goal 4, Objective 1<br>Goal 8, Objective 1  | Goal 3<br>Goal 3, Policies 1 and 2<br>Goal 4                     | Policy 10                  |
| <i>6. The [City/County] will support increased opportunities for local and regional public transit routes and facilities.</i>   | Goal 4<br>Policies 4b and 4c<br>Goal 5<br>Policy 9d     | Goal 2<br>Goal 5<br>Goal 5, Objectives 1 and 4<br>Goal 7<br>Goal 7, Objectives 1, 2, and 3 | Goal 1, Objective 5<br>Goal 4<br>Goal 4, Objectives 2, 3, and 4<br>Goal 6, Objective 1<br>Goal 8, Objective 1 | Goal 3<br>Goal 3, Policies 1 and 2<br>Goal 4<br>Goal 4, Policy 3 | Policy 1<br>Policy 10      |
| <i>7. The [City/County] will invite transit service providers to participate in the review of land use applications that may have implications for transit service.</i>   | Goal 9<br>Policy 9d                                     | Goal 7<br>Goal 7, Objectives 1 and 2   | Goal 8, Objective 1   | Goal 3, Policy 2   | None                       |
| <i>8. The [City/County] will provide or will require development to provide improvements such as pedestrian and bicycle connections, shelters, and/or lighting to complement transit service and encourage higher levels of transit use. Transit stop improvements shall be coordinated with the transit service provider.</i>  | Policy 3e<br>Goal 4<br>Policy 4c<br>Goal 5<br>Policy 5a | Goal 2<br>Goal 3, Objective 7<br>Goal 5, Objective 4<br>Goal 7<br>Goal 7, Objective 2      | Goal 7, Objective 2<br>Goal 8, Objective 1<br>Goal 11, Objectives 2 and 3                                     | Goal 3<br>Goal 3, Policy 2<br>Goal 4<br>Goal 4, Policies 2 and 3 | Policy 10                  |
| <i>9. The [City/County] will target improvements to the [City's/County's] pedestrian environment, including lighting, landscaping, public art, marked and protected crossings, and curb ramps, to improve conditions for and encourage walking and to promote transit.</i>  | Goal 3<br>Policies 3a and 3c<br>Goal 4<br>Policy 4c     | Goal 2<br>Goal 3, Objectives 6 and 7<br>Goal 4, Objectives 4 and 5                         | Goal 5, Objective 11<br>Goal 8, Objective 1<br>Goal 11, Objectives 2 and 3                                    | Goal 3<br>Goal 3, Policy 2<br>Goal 4<br>Goal 4, Policies 2 and 3 | Policy 10                  |

Sunset Empire Transportation District

| Recommended Policy   | Clatsop County <sup>8</sup> | Astoria <sup>9</sup>                              | Warrenton <sup>10</sup>   | Seaside <sup>11</sup> | Cannon Beach <sup>12</sup> |
|--|-----------------------------|---|---|-----------------------|----------------------------|
| <i>10. The [City/County] will support higher-density and mixed land use around transit stops to make transit service more feasible and effective.</i>  | Policy 7d                   | Goal 3, Objective 5<br>Goal 5, Objectives 1 and 4 | Goal 1, Objective 7<br>Goal 7, Objective 2<br>Goal 8, Objective 2 | Goal 3, Policy 2      | Policy 10                  |
| <i>11. In lower-density areas, the [City/County] will support park-and-ride/rideshare facilities, demand-responsive transit services, and other facilities and services that are appropriate where it is less feasible to serve the area with fixed-route transit.</i> | Policy 4a                   | Goal 3, Objective 5<br>Goal 5, Objectives 1 and 4 | Goal 7, Objective 2<br>Goal 8, Objective 2                        | Goal 3, Policy 2      | Policy 10                  |

## Development Code

Development code requirements can support transit-related improvements in several areas such as:

- Coordination with transit agencies. The transit agency needs to be “at the table” during all stages of the development review process.
- Access to transit & Transit-supportive facilities. Every bus passenger is a pedestrian or a bicyclist at some point during the trip. Access to bus stops supports transit but also makes walking and bicycling safer and more comfortable for all Clatsop County residents.
- Multimodal elements (vehicle parking, bicycle parking, urban form). Every community strives to find the balance between providing space for access (e.g. parking, staying) and space for mobility (movement). Access elements must also be balanced between modes. A comprehensive approach to transit must include consideration of how other modes of transportation access a development site.

An assessment of each jurisdiction’s development code language in terms of consistency with recommended language (yes – addressed; partial – somewhat addressed; no – not addressed) highlights opportunities to achieve TPR transit-related benchmarks. Recommended language was pulled from the State of Oregon Transportation and Growth Management Model Development Code for Small Cities, 3<sup>rd</sup> Edition, and language from peers. The assessment is organized by the four topic areas listed above. Specific code language adaptable to each jurisdiction is provided in Volume II, Section F and G.

Figure 2-15 Assessment of Development Code Consistency

|   | Recommended Code  | Clatsop County <sup>13</sup> | Astoria <sup>14</sup> | Warrenton <sup>15</sup> | Seaside <sup>16</sup> | Cannon Beach <sup>17</sup> |
|---|---|------------------------------|-----------------------|-------------------------|-----------------------|----------------------------|
| Coordination with Transit Agencies          |   |                              |                       |                         |                       |                            |
| 1.  | Pre-application conference – Include SETD at development pre-application conference.                                | Partial                      | Yes                   | No                      | No                    | No                         |
| 2.  | Application review – Specifically call out transit agency among list of agencies notified about application review. | Partial                      | Partial               | Partial                 | No                    | No                         |
| 3.  | Hearing notice – Send hearing notices regarding development applications to SETD.                                   | No                           | Yes                   | Partial                 | No                    | No                         |
| Access to Transit and Supportive Facilities |   |                              |                       |                         |                       |                            |

<sup>13</sup> Clatsop County Land and Water Development and Use Ordinance and Clatsop County Standards Document:  
[http://www.co.clatsop.or.us/sites/default/files/fileattachments/land\\_use\\_planning/page/612/zoning\\_Ordinance\\_80-14\\_codified\\_11-14-15.pdf](http://www.co.clatsop.or.us/sites/default/files/fileattachments/land_use_planning/page/612/zoning_Ordinance_80-14_codified_11-14-15.pdf)  
[http://www.co.clatsop.or.us/sites/default/files/fileattachments/land\\_use\\_planning/page/612/standards\\_document\\_codified\\_11-14-15.pdf](http://www.co.clatsop.or.us/sites/default/files/fileattachments/land_use_planning/page/612/standards_document_codified_11-14-15.pdf)

<sup>14</sup> City of Astoria Development Code:  
<http://www.astoria.or.us/default.asp?pageid=115&deptid=1>

<sup>15</sup> City of Warrenton Municipal Code, Title 16 (Development Code)  
<http://qcode.us/codes/warrenton/>

<sup>16</sup> City of Seaside Zoning Ordinance and City of Seaside Subdivision and Land Partitioning Ordinance  
[http://www.cityofseaside.us/sites/default/files/docs/ZONINGORDINANCE%20MASTER2004\\_0.pdf](http://www.cityofseaside.us/sites/default/files/docs/ZONINGORDINANCE%20MASTER2004_0.pdf)  
<http://www.cityofseaside.us/sites/default/files/docs/Land%20Division%20Ord.%2074-36.pdf>

<sup>17</sup> City of Cannon Beach Municipal Code, Title 16 (Subdivisions) and Title 17 (Zoning)  
<http://www.qcode.us/codes/cannonbeach/>

Sunset Empire Transportation District

|                            | Recommended Code  | Clatsop County <sup>13</sup> | Astoria <sup>14</sup> | Warrenton <sup>15</sup> | Seaside <sup>16</sup> | Cannon Beach <sup>17</sup> |
|----------------------------|---|------------------------------|-----------------------|-------------------------|-----------------------|----------------------------|
| <i>Site Access</i>         |   |                              |                       |                         |                       |                            |
| 4.                         | Access between the site and the street – Connect developments to the street with sidewalks.   | Yes                          | Yes                   | Yes                     | Partial               | No                         |
| 5.                         | Access to transit stop and supportive facilities – Provide direct access from development to transit. This speaks to building entrance orientation, for example (beyond the sidewalk itself). | Partial                      | Partial               | Partial                 | No                    | No                         |
| <i>Area Access</i>         |   |                              |                       |                         |                       |                            |
| 6.                         | Access to transit stops from beyond the site – This addresses the larger access network including connectivity from beyond the development site.  | Yes                          | Yes                   | Yes                     | Partial               | No                         |
| <i>Multimodal Elements</i> |   |                              |                       |                         |                       |                            |
| <i>Vehicle Parking</i>     |   |                              |                       |                         |                       |                            |
| 7.                         | Transit facilities in parking areas - Allow bus stops and park-and-ride in the SETD service area.   | Partial                      | No                    | No                      | No                    | No                         |
| 8.                         | Preferential parking for employee ridesharing – Dedicate carpool or vanpool parking spaces.   | Yes                          | Partial               | No                      | No                    | No                         |
| 9.                         | Maximum parking requirements – Establish parking maximums.  | No                           | Partial               | No                      | No                    | No                         |
| 10.                        | Reduced parking requirements – Reduce parking requirements when development is near transit.  | Yes                          | Yes                   | No                      | No                    | No                         |
| 11.                        | Parking area landscaping – Shield parking lots and integrate landscaping and walking provisions.  | Partial                      | Yes                   | Yes                     | No                    | Partial                    |
| <i>Bicycle Parking</i>     |   |                              |                       |                         |                       |                            |
| 12.                        | Minimum requirements – Require bicycle parking.   | Yes                          | Yes                   | Partial                 | No                    | No                         |
| <i>Urban Form</i>          |   |                              |                       |                         |                       |                            |
| 13.                        | Maximum building setbacks – Establish maximums to enhance walkability.  | No                           | Partial               | Partial                 | Partial               | Partial                    |
| 14.                        | Pedestrian amenities in front yard setbacks – Allow development to build pedestrian amenities in front yard setback.  | No                           | Partial               | Partial                 | No                    | No                         |
| 15.                        | Parking between the building and the street – Parking lots degrade the walking environment; require placement away from the street (e.g. behind the development).                             | Partial                      | Yes                   | No                      | No                    | Partial                    |
| 16.                        | Maximum block length – Short blocks foster walkability and visual interest; establish maximums.   | Partial                      | Yes                   | Partial                 | Partial               | No                         |

## Proposed Development

The major development coming to the region is a Walmart in the North Coast Business Park at US 101 and Ensign Lane (see Figure 2-16).

In general, Walmart stores are major transit attractors. The area already contains several trip generators, including Costco, Goodwill, and Home Depot. Farther east along on Ensign Lane, the Northwest Senior and Disability Services office, Food Bank, and probation office (which will be relocated in 2016) also make this area of Warrenton a major draw.

Lastly, a multi-family development in Miles Crossing has been proposed and will be built contingent upon zoning changes.

Figure 2-16 North Coast Business Park Site Plan



## 3 TRANSPORTATION NETWORK

The network of transportation services available to Clatsop County includes public transportation, as well as the roadway network for walking, bicycling, and driving. Transportation infrastructure guides where and when public transportation can operate.

### SETD TRANSIT SERVICE

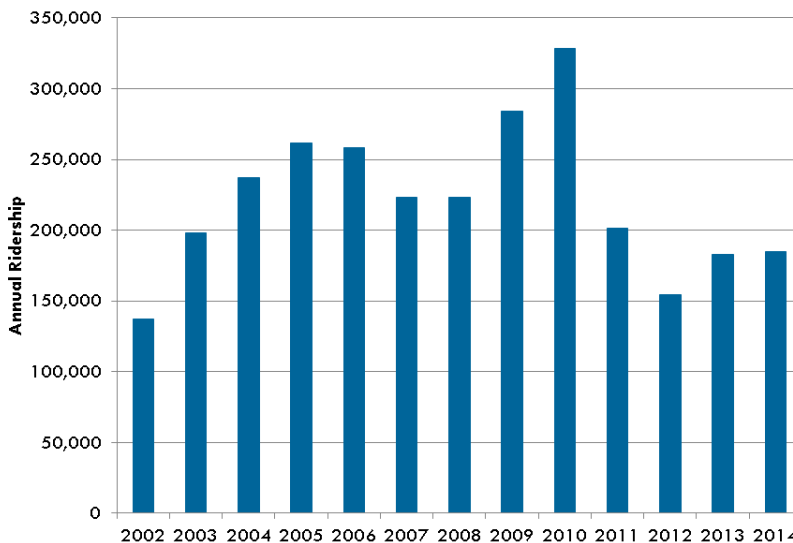
SETD provides public transportation throughout Clatsop County with a combination of fixed-route, ADA Paratransit, and demand-response services. SETD also houses a three-county Medicaid brokerage called RideCare and promotes multimodal transportation options such as carpooling. For detailed information about SETD services, see Volume II, Section B.

#### Fixed-Route

SETD's fixed bus routes operate on a set schedule and alignment. Transit corridors encompass the Astoria to Warrenton/Hammond Area, U.S. 30 east to Rainier, and U.S. 101 south to Cannon Beach. SETD operates five weekday and four weekend routes year-round. During the summer, community transportation needs change drastically, with an influx of tourists along the U.S. 101 corridor and cruise ships that dock in Astoria. SETD adds seasonal routes serving this seasonal market. Figure 3-2 summarizes all the fixed-route services.

SETD overall fixed-route ridership (Figure 3-1) fluctuated during the past 12 years due to financial challenges. Ridership climbed to 330,000 per year in 2010, but after the agency's financial crisis SETD cut service back and ridership dropped. Since then, ridership has climbed back to 180,000 trips per year.

Figure 3-1 Total Annual Fixed-Route Ridership, 2002-2014



Source: Sunset Empire Transportation District

Sunset Empire Transportation District

Figure 3-2 Fixed Route Service Overview

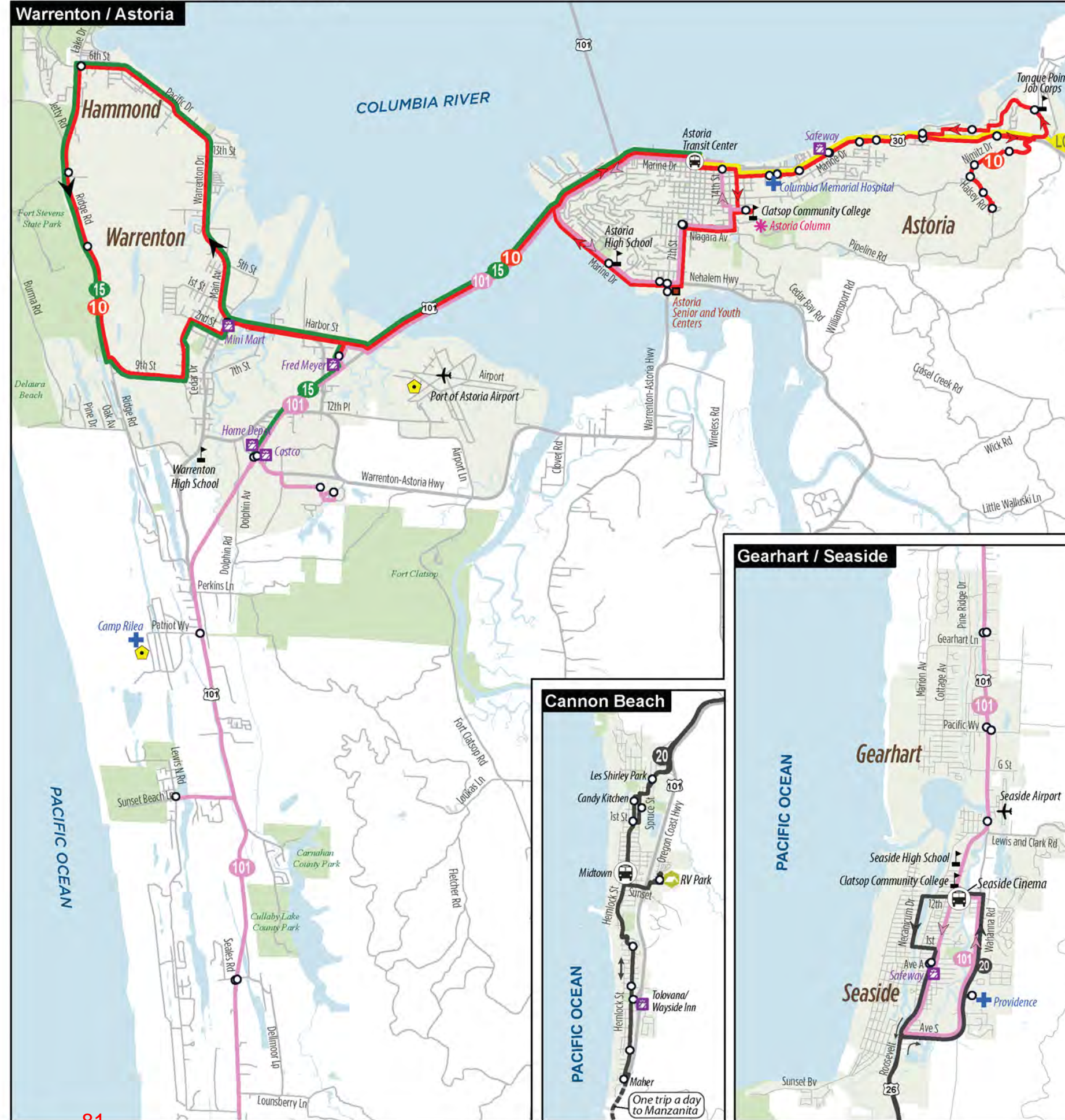
| Route Number or Name                         | Days of Operation | Span of Service                               | Frequency or Number of Daily Trips               | Fare (One-Way)                | Communities Served   |
|--|-------------------|---|--|-------------------------------|--|
| <b>Year-round Service</b>                    |                   |   |  |                               |  |
| 10   | Monday-Friday     | 5:45 a.m. – 9:12 p.m.                         | 60 minutes                                       | \$1                           | Astoria, Hammond, Warrenton  |
| 15   | Monday-Sunday     | 6:00 a.m. – 6:00 p.m.                         | 6 times per day                                  | \$1                           | Warrenton, Hammond, Astoria  |
| 20   | Monday-Friday     | 6:00 a.m. – 8:55 p.m.                         | 60 minutes                                       | \$1                           | Seaside, Cannon Beach, Manzanita [1]   |
| 21   | Saturday-Sunday   | 9:00 a.m. – 12:30 p.m.; 3:00 p.m. – 6:20 p.m. | 30-60 minutes                                    | \$1                           | Cannon Beach, Seaside  |
| 101  | Monday-Friday     | 6:00 a.m. – 9:50 p.m.                         | 60 minutes (except 10 am-12 pm; 12-2 pm; 6-8 pm) | \$1-\$3 depending on distance | Astoria, Warrenton, Gearhart, Seaside, Cannon Beach                            |
| Lower Columbia Connector                     | Monday-Sunday     | 6:45 a.m. – 5:40 p.m.                         | 2 trips  | \$1-\$8 depending on distance | Astoria, Svensen, Knappa, Westport, Clatskanie, Rainier (Transfer to CC Rider) |
| Pacific Connector                            | Saturday-Sunday   | 8:30 a.m. – 5:30 p.m.                         | 3 trips  | \$1-\$4 depending on distance | Astoria, Warrenton, Gearhart, Seaside, Cannon Beach, Manzanita [1]             |
| <b>Seasonal Service (<i>summer only</i>)</b> |                   |   |  |                               |  |
| 11   | Select dates      | Based on cruise ship schedules                |  | Free                          | Astoria  |
| 21   | Monday-Friday     | 11:00 a.m. – 6:00 p.m.                        | 30 minutes                                       | \$1                           | Cannon Beach, Seaside  |
| 12   | Select dates      | Based on cruise ship schedules                |  | Free                          | Astoria, Warrenton; Serves cruise ships but open to general public             |
| Seaside Streetcar Trolley                    | Saturday-Sunday   | 11:00 a.m. – 8:00 p.m.                        | 60 minutes                                       | \$1                           | Seaside  |

Notes: [1] One trip per day on Route 20 serves Manzanita. Two trips per day are possible with a transfer to Tillamook County Transportation District (TCTD) service

Figure 3-3, Figure 3-4, Figure 3-5, and Figure 3-6 display maps of SETD’s weekday, weekend, seasonal weekday, and seasonal weekend routes.



Figure 3-3 Weekday Year-Round System Map



**Transit Service (Weekday)**

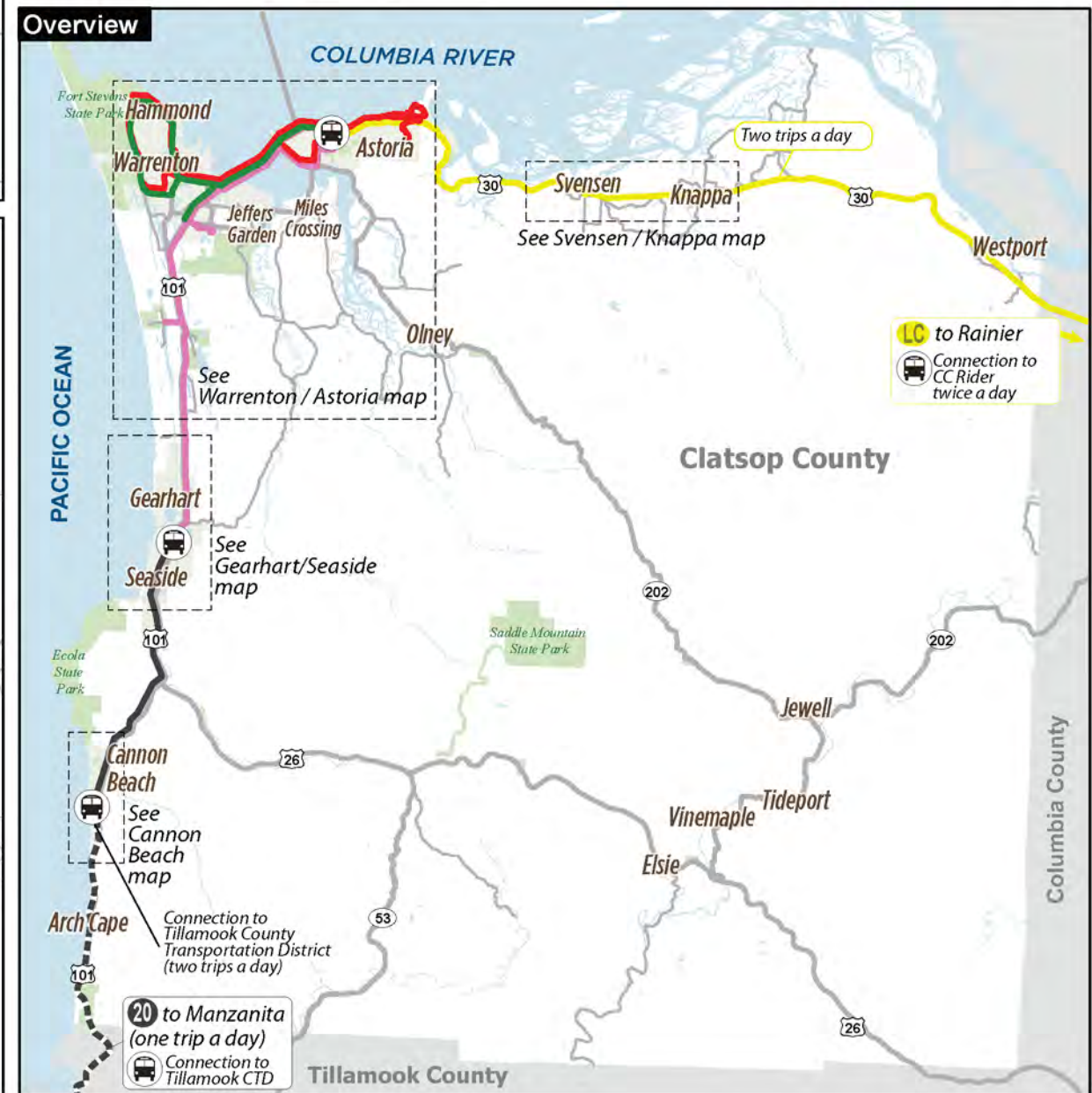
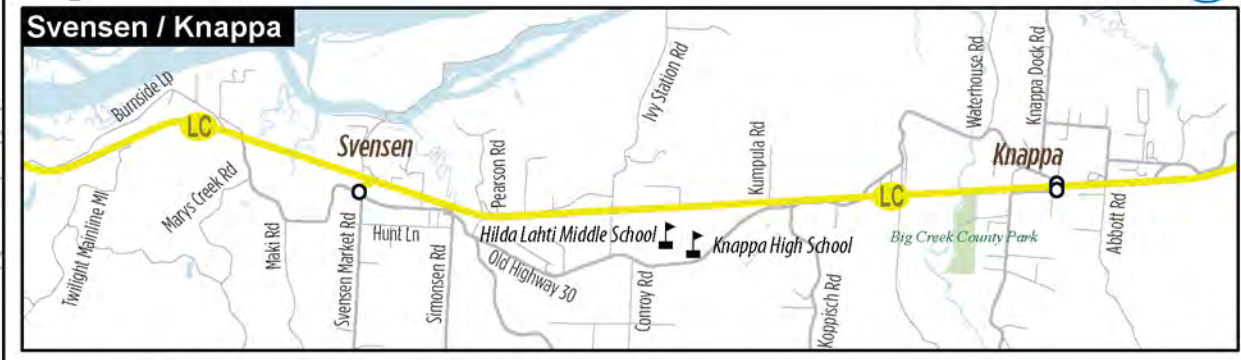
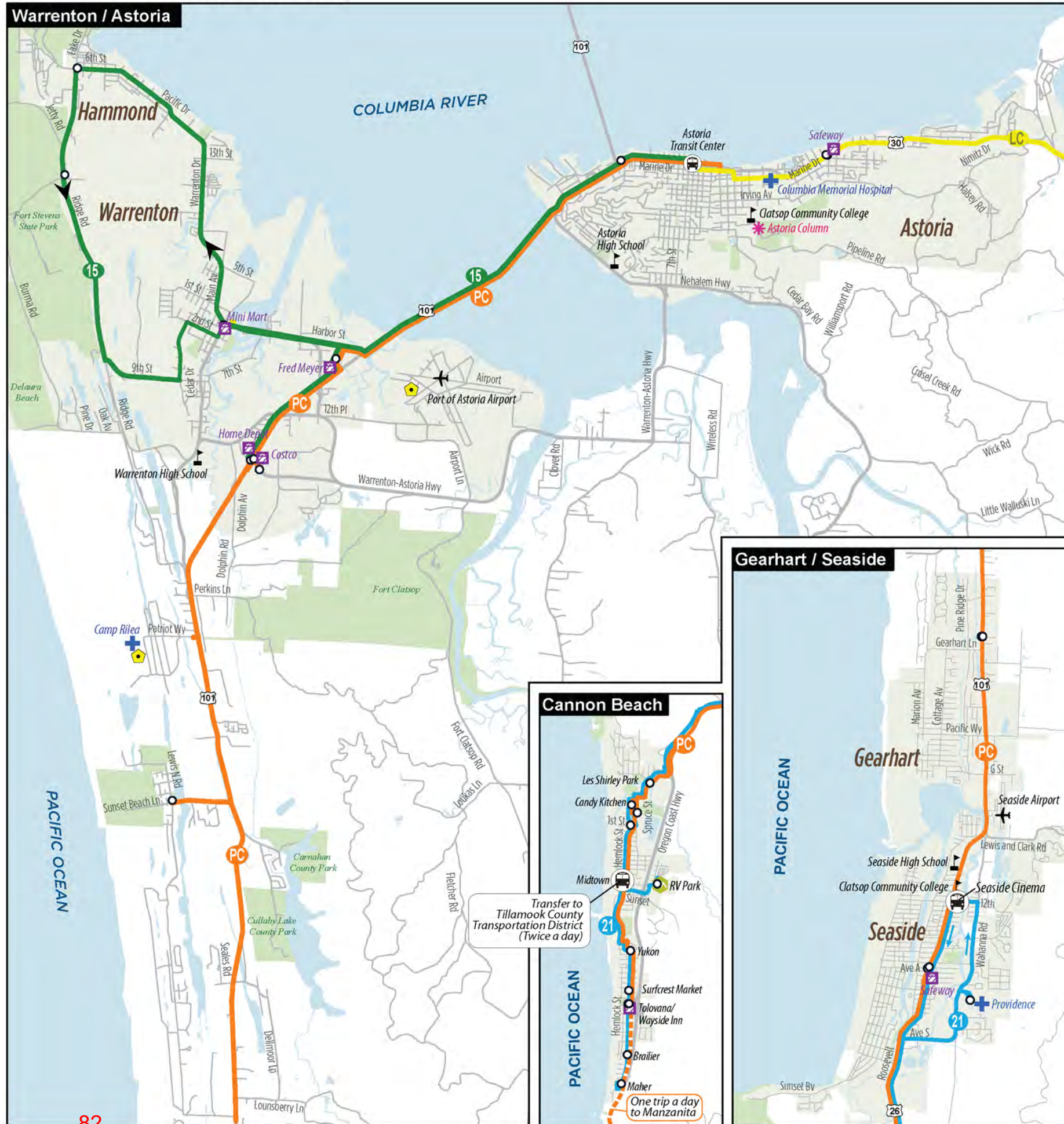


Figure 3-4 Weekend Year-Round System Map



### Transit Service (Weekend)

- |  |                   |                        |
|--|-------------------|------------------------|
| <b>Sunset Empire Transportation District</b> | <b>Landmarks</b>  | <b>+</b> Medical       |
| — Pacific Connector (PC)                     | * Attractions     | 🏪 Shopping             |
| — Route 15                                   | 🎓 Education       | ✈️ Airport             |
| — Lower Columbia Connector (LC)              | ✈️ Airport        | 🛖 Coast/National Guard |
| — Route 21                                   |                   |                        |
| ○ Bus Stops                                  |                   |                        |
| 🚏 Transfer Locations                         |                   |                        |
|  | 🏘 City Boundaries |                        |

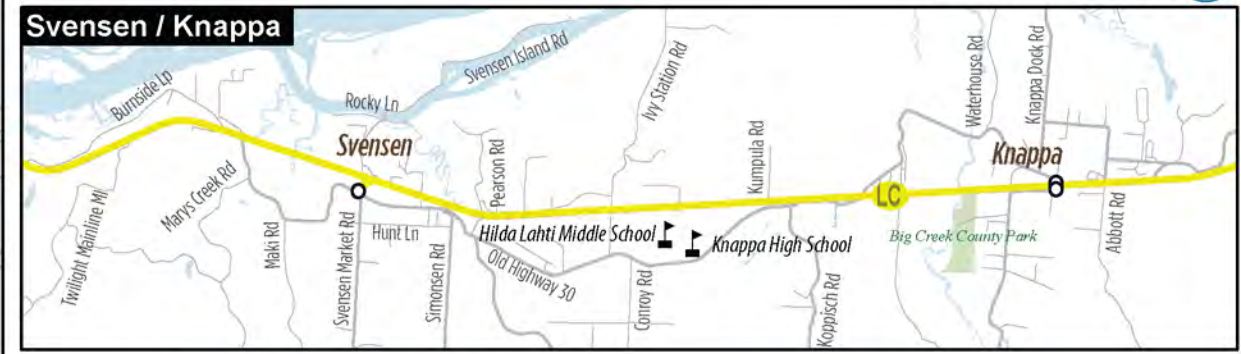
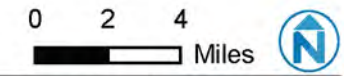
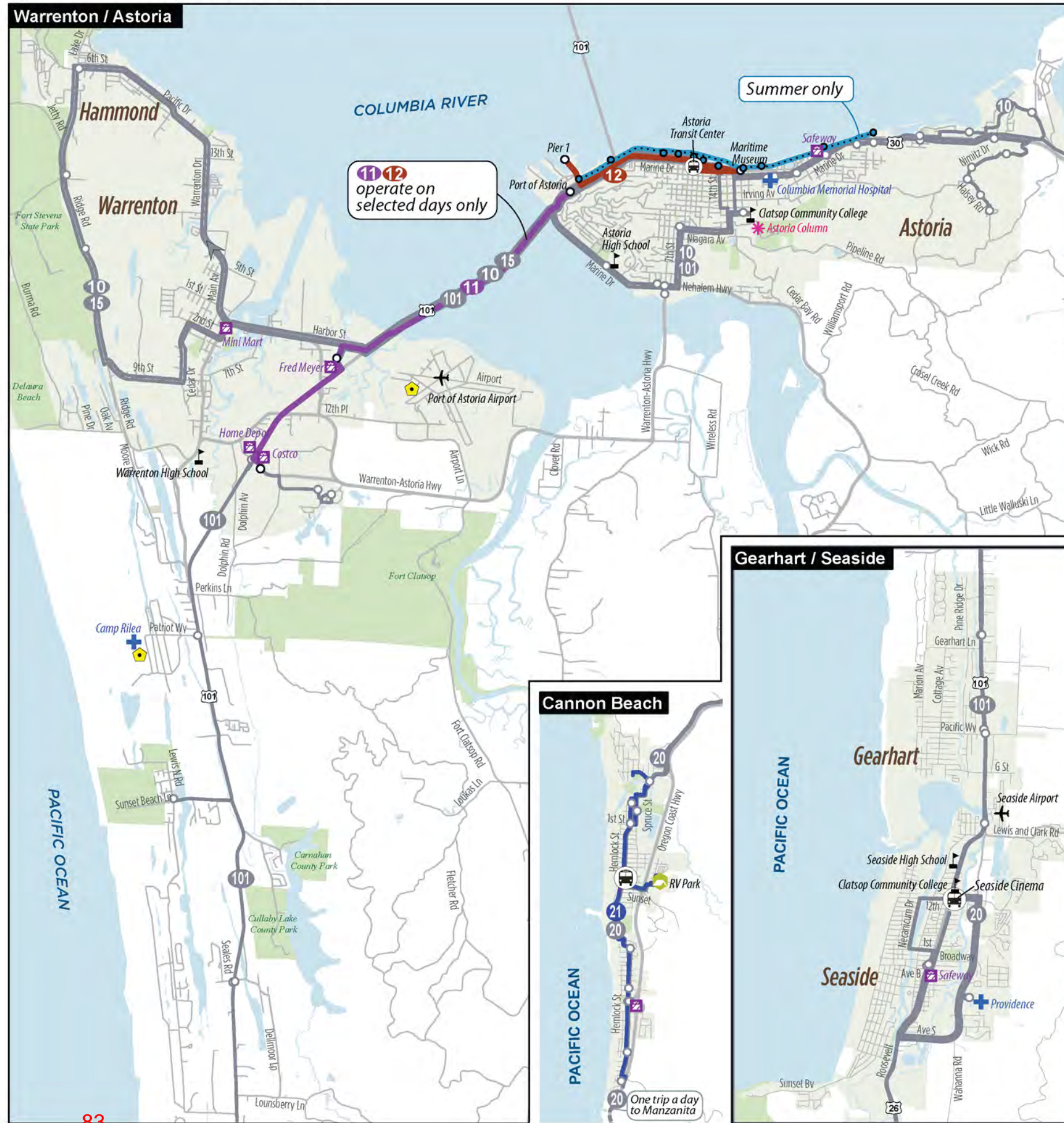


Figure 3-5 Weekday Seasonal System Map



**Transit Service - Seasonal (Weekday)**

**Seasonal Routes**

- Route 11
- Route 12
- Route 21
- Astoria Trolley\*
- All-year Routes (10, 15, 20, 101, Lower Columbia Connector)

**Transfer Locations**

**Landmarks**

- Attractions
- Education
- Airport
- Medical
- Shopping
- Coast/National Guard

**City Boundaries**

0 2 4 Miles

\*Not operated by SETD

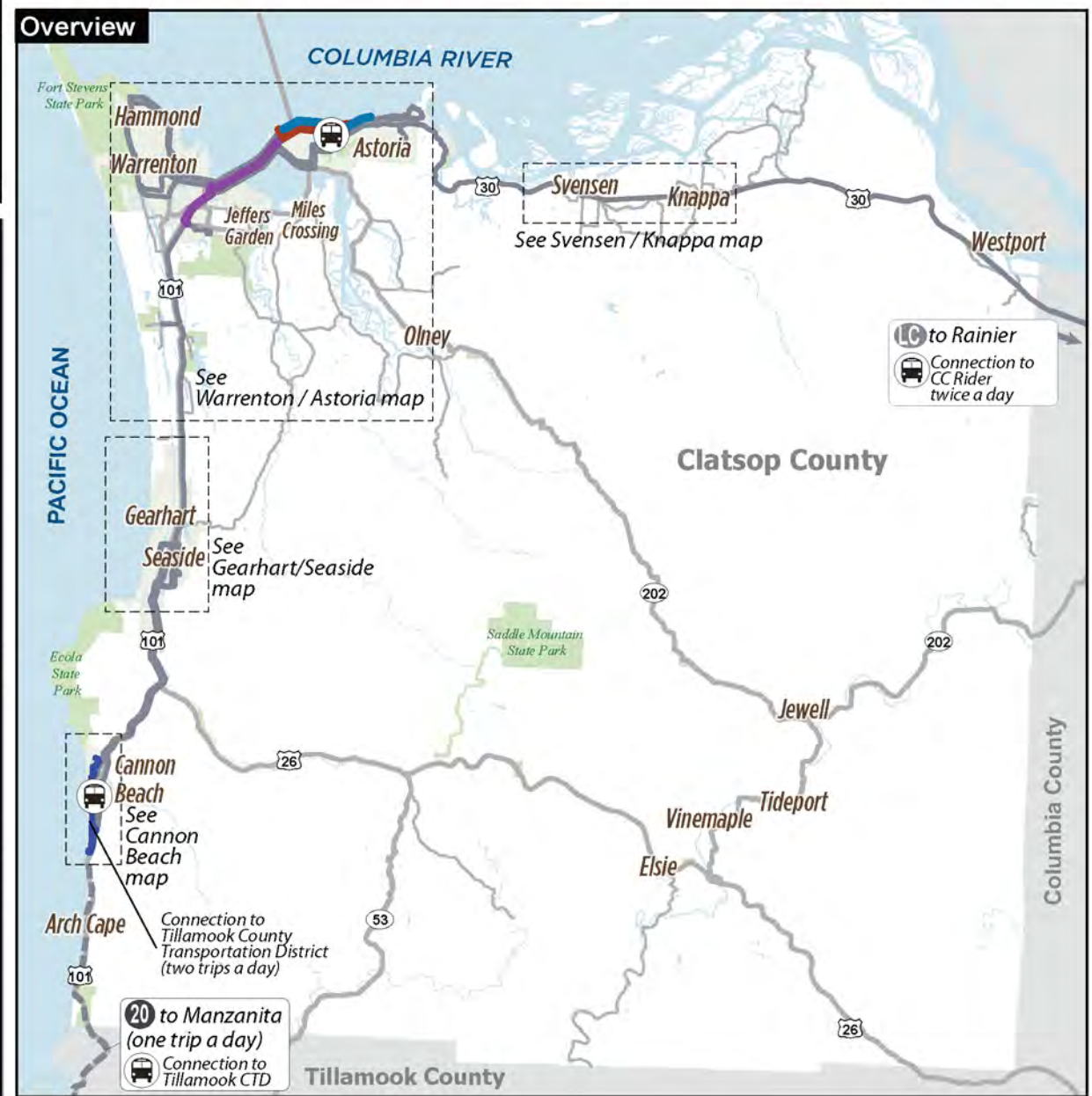
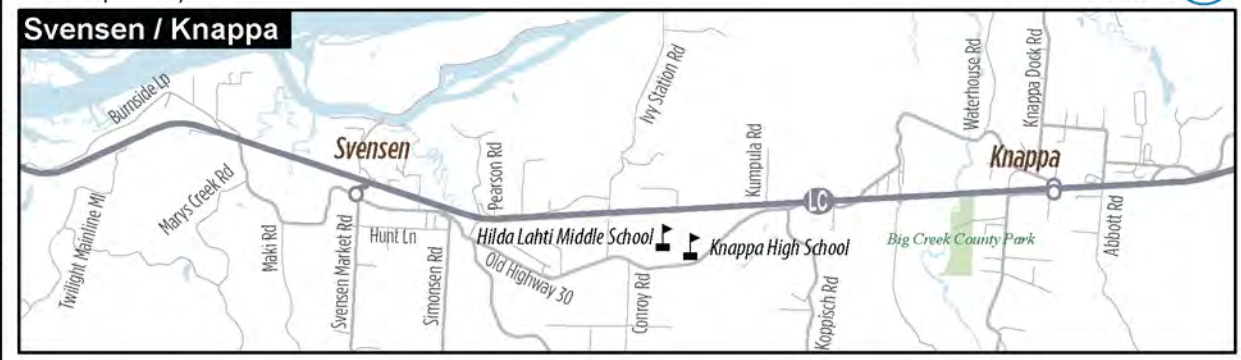
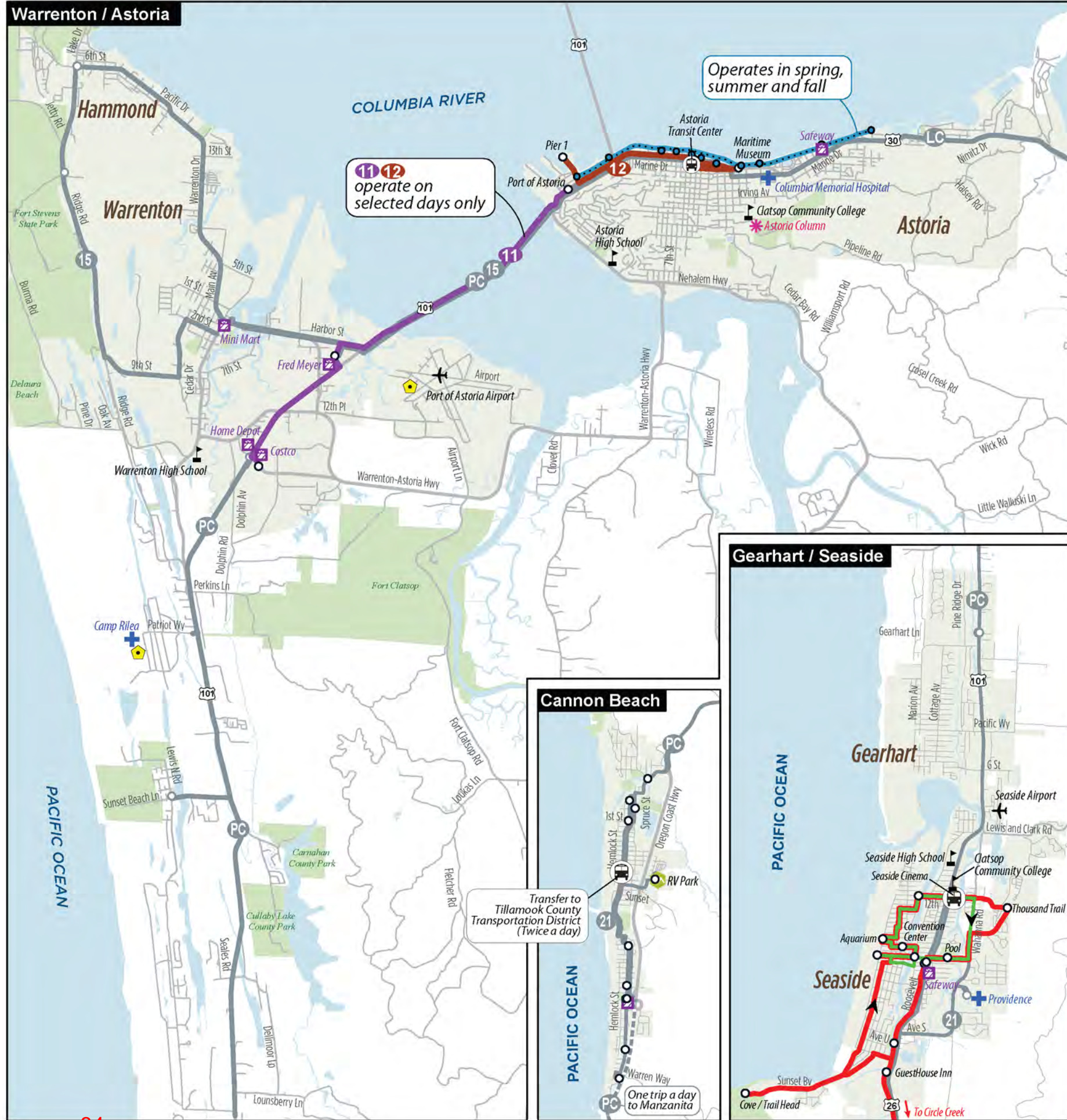


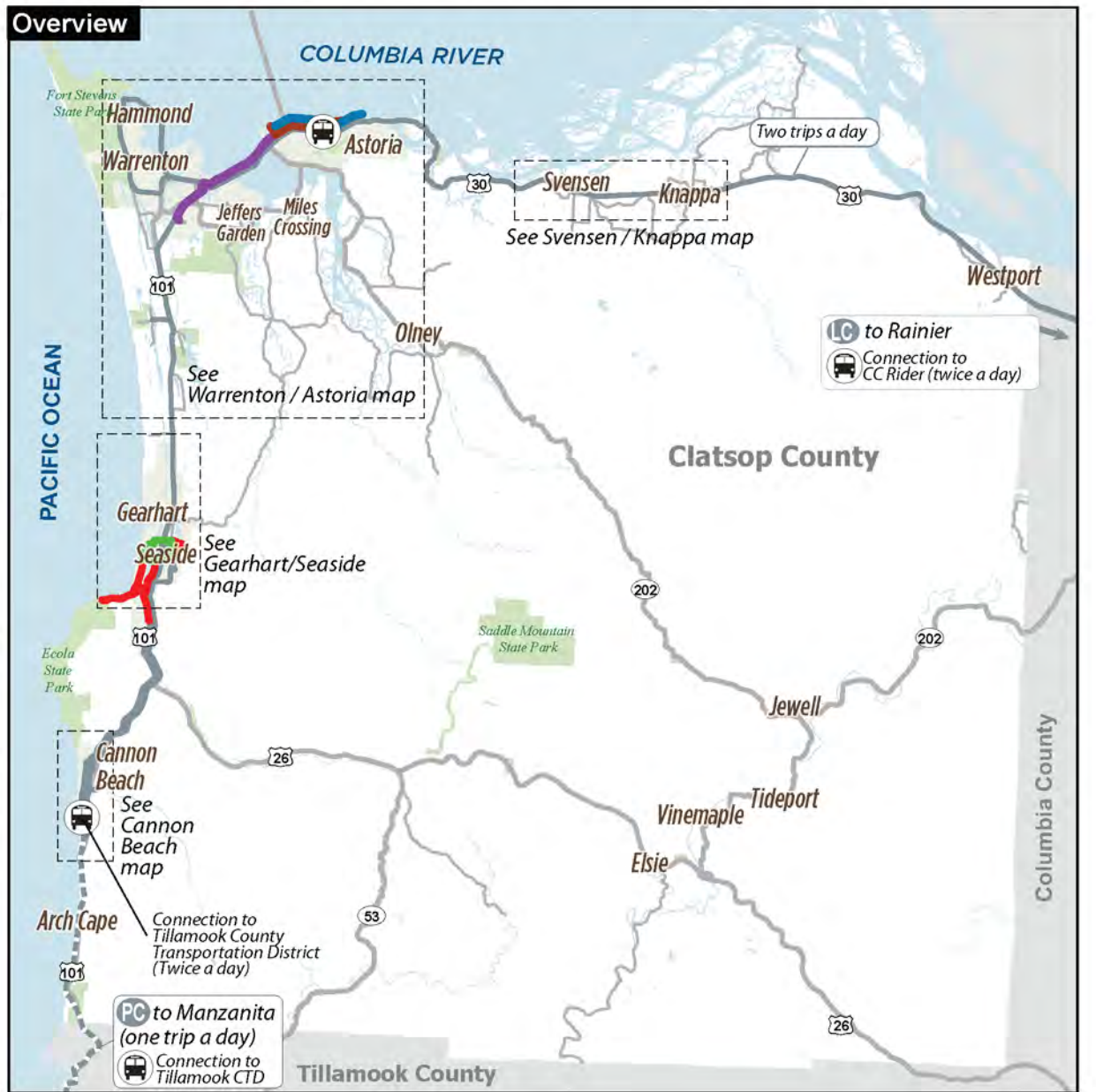
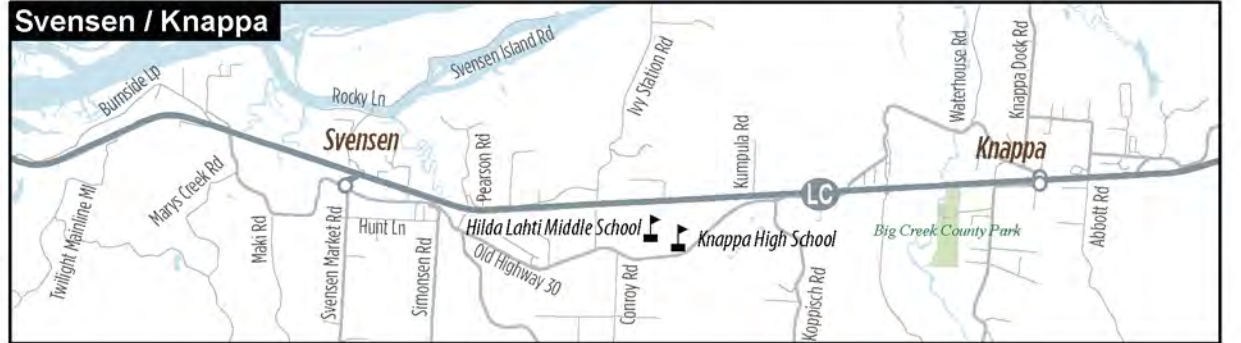
Figure 3-6 Weekend Seasonal System Map



**Transit Service - Seasonal (Weekend)**

|   |  |  |
|---|--|--|
| <p><b>Seasonal Routes</b></p> <ul style="list-style-type: none"> <li> Route 11 Purple Seal</li> <li> Route 12 Brown Deer</li> <li> Seaside Streetcar Trolley</li> <li> Astoria Trolley*</li> <li> All-year Routes (Route 15, 21, Lower Columbia Connector, Pacific Connector)</li> </ul> <p>*Not operated by SETD</p> | <p><b>Transfer Locations</b></p> <ul style="list-style-type: none"> <li> Transfer Locations</li> <li> City Boundaries</li> </ul> | <p><b>Landmarks</b></p> <ul style="list-style-type: none"> <li> Attractions</li> <li> Education</li> <li> Airport</li> <li> Medical</li> <li> Shopping</li> <li> Coast/National Guard</li> </ul> |
|---|--|--|

0 2 4 Miles



## Route Descriptions

**Route 10** has the highest ridership of SETD services (in 2014), carrying 62,800 passengers or 34% of all fixed-route ridership. The route follows two different patterns:

1. Loops around Warrenton/Hammond and serves Fred Meyer, then travels to the Astoria Transit Center, east on Marine Drive to Emerald Heights/Tongue Point, and west back into Astoria and turns south to serve Clatsop Community College (CCC), traveling along the south side of the city past Astoria High School and back to the Astoria Transit Center
2. Same alignment as above, but does not serve Warrenton/Hammond

Route 10's two operators (making AM and PM runs) start and end the day from the Warrenton garage, which is why Route 10 serves Warrenton-Hammond at the beginning, middle, and end of the day (six times per day).

**Route 15** serves Warrenton/Hammond, including Fred Meyer, the Warrenton Mini Mart, and Costco. This route runs six times per day at irregular intervals because the Route 15 vehicle also operates as the Lower Columbia Connector. Twice per day, the bus travels to the Transit Center in Astoria, switches head signs, and operates as the Lower Columbia Connector to Rainier.

**Route 20** links Seaside and Cannon Beach with hourly service. Starting from the Seaside Cinema, Route 20 travels west to Necanicum Drive and then rejoins U.S. 101 at Broadway and travels south. At Cannon Beach, the bus takes the first exit into downtown and travels via Hemlock Street. South of Tolovana Park, the bus travels through a residential area then turns around at Maher Street. Northbound, the bus turns right on 1<sup>st</sup> Avenue then north on Spruce Street past the visitor center and back onto U.S. 101. Entering Seaside, the bus turns right at Avenue S and travels via Wahanna Road, deviates into Providence Seaside Hospital, then runs back to the Cinema. Three times per day, passengers can transfer to Tillamook County Transportation District vehicles – twice in Midtown in Cannon Beach (at 9:20 a.m. and 4:20 p.m.) and once in Manzanita (at 11:10 a.m.). The 10:00 a.m. Route 20 trip provides the midday connection in Manzanita; as a result there is no 11:00 a.m. Route 20 departure in Seaside.

**Route 21** operates on weekends year-round, and on weekdays during the summer. On weekends, Route 21 is very similar to Route 20. Service starts at the Seaside Cinema and travels south to Cannon Beach and back. Route 21, however, does not serve Seaside on every trip. On the 9:55 am trip leaving Seaside, the bus travels through Cannon Beach southbound and northbound, but at the Candy Kitchen rather than continuing to Seaside, the bus does another loop through Cannon Beach and does not get back to the Cinema until 11:25 am. A similar pattern occurs in the afternoon. The Route 21 driver operates a split shift, with no service operated between 12:20 pm-3 pm. Route 21 is funded by the City of Cannon Beach through an inter-governmental agreement that enhances summer service. During summer weekdays, Route 21 supplements Route 20 and only runs back and forth in Cannon Beach.

**Route 101** has the second highest ridership, and links Astoria, Warrenton, the retail area near Costco, Gearhart, and Seaside. Service runs hourly except for three gaps – there is no 11 a.m., 1 p.m., or 7 p.m. departure from Astoria. Southbound, after leaving the transit center, the route travels to Fred Meyer, then turns at Costco/Home Depot onto Ensign Lane. This approximately 5-minute deviation from U.S. 101 serves the quickly developing area that contains the Northwest Seniors and Disabilities Services office, the Probation office, Food Bank, and multi-family housing. A Walmart will open south of Costco in fall 2016, and is expected to increase shopping traffic and demand for access to this area. Route 101 makes deviations upon request to Camp Rilea, which houses a veteran's clinic. Route 101 also deviates to serve the Sunset Beach community. This location is served on both northbound and southbound trips; northbound, the bus must often wait more than a minute to make a left turn onto U.S. 101. During the summer, this turn can take many minutes. A planned "jughandle" turn south of the Sunset Beach turn

would allow the northbound Route 101 bus to make a right-turn onto southbound U.S. 101 and use the jughandle turn to access northbound U.S. 101.

In Seaside, Route 101 stops at the Seaside Cinema, then travels clockwise via Wahanna Road back to U.S. 101 using Avenue S, past McDonald’s, and back to the Cinema, then travels northbound.

Within Astoria, Route 101 travels counterclockwise along Marine Drive (Route 10 serves Marine Drive in the clockwise direction). The 10/101 loops are quite long, meaning a passenger can experience significant travel savings by transferring depending upon their destination. For example, from Fred Meyer in Warrenton, a passenger heading to Clatsop Community College would have the fastest trip aboard the 101, which enters town and travels via the south side of Astoria directly to the college. Aboard Route 10, the passenger would end up going out to Emerald Heights and Tongue Point before coming back to the college. Alternately, Route 101 passengers wishing to go to a destination along Marine Drive near the Transit Center would have the fastest trip on Route 10. The Route 10 and 101 operators communicate with each other by radio and transfer passengers either at Fred Meyer (if it happens to be a time when Route 10 serves Fred Meyer) or in downtown Astoria around 14<sup>th</sup> and Exchange Streets (if Route 10 is not serving Fred Meyer).

Similarly, in Seaside Route 20 and Route 101 operate in opposite loops around Wahanna Road, Avenue S, U.S. 101, and 12<sup>th</sup> Street.

**Lower Columbia Connector (LCC)** links Astoria to Rainier, OR two times per day. This route also serves the Clatsop County communities of Svensen, Knappa, and Westport as well as Clatskanie in Columbia County. From Rainier, passengers can transfer to Longview, WA or to Portland via CC Rider. Passengers can also transfer to Amtrak service in Longview.

**Pacific Connector** runs on weekends following a route similar to a combined Route 101 and Route 20. The route operates three round trips per day from the Transit Center in Astoria to Fred Meyer, Seaside, and Cannon Beach. Two trips run in the morning (8:30 a.m. and 10:40 a.m.), then there is a break in service until the third trip from 3:20-5:30 pm. Similar to Route 20, passengers have three opportunities to transfer to Tillamook County service in Cannon Beach (two times) and in Manzanita (one time).

## RideAssist

RideAssist is the federally-required ADA paratransit (curb-to-curb) service offered to people with disabilities who are unable to access or use fixed-route service. Passenger origins and destinations must be within a ¾-mile buffer of fixed-route service. RideAssist service is offered during the same days and times as fixed-route service.

Reservations for RideAssist can be made from 1 day to up to 2 weeks in advance. RideAssist ridership has increased during the past three years (Figure 3-7). This trend is similar to the experience of many transit agencies, given the demographic trend of an aging population that is more likely to have a disability.

Figure 3-7 Rides Provided by RideAssist between 2012 and 2014

|                 | 2012  | 2013  | 2014  |
|-----------------|-------|-------|-------|
| Total           | 3,306 | 3,076 | 3,734 |
| Average monthly | 276   | 256   | 311   |

Source: Sunset Empire Transportation District

## Dial-A-Ride

Curb-to-curb Dial-a-Ride (DAR) service is open to anyone residing within two areas:

- Miles Crossing/Jeffers Gardens and Warrenton/Hammond, Monday-Friday between 8 am-5 pm
- John Day/Svensen and Knappa, on Tuesdays and Thursdays with a morning pick-up and an afternoon return

Riders must reserve trips at least two days in advance. Fares are based on distance; a one-way fare for a 0-10 mile trip costs \$8, and \$12 for an 11-20 mile trip.

Figure 3-8 lists DAR ridership from 2012-2014. Due to budget constraints, DAR service was cut for a time in 2014, and ridership after service was reinstated has remained extremely low.

Figure 3-8 Rides provided by DAR between 2012 and 2014

|                 | 2012 | 2013 | 2014 |
|-----------------|------|------|------|
| Total           | 854  | 669  | 27   |
| Average monthly | 71   | 56   | 2    |

Source: Sunset Empire Transportation District

## RidePal & NWTO

Through the RidePal program, SETD’s mobility manager operates both individualized and group travel training and provides a “how to ride the bus” orientation throughout the community.<sup>18</sup>

ODOT promotes Transportation Options (TO) as a way of providing policy support for and programs linking people to available services such as vanpools, carpools, transit, walking, and bicycling. The Northwest Transportation Options (NWTO) is a partnership of Clatsop, Columbia, and Tillamook Counties for promoting these options.<sup>19</sup>

## ROADWAYS

The major transportation routes through the county include U.S. 26, U.S. 30, and U.S. 101. U.S. 26 and U.S. 30 run east-to-west, connecting the county to the Portland metropolitan area. U.S. 101 parallels the coast running north-to-south, providing a connection between U.S. 30 and U.S. 26. These roadways, part of the National Highway System, serve the highest volume of traffic in the county. Average annual daily traffic (AADT) volumes range from 6,000 to 8,000 along U.S. 26 and U.S. 30, up to 20,000 along portions of U.S. 101 north of U.S. 26, and around 5,000 south of U.S. 26. Other Statewide Highways in the county include U.S. 101 Business, OR 53, OR 103, OR 104, OR 104S, and OR 202. These highways serve less traffic, with AADT volumes generally less than 5,000 each.

Motor vehicle conditions in the county vary based on the time of year. During the summer peak (typically in August), traffic volumes are much higher than during the average weekday (typically in May and September) and, therefore, roadways are relatively more congested.

The Clatsop County TSP compared intersections in the county to mobility targets intended to maintain a minimum level of efficiency for motor vehicle travel. Intersection operations in the county are monitored through volume-to-capacity (v/c) ratios. A v/c ratio is a decimal representation (between 0.00 and 1.00) of the proportion of capacity of the roadway that is being used. It is determined by dividing the peak hour traffic volume by the hourly capacity of a given turn movement, approach leg, or intersection. A lower

<sup>18</sup> <http://www.ridethebus.org/RIDEPal.aspx>

<sup>19</sup> <http://www.ridethebus.org/RIDENext.aspx>

ratio indicates smooth operations and minimal delays. As the ratio approaches 1.00, congestion increases and performance is reduced.

Most roadways in the county experience traffic volumes that utilize less than half of the available capacity during the summer (v/c ratio is less than 0.50). The exception is the segment of U.S. 101 between Astoria and Seaside, which has a v/c ratio of 0.70 during the summer. Drivers may experience some slowing in travel along this segment of the roadway system during times of peak travel demand, considered to be highest during the afternoon/evening in peak summer months (July-September). Also, drivers at many of the unsignalized side street approaches to the highway along this segment experience high delays (over 90 seconds per vehicle), while waiting for a clearing to enter the highway. By 2035, motor vehicle trips along this segment are projected to increase by 45%. Summer congestion greatly affects SETD services – primarily Route 101, which must cross the Youngs Bay Bridge almost every hour.

## ADDITIONAL TRANSPORTATION PROVIDERS

In addition to SETD, a number of service agencies, churches, and assisted living facilities provide transportation on a limited basis to their constituents, clients and/or parishioners.

### Transit Agencies

**Pacific Transit** provides four trips per day into Clatsop County from Pacific County, WA. According to the agency, most passengers arrive for shopping, and some transfer to SETD for access to Fred Meyer, Costco, and other destinations. Route 24 serving Astoria has moderate ridership levels and the agency does not plan to make any changes to the route in the near future.

**Northwest POINT** is an Amtrak through route (meaning passengers can buy tickets to connecting Amtrak service through an arrangement between Amtrak and ODOT) connecting Astoria, Seaside, Cannon Beach, and Portland's Union Station with two round trips per day. Buses are coach style with Wi-Fi and restrooms. Fares between Astoria and Portland are \$18 each way.

**Columbia County (CC) Rider** connects Portland to St. Helens and to Rainier. CC Rider routes meet SETD routes twice per day, seven days per week, at the new Rainier transit center. A fare from Astoria to Portland via SETD and CC Rider costs \$15 (\$29 round trip).

**Tillamook County Transportation District (TCTD)** links with SETD three times per day. Clatsop County residents reported accessing TCTD routes for travel to destinations in Manzanita and Nehalem in Tillamook County, while Tillamook County residents stated a need to get to medical destinations in Clatsop County, especially the Veteran's Clinic at Camp Rilea.

SETD and four other transit partners, including CC Rider and TCTD, joined in a coalition called the **Northwest Connector Alliance**. The organization's purpose is to better facilitate regional connections between systems to connect people from Portland to the coast and across county lines. Through outreach and public workshops, the Alliance came up with the name Northwest Connector to brand all four transit systems. A system map of the Connector network is on the front of SETD's brochures, and many bus stops bear the OXO signage representing Connector. The OXO design is a graphic representation of "north by northwest."

### Other Providers

**MEDIX** is a private ambulance service for specialized transportation. The Medix fleet in Clatsop County includes six vans, all of which are wheelchair and lift equipped. The vast majority (90%) of their business entails non-emergency medical transportation, and the primary clientele are older adults, people with disabilities, and Medicaid recipients. MEDIX averages 400 one-way trips per month, and will travel to



Tillamook County, Pacific County in Washington State, Portland, and occasionally Columbia County. SETD contracts with MEDIX to provide RideAssist Medicaid service.

**Coast Rehabilitation** is the largest residential and vocational program serving individuals with disabilities with its own fleet of vehicles: 1 full-sized van or 1 minivan for each residential home. The primary geographic area served by Coast Rehabilitation is Seaside to Astoria. To cover other areas of the county, the Center collaborates with SETD.

**Taxis** are an expensive but sometimes last-resort option for transportation in rural areas. Several operators provide taxi service within Clatsop County. Taxis can become excellent transit agency partners through programs such as Guaranteed Ride Home, in which a transit rider may be reimbursed for a taxi fare a certain number of times per year in case of an emergency.

**Private assisted living facilities** in Astoria, Gearhart, and Seaside own vans/buses for transporting their residents. These facilities primarily transport their residents on regularly scheduled weekly trips—shopping, prescription pick-ups, and church and social outings.

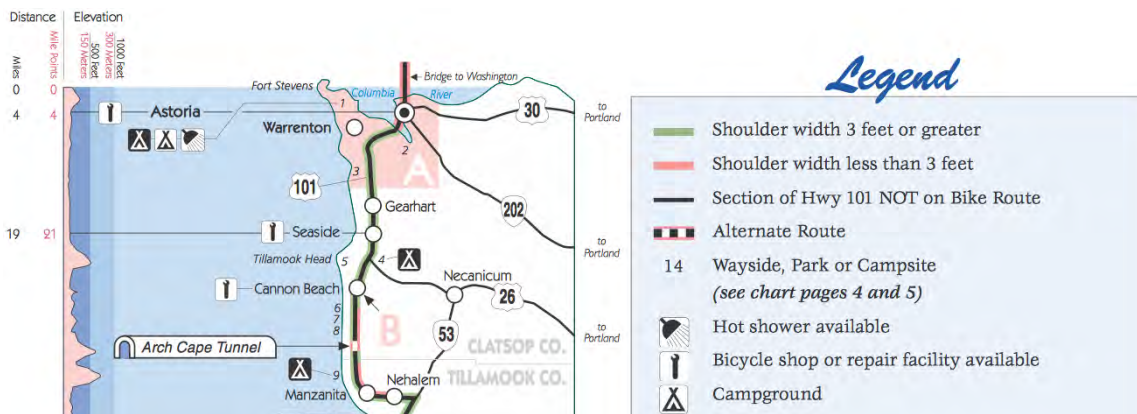
The U.S. Department of Veterans Affairs owns one van operated by the **Disabled American Veterans** to transport veterans to medical appointments in Portland.

Finally, the largest transportation providers in the County are the school systems, including **Astoria, Warrenton-Hammond, and Seaside School Districts**. While excess capacity exists midday, school buses are not necessarily a good fit for populations with special transportation needs because most of their buses do not have wheelchair lifts and the widths of the aisles are narrower than a standard public transportation bus.

## WALKING & BICYCLING

Every transit rider is a pedestrian at some point. In some cases, transit riders are also bicyclists. Non-motorized infrastructure may be linked to land use policies – for example, often times a developer must build sidewalk and curb and gutter as part of a new project. In general, the population centers of Clatsop County contain sidewalks. ADA-compliant curb ramps and frequent safe street crossings are not as prevalent, which inhibit walking in general (and walking to transit). The Clatsop County TSP recommends pedestrian crossings every 330 feet. Bicycle lanes are present in some areas of Astoria and along U.S. 101; this highway is designated as part of the Oregon Coast bicycle route (Figure 3-9).

Figure 3-9 Oregon Coast Bike Map showing Clatsop County



Source: Oregon Department of Transportation Coast Bike Route

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## 4 SETD SYSTEM PERFORMANCE & ASSESSMENT

A more detailed look at SETD’s performance at the route and segment level reveals opportunities to strengthen service. An assessment of system and route-level performance, along with a review of the transit agency as an organization, show the system’s strengths and weaknesses.

For complete route profiles including boardings by stop, on-time performance, and ridership by trip for year-round and summer service, see Volume II, Section C.

### FIXED ROUTE

“Productivity” is a term used in the transit industry to help understand a service’s efficiency and effectiveness. Productivity metrics are typically expressed as a ratio of a unit of service to an outcome – for example, cost per revenue hour, passengers per revenue mile, and service hours per capita are all common metrics used to assess an agency’s return on investment. The targets for each of these metrics, however, is a decision made by the individual transit system and broader community.

During the past three calendar years, ridership has increased (Figure 4-1), and so has the level of service output (revenue miles and hours). The productivity metrics shows that passengers per mile and per hour peaked in 2013, and dipped very slightly in 2014; however, the overall trend shows increased productivity.

Figure 4-1 Annual Fixed Route Performance, 2012-2014

| Metric                                     | 2012    | 2013    | 2014    |
|--|---------|---------|---------|
| Total passengers                           | 154,622 | 182,836 | 183,268 |
| Total revenue miles                        | 322,612 | 351,159 | 372,437 |
| Total revenue hours                        | 14,686  | 16,034  | 16,224  |
| Passengers per revenue mile                | 0.48    | 0.52    | 0.49    |
| Passengers per revenue hour (productivity) | 10.53   | 11.40   | 11.30   |

Source: Data from Sunset Empire Transit District

### Route-Level Performance

Routes 10, 101, and Pacific Connector (the weekend version of Route 101) achieve good productivity in terms of passengers per hour. Route 20 performs decently given the lower densities of Seaside and Cannon Beach (Figure 4-2). Lower Columbia Connector performs poorly, with less than three passengers per revenue hour. Productivity of Route 21 is also relatively low. Route 11 is an outlier because it serves a very specialized market, often cruise ships, with a limited number of coordinated trips and thus carries a large number of customers per revenue hour. In terms of cost, Route 10 and Route 101 cost per passenger

are low given high ridership, whereas Lower Columbia Connector has the highest cost per passenger, followed by Route 21. These figures are based on a standard fixed-route cost per hour of \$54.66.<sup>20</sup>

Figure 4-2 Average Monthly Performance Data by Route, 2014

| Route                    | Monthly Passengers | Monthly Revenue Hours | Passengers per Revenue Hours | Monthly Revenue Hours | Passengers per Revenue Mile | Cost per Passenger |
|--------------------------|--------------------|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|
| Route 10                 | 5,234              | 312.8                 | 16.7                         | 5,630                 | 0.98                        | \$3.28             |
| Route 11                 | 4,400              | 87.8                  | 50.1                         | 795                   | 5.54                        | \$1.09             |
| Route 20                 | 2,248              | 253.2                 | 8.9                          | 6,454                 | 0.35                        | \$6.18             |
| Route 21                 | 589                | 109.4                 | 5.4                          | 2,294                 | 0.26                        | \$10.09            |
| Route 101                | 4,161              | 293.3                 | 14.2                         | 7,515                 | 0.55                        | \$3.87             |
| Lower Columbia Connector | 644                | 62.7                  | 2.9                          | 7,725                 | 0.08                        | \$21.79            |
| Pacific Connector        | 686                | 62.7                  | 11.0                         | 1,727                 | 0.40                        | \$4.95             |
| Seaside Streetcar        | 362                | 64.0                  | 5.7                          | 813                   | 0.45                        | \$9.66             |
| <b>OVERALL</b>           | <b>18,801</b>      | <b>1,569</b>          | <b>11.3</b>                  | <b>37,919</b>         | <b>0.49</b>                 | <b>\$4.74</b>      |

Source: Data from Sunset Empire Transit District

## Ridership by Stop & by Route

SETD staff recorded the boarding and alighting location of passengers in May and July 2015. Figure 4-3 and Figure 4-4 show ridership by stop. In Seaside, stop activity is concentrated at the Cinema, McDonald’s, and Avenue A, whereas people’s final origins or destinations (based on the on-board survey data) are more scattered throughout the community. This indicates that Seaside riders may walk long distances to and from bus stops.

The major ridership generators in Astoria are mostly in the eastern part of the city—Emerald Heights, the Job Corps (Tongue Point), Safeway, and Clatsop Community College. In the western part of Astoria, ridership activity along Marine Drive between the Transit Center and the Short Stop Market is steady but there are no major ridership attractors.

At Safeway, the predominant boarding pattern is at the eastbound stop and alightings comprise most of the ridership activity at the westbound stop. This may indicate that Safeway shoppers and employees live east of Safeway and take Route 10 from Emerald Heights and Tongue Point or other neighborhoods.

On weekends, Route 10 does not operate and there is no service to eastern Astoria except for the Lower Columbia Connector, which only operates two trips per day and is not convenient for activities such as shopping. The Pacific Connector does not run farther east than the Transit Center, meaning residents of western Astoria could not access activity centers such as Safeway on weekends. Residents of eastern Astoria would similarly have difficulty accessing destinations such as Safeway and Fred Meyer on weekends since Route 10 does not run.

Figure 4-5 and Figure 4-6 show boardings and alightings by route. Multiple routes serve many destinations, therefore this analysis shows which route passengers use to access destinations. At the time

<sup>20</sup> Data provided by SETD multiplies the cost of hours by \$54.66

of the data collection (May 2015), Route 101 still ran every 120 minutes. Still, a large percentage of riders heading to and from Clatsop Community College took Route 101. This points to either students arriving from regional origins (Seaside, for example), or to people arriving from Warrenton who realize Route 101 is the most direct route.

A fair amount of people used the Columbia Connector in Warrenton (which has been rebranded as Route 15 west of the Transit Center as of August 2015) to access the Warrenton Mini Mart and Fred Meyer, showing that people are aware that both Route 10 and Columbia Connector serve those destinations.

In Seaside, the vast majority of ridership occurs at the Cinema or at McDonald's. The portion along Wahanna Road sees very little activity. According to stakeholders, low-income housing is present along Wahanna Road; however, it may be that service is not known or needed along this area.

The next map series (Figure 4-7 and Figure 4-8) show data from the July survey effort just for routes affected most by seasonal demand (Routes 101, 20, 21, Pacific Connector, Seaside Trolley). The data shows 47 fewer stops at Clatsop Community College, as expected, but a handful of people are still taking the bus there for summer classes. The level of activity during weekdays in Seaside increased notably – for example, weekday 20/101 ridership carried 46 boardings and alightings at the Seaside Cinema while 70 people used the stop during summer. A similar uptick can be seen at Avenue A and the McDonald's. Activity in Cannon Beach increased slightly as well.

Figure 4-9 shows boardings by route during summer weekdays. The increase in ridership at the Seaside Cinema is primarily coming from Route 101, not Route 20, indicating that seasonal visitors to Seaside originate from the north. In Cannon Beach, ridership at most stops went up, but ridership on Route 21 is fairly small – people may not realize that the 20 and 21 serve similar routes, or perhaps there is less demand for in-town Cannon Beach travel than for travel from Seaside to Cannon beach. Figure 4-10 shows boardings by route for a summer weekend. In this case, the 21 shows good ridership within Cannon Beach, with some pick-ups in Seaside as well. The Pacific Connector serves more trips in Seaside than Cannon Beach.

The maps presented in Figure 4-3 to Figure 4-10 reflect the service design as of May 2015 or August 2015 (summer survey). Where possible, the maps were adapted to reflect more recent changes for consistency with the current service description, such as the rebranding of the Lower Columbia Connector as Route 15 where it provided local service in Warrenton.

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Figure 4-3 Boardings and Alightings by Stop – Weekday

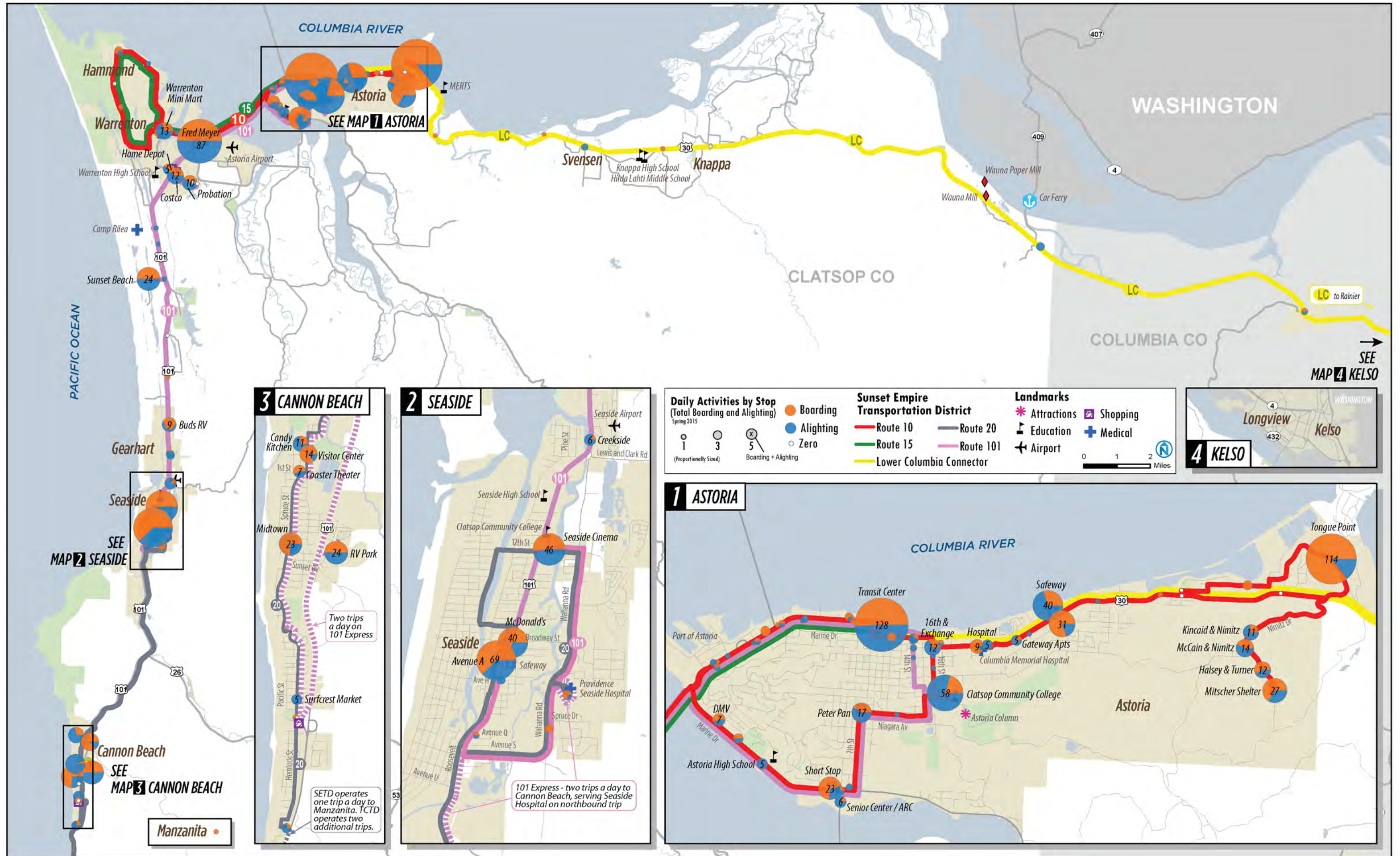


Figure 4-4 Boardings and Alightings by Stop – Weekend

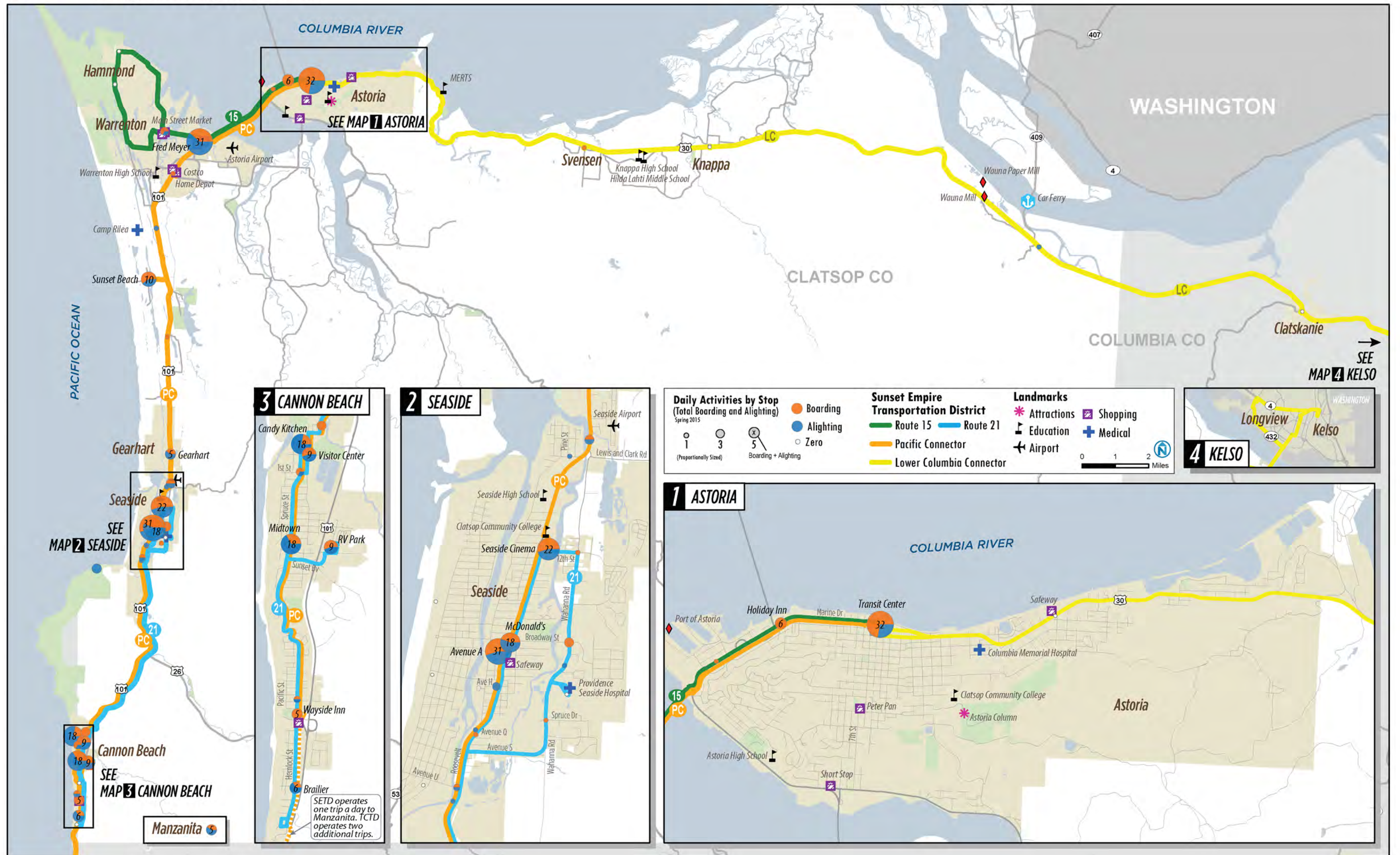




Figure 4-5 Boardings and Alightings by Route – Weekday

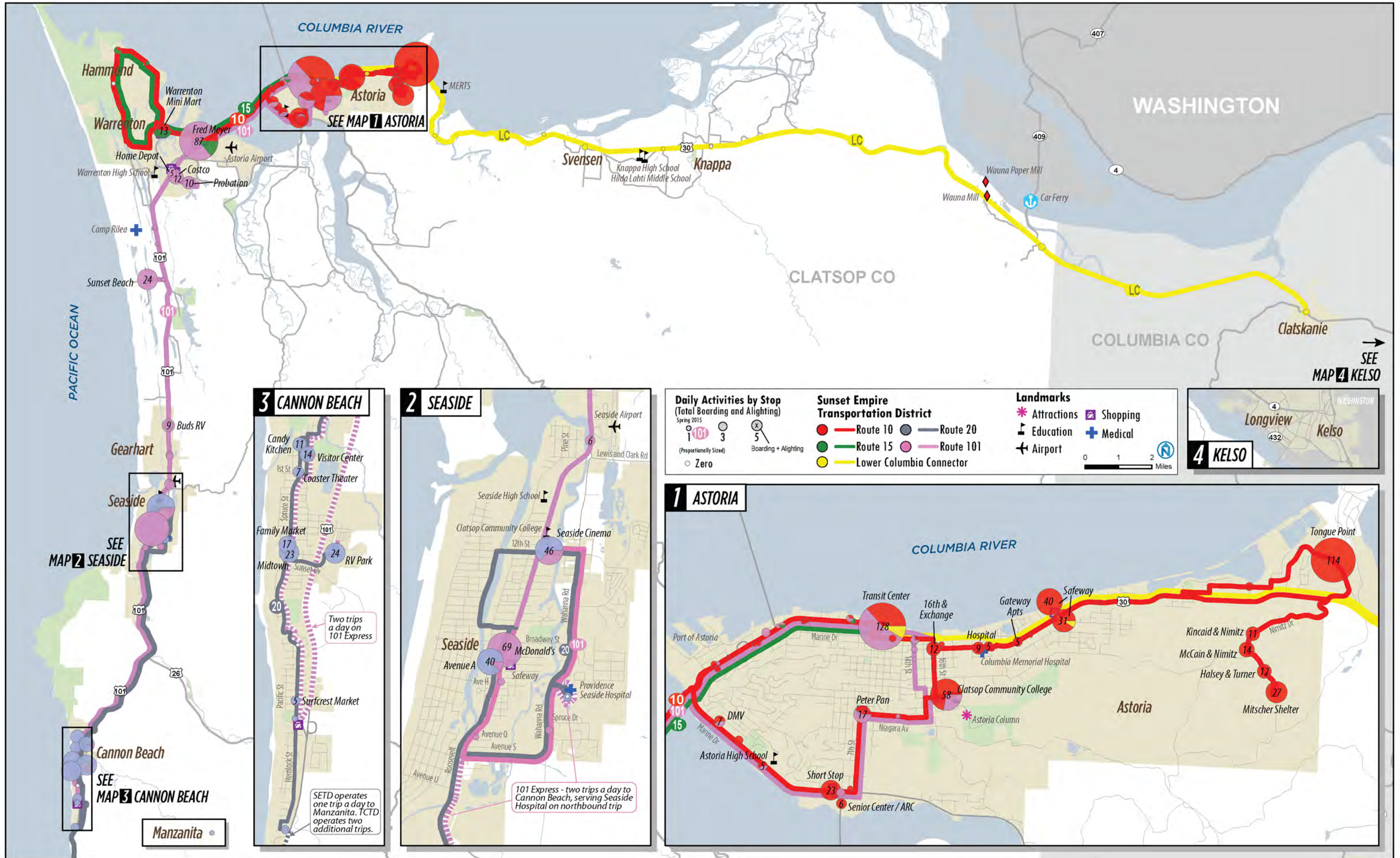


Figure 4-6 Boardings and Alightings by Route – Weekend

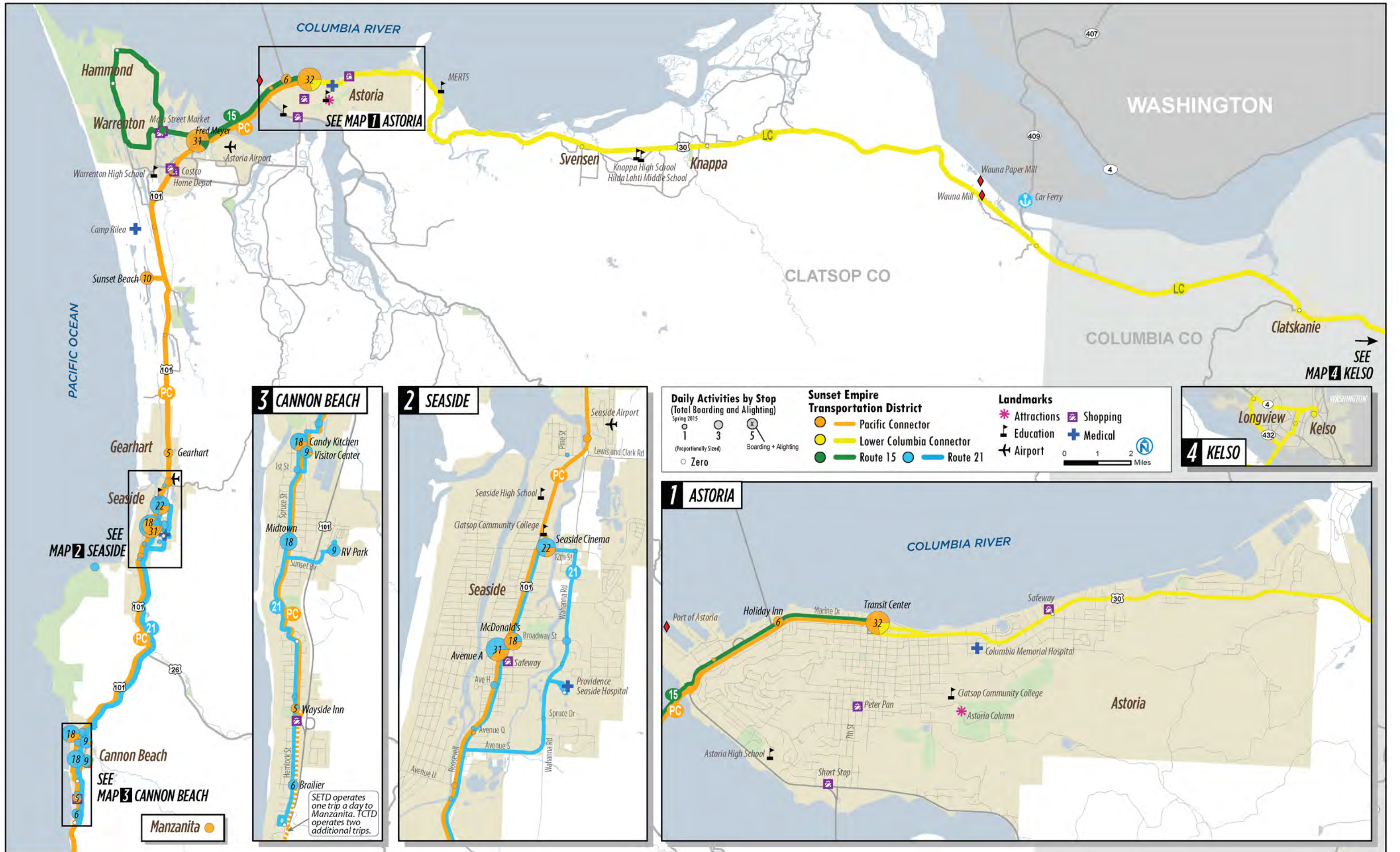


Figure 4-7 Boardings and Alightings by Stop – Summer Weekday (for routes serving seasonal market)

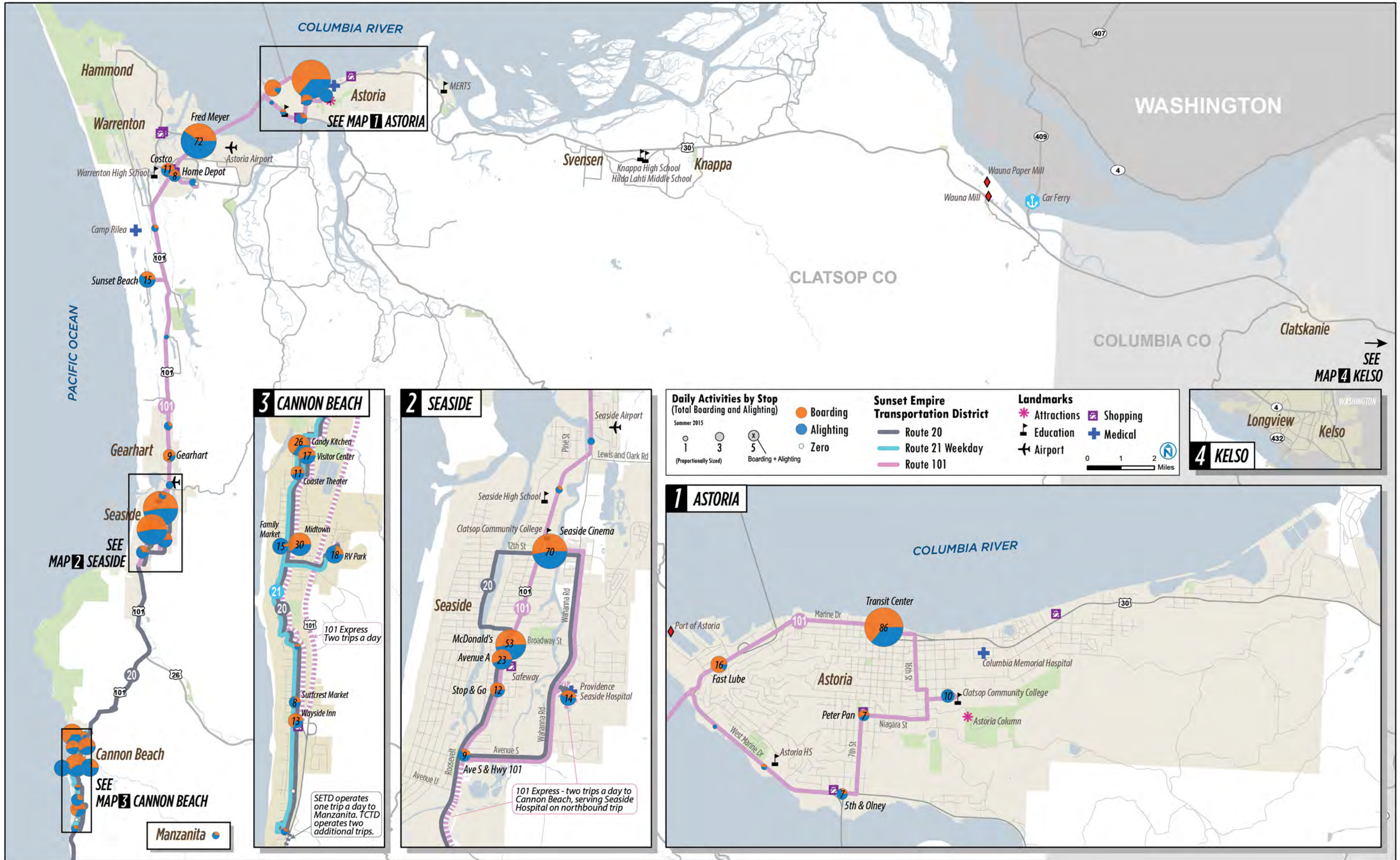


Figure 4-8 Boardings and Alightings by Stop – Summer Weekend (for routes serving seasonal market)

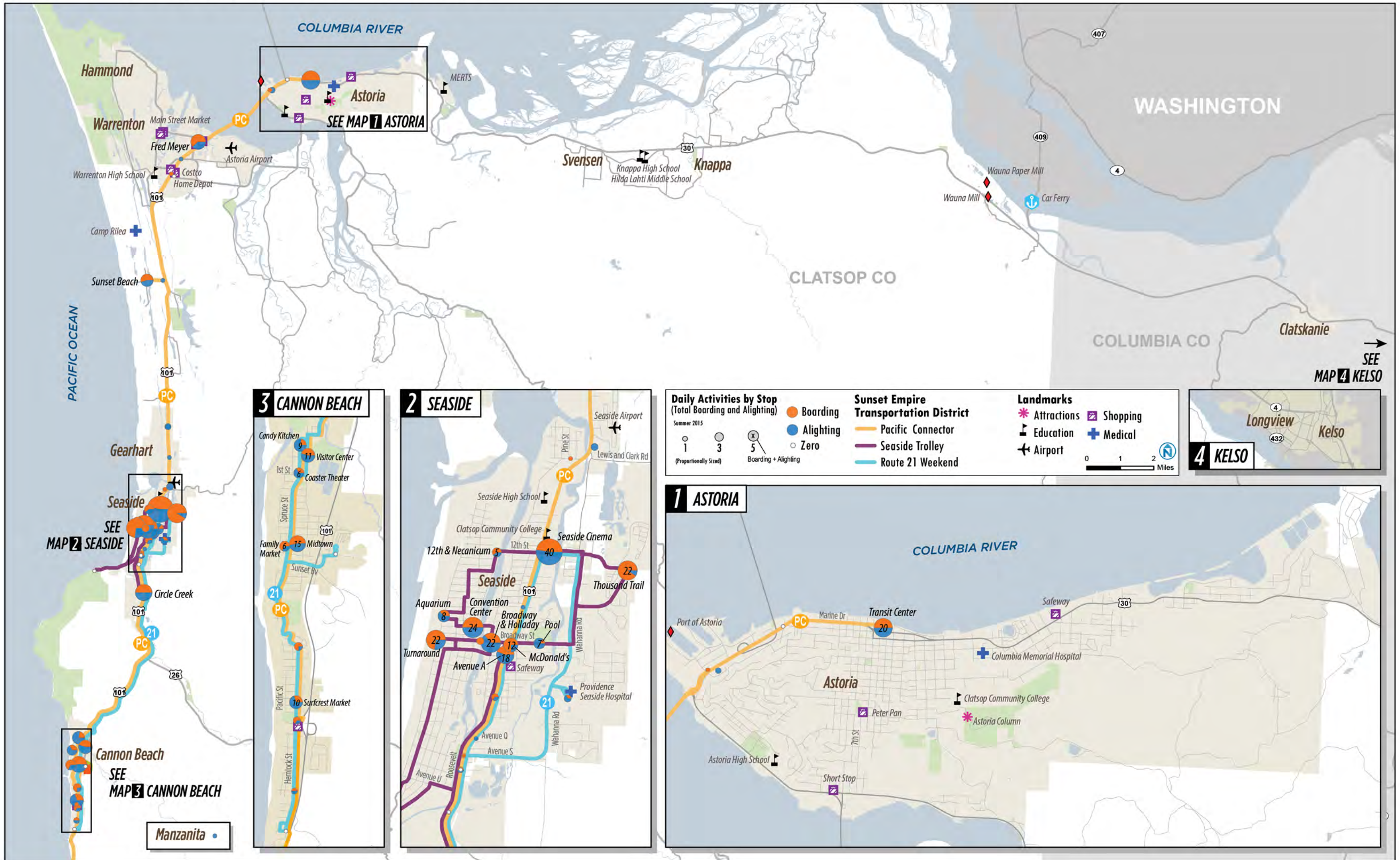


Figure 4-9 Boardings and Alightings by Route – Summer Weekday (for routes serving seasonal market)

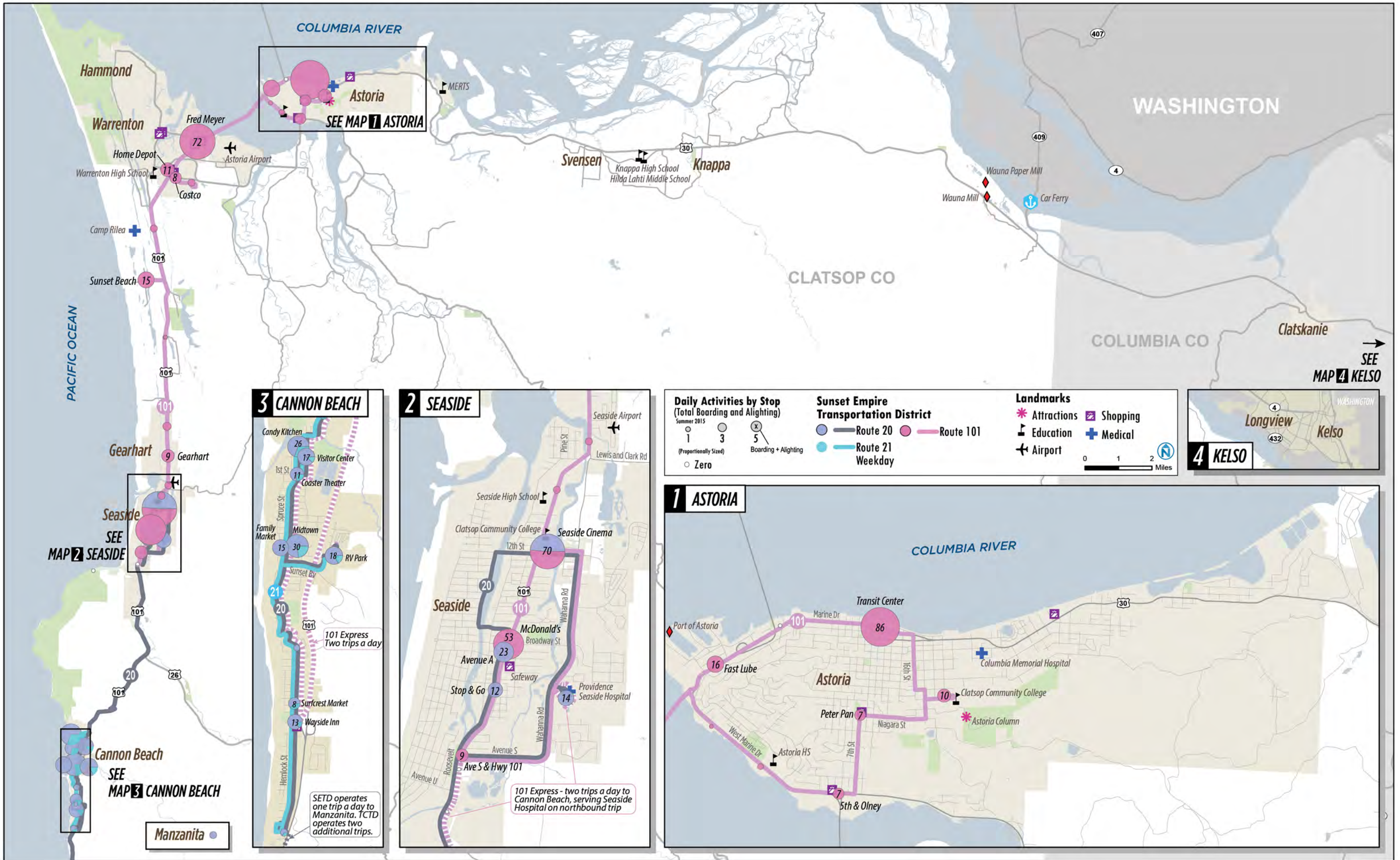
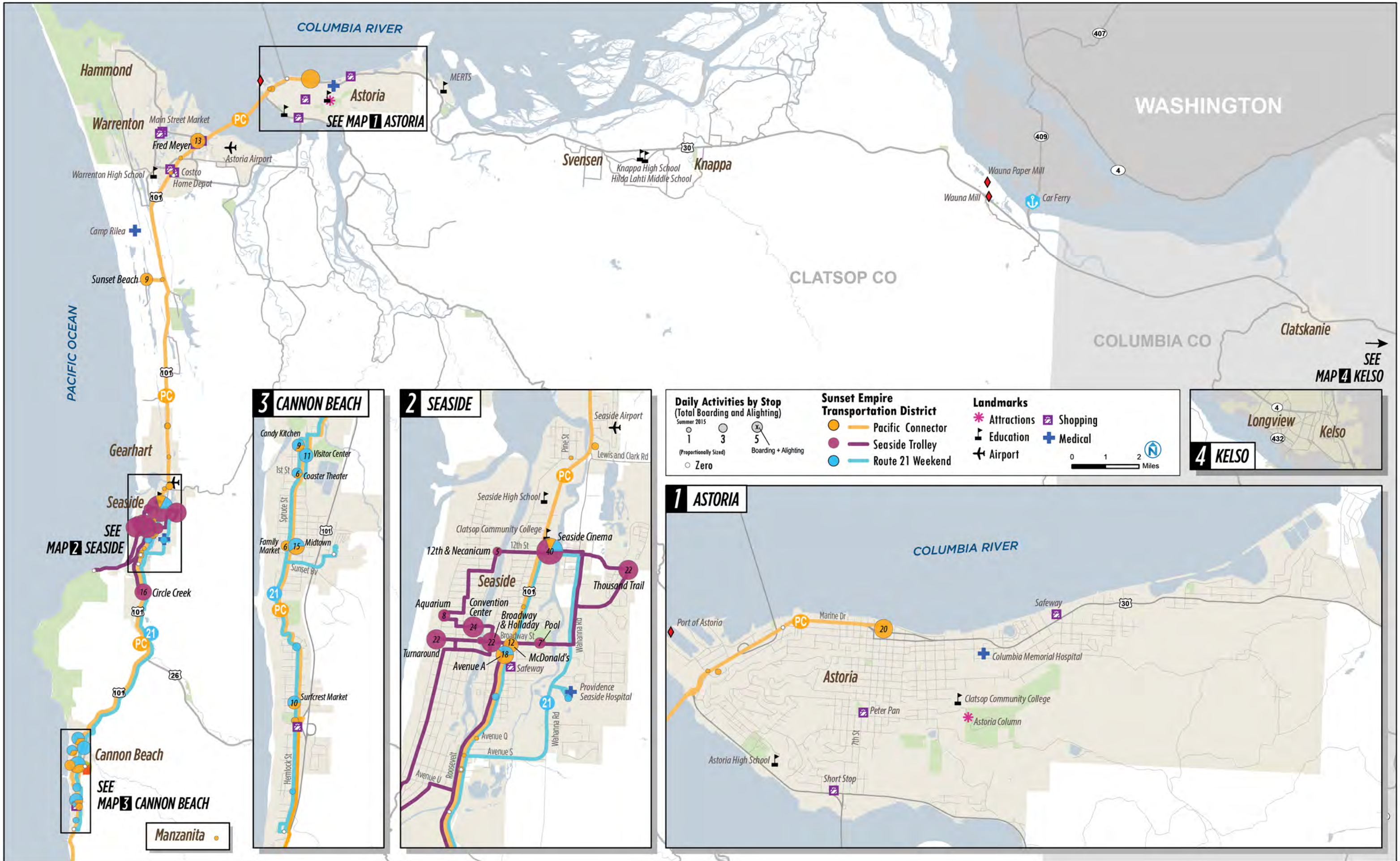


Figure 4-10 Boardings and Alightings by Route – Summer Weekend (for routes serving seasonal market)



## Route Profiles

Further analysis of the rider survey data was used to determine overall high-ridership stops, identify unproductive portions of routes, and track on-time performance. Key findings from the route profiles include:

- **Lower Columbia Connector (Route 30)** – This route has low productivity. Ridership to/from Astoria to Svensen/Knappa carries the bulk of ridership but makes up a small portion of the route length.
- **Route 10 (Astoria)** - This route is highly productive (18.4 boardings per service hour); high ridership to the Job Corp (Tongue Point) is notable. Route 10 has high number of alightings at Clatsop Community College but relatively few boardings (Route 101 provides a more direct return trip to downtown Astoria). There are some issues with on-time performance issues (20% late), although differences in running time reflect different route patterns, e.g., Route 10 provides service between Warrenton-Astoria or circulation in Warrenton on some trips.
- **Route 101 (Astoria – Seaside)** – Route 101 is productive (15.6 boardings per service hour). Productivity is lower (but still reasonable) in the summer possibly due to fewer trips to CCC or other seasonal factors. SETD increased frequency on this route between May and August (data were collected in May and July), so lower productivity also reflects passengers being spread across more trips. There is strong midday demand, though more moderate in the summer. On-time performance worsened in the summer, but was perhaps mitigated by the increase in the number of trips. Boarding activity is strong in the south part of Seaside, particularly at McDonald’s (also seen on Route 20).
- **Pacific Connector (Astoria – Seaside – Cannon Beach – Manzanita)** - This route has good productivity (10.6), though slightly lower ridership and productivity in summer (8.3 boardings per service hour). Late afternoon ridership was particularly strong, indicating possible demand for another afternoon trip. On-time performance degrades on summer weekends – indicating potential need for different summer and/or summer weekend schedules. Midday northbound demand falls off in Cannon Beach but remains strong between Seaside and Astoria.
- **Route 20 (Seaside – Cannon Beach, Weekday)** – Productivity is reasonable (9.7 boardings per service hour), though lower in summer (7.4) partly due to more trips (the former Route 101 Express pattern was folded into this route between the May and August surveys). In addition, seasonal weekday Route 21 (see below) is somewhat duplicative. The 6:00 am trip doesn’t perform well (could consider having service start later), but the 7:00 pm trip looks strong (indicating potential demand for later evening service). On-time performance worsens in summer. While there is some demand to Seaside Hospital, ridership is relatively low for a significant activity center. Similar to Route 101, boarding activity is stronger in the south part of Seaside.
- **Route 21 (Seaside – Cannon Beach, Weekend)** – Productivity is good (10.3 boardings per service hour) in the May survey but falls to 4.6 in the summer survey. The route ran slightly late in the May survey, but had severe on-time performance issues in the summer survey. For example, the 3:55 pm departure from Seaside arrived in Cannon Beach 21 minutes behind schedule, and missed its local run within Cannon Beach.
- **Route 21 (Cannon Beach local service; summer weekday only)** – Productivity is very low on this route (2.6 boardings per service hour). As noted for Route 20, there is some duplication in local Cannon Beach service on summer weekdays between this route and Route 20. The surveys indicated some on-time performance issues.
- **Seaside Trolley (Seaside local, Summer only)** – Productivity was reasonable (9.1 boardings per service hour).

## AGENCY ASSESSMENT

SETD is organized into six divisions, all of which are overseen by an Executive Director and the Board of Commissioners. SETD employs 40 people, of which 31 are full-time permanent employees. The Operations Division is the largest division, with 17 employees—15 of whom are bus operators. As of July 2015, SETD has been hiring additional administrative and operations staff. Staff are non-union. SETD has undertaken a wage study to determine if pay levels meet cost of living and skills required metrics, and recently began providing most operators with official lunch breaks.

### Budget

SETD’s adopted FY 14-15 operating budget is \$3.26 million, which is slightly higher than the FY 13-14 budget of \$3.20 million. SETD collects property taxes, which make up about a quarter of its revenues.

Figure 4-11 SETD Funding Sources and Expenditures

| Primary funding sources  | Primary expenditures   |
|--|--|
| <ul style="list-style-type: none"> <li>▪ Property tax (26% of total revenues)</li> <li>▪ Beginning Balance (26%)</li> <li>▪ FTA 5311 Rural Operations (14%)</li> <li>▪ Fares (7%)</li> <li>▪ State timber revenue (5%)</li> <li>▪ ODOT Special Transportation Fund/Special Transportation Operating funds (4%)</li> <li>▪ FTA 5339 Bus and Bus facilities (4%)</li> <li>▪ FTA 5311(f) Intercity grant (3%)</li> <li>▪ ODOT Drive Less Connect (3%)</li> <li>▪ FTA 5310 Preventive Maintenance / Vehicles (2%)</li> <li>▪ Miscellaneous (5.9%)</li> </ul> | <ul style="list-style-type: none"> <li>▪ Wages and benefits (36%)</li> <li>▪ Fuel (7%)</li> <li>▪ Vehicle maintenance and repair (3%)</li> </ul> |



## Fare Structure

Given its large service area, SETD utilizes a tiered fare structure based upon distance traveled (Figure 4-12). SETD does not issue transfers. The agency does not offer a senior or disabled single-ride reduced fares. Regional Connector Passes for regional travel were introduced after a Northwest Connector study in 2013. The five transit agencies that comprise the partnership implemented a 3-day and 7-day visitor transit pass.

Figure 4-12 Fare Structure for General Passengers

| Fare Type               | Fare            | Routes  |
|-------------------------|-----------------|---|
| Single Ride - Cash      | \$1.00          | 10, 11, 15, 20, 21, 101/Pacific (Within Astoria/Warrenton or Gearhart/Seaside), Seaside Streetcar Trolley   |
| Single Ride - Cash      | \$3.00 - \$8.00 | 101, Lower Columbia Connector, Pacific Connector  |
| Single Ride - Tickets   | \$1 increments  | The Transit Center sells bus tickets that can be used as cash aboard vehicles   |
| Day pass                | \$5             | Unlimited rides for the day   |
| Month pass              | \$45            | Monthly unlimited pass; tied to calendar month  |
| Annual pass             | \$495           | Annual unlimited trips  |
| Connector 3- Day Passes | \$25            | Good for one trip to the coast from Portland or the Albany/Corvallis, area, one return trip, and unlimited travel in Clatsop, Tillamook, and Lincoln Counties (from Astoria to Yachats) |
| Connector 7- Day Passes | \$30            | Good for one trip to the coast from Portland or the Albany/Corvallis, area, one return trip, and unlimited travel in Clatsop, Tillamook, and Lincoln Counties (from Astoria to Yachats) |

Several types of pass discounts are available for eligible riders, including individuals who are 60 years of age and older, are a Social Security recipient, a Veteran, or a student. These individuals can receive a discount on monthly or yearly passes. Students can also receive pass discounts with proof of school I.D. Students of all ages are also eligible to buy quarterly passes. Lastly, youth aged 18 and younger can purchase a “Summer Fun Pass” for use between June 15<sup>th</sup> and September 6<sup>th</sup>. This information is summarized in Figure 4-13.

Figure 4-13 Fare Structure for Special Populations

| Passes  | Day    | Month   | Quarter | Year     | Note  |
|---|--------|---------|---------|----------|---|
| Elderly and Disabled  | \$5.00 | \$30.00 | N/A     | \$330.00 |   |
| Military  | \$5.00 | \$30.00 | N/A     | \$330.00 | United States Military ID Needed to Purchase Pass |
| Student (Grades K-12)   | \$5.00 | \$30.00 | \$30.00 | \$330.00 | Current School ID Needed to Purchase Pass         |
| College Student   | \$5.00 | \$30.00 | \$60.00 | \$330.00 | Proof of Enrollment for Current Term              |
| Summer Fun Pass - For ages 18 and younger between June 15th and September 6th - \$30.00 |        |         |         |          |   |

Passengers certified for ADA Paratransit pay twice the regular fare. Dial-A-Ride customers pay by distance. One-way trips from 0-10 miles cost \$8 and trips from 11-20 miles cost \$12.

## Vehicles

SETD operates service with 21 vehicles, 15 of which are used on its fixed-route services. Vehicles used on fixed-route services are between 30 and 35 feet in length, and have seating for up to 39 passengers. All

SETD buses are equipped to carry at least 2 wheelchairs, but can hold up to 3-4 wheelchairs depending on the vehicle. All buses have bicycle racks. Four vehicles will be replaced in 2015-2017 – these Chevrolet models have had continual maintenance problems and will likely not reach their useful life.

The Dial-A-Ride vehicles are cutaways that have a seating capacity of 12 passengers. Vehicle ages range from one to 13 years old, with an average fleet age of 7.5 years. Two vehicles are expected to be replaced in FY 2014/15.

## Facilities

SETD owns two facilities, one in Astoria and one in Warrenton. The Astoria Transit Center at 900 Marine Drive is the primary transfer location and includes park-and-ride spaces. An indoor waiting area and ticket window provide passengers with ticket sales and information. SETD’s operations center is located in Warrenton. All vehicles are stored and maintained at this location, and all operators report here for shifts.

SETD recently opened a transit kiosk in the Seaside Factory Outlet Center to provide ticket sales and customer information. The agency is considering locating a transit facility in Seaside, given growth in the area and strong ridership on Route 101.

## Technology

SETD employs the following technologies:

- Scheduling software – OBSS is used for Dial-A-Ride and ADA paratransit scheduling
- Web site – [www.ridethebus.org](http://www.ridethebus.org) includes system and route maps and schedules
- Trip planning support – use of General Transit Feed Specification means that SETD routes are available in Google Transit

A major next step for the agency is equipping vehicles with GPS to allow for real-time arrival information.

## Regional Connections

The primary goal of the Northwest Connector branding lies in fostering inter-county connections. The alliance coordinates monthly on scheduling and service coordination. Before August 1, 2015, riders had to transfer at either Westport or Clatskanie to switch from SETD to CC Rider. As shown in Figure 4-14, typically around 60 passengers per month transfer between systems. Starting in August 2015 riders transfer at a single, consistent transfer location in Rainier. Service frequency was reduced from three trips to two per day.

Figure 4-14 Transfers from SETD to CC Rider by Month



SETD also coordinates with TCTD buses; however, running times are several times longer than a similar trip via car, and advertised transfer times may be confusing to riders. For example, a trip from Astoria to Manzanita (departing Astoria at 8 am) would take 124 minutes versus 60 minutes via driving. The transfer time for the first trip of the day is shown as 9:20 am at Cannon Beach Family Market; however, that is the time when the TCTD bus arrives northbound at Family Market. The bus does not actually leave at 9:20, but at 9:40 am, arriving in Manzanita at 10:04 am. This trip, including SETD and a transfer to TCTD, would cost \$5.50 one way. The fare is cheaper if a passenger takes the one Route 20 trip per day that goes straight to Manzanita (\$4 one-way).

## **Amenities**

Many major stops have shelters, including at Clatsop Community College, Fred Meyer, Safeway, the social services office on Marine Drive, Seaside Cinema, Avenue A in Seaside next to McDonald's, locations in Cannon Beach, and Emerald Heights. SETD does not have a set schedule for maintaining and cleaning the shelters.

SETD is a flag-stop system, meaning passengers can hail the bus anywhere along its route and the bus will stop if it is safe to do so. Some scheduled stops do have sign poles with either the OXO, "The Bus" (the previous branding), or SETD's logo, but most do not have signs.

Current passenger schedules list a large number of stops, many of which are flag stops. Very low ridership stops could be removed from the schedule to streamline information.

## **Marketing and Information**

Currently SETD has a system schedule booklet and regional map, but no hand schedules with route-level maps. The route maps online show where the route goes in general, but not where it stops in specific cities. The schedules list stops but some may be difficult for new riders or people unfamiliar with the system to find, e.g., the "Hammond 4-Way" stop.

The schedules generally include a full round trip per column, then at one point halfway down the bus switches direction; highlighting that switch would be useful. For example, Route 20 in Cannon Beach lists stops at both "Midtown" and "Family Market" – these are actually the same location but are on different sides of the street. The casual user might not realize this.



## 5 COMMUNITY INPUT

SETD bus service is a community public good, therefore it must travel when and where people need it to be useful. Input was gathered from current riders, stakeholders, and the general public, as summarized in Figure 5-1.

Figure 5-1 Summary of Community Input

| Time Frame     | Project Phase  | Information Presented  | Outreach Tools  |
|----------------|--|--|---|
| April-May 2015 | Outreach & Data Gathering                            | <ul style="list-style-type: none"> <li>Project overview and information gathering</li> </ul>                             | <ul style="list-style-type: none"> <li>On-board rider survey</li> <li>Community survey</li> <li>Stakeholder meetings</li> </ul> |
| June-July 2015 | Existing Conditions                                  | <ul style="list-style-type: none"> <li>Community overview</li> <li>Market analysis</li> <li>Existing services</li> </ul> | <ul style="list-style-type: none"> <li>On-board rider survey</li> <li>Mobile outreach events</li> </ul>                         |
| December 2015  | Goals and Service Opportunities                      | <ul style="list-style-type: none"> <li>Goals</li> <li>Initial service opportunities</li> </ul>                           | <ul style="list-style-type: none"> <li>Community survey</li> <li>Mobile outreach events</li> </ul>                              |
| June 2016      | Long-Range Comprehensive Transportation Plan (LRTCP) | <ul style="list-style-type: none"> <li>Final Plan: Service, capital, and transit-supportive elements</li> </ul>          | <ul style="list-style-type: none"> <li>Open houses</li> </ul>   |

### STAKEHOLDER OUTREACH

Four meetings plus additional phone conversations were held with community organizations, government agencies, and non-profits.

For additional analysis on community outreach and findings, see Volume II, Sections D, and I

### Key Findings

- In general, stakeholders appreciate the value of SETD services. The bus is generally seen as something used by those who have no other transportation options.
- For many major employers, bus service is not really feasible given shift times and overcoming the culture of driving in Clatsop County.
- Clatsop Community College is a major source of ridership. Since 90% of students are also working, many take evening classes running until 9 pm. The MERTS campus used to be served and CCC is interested in reinstating service.
- Awareness of when and where service runs would be hugely beneficial as starting point.
- Access to transit hampered in developing areas of the county (Ensign Lane / Huckleberry area) by lack of sidewalks.
- Service takes too long compared to driving.

- Astoria is compact but has major topographic challenges (very steep hills) making walking to transit difficult for older adults and people with disabilities or with strollers/packages.
- Parking challenges in Cannon Beach mean leaders are interested in maximizing transit usage; Cannon Beach has been a strong supporter of transit.
- The labor market of the region is not the typical 9-5 group. Hotel workers may start very early in the morning while restaurant and bar workers end shifts late at night.
- In Seaside, a large percentage of the homes closer to the beach are second homes that are not occupied year-round. Most people who reside in Seaside live east of U.S. 101. Over time, the eastern part of the city will likely develop more; for example, the local school will be relocated to the east and higher part of the city to be out of the tsunami zone.
- Stakeholders generally agreed that hourly bus service frequencies are adequate for a community of Clatsop County's size.
- Lack of affordable housing in employment centers like Cannon Beach and Seaside mean people must commute from Astoria/Warrenton/Hammond to work.

## Opportunities

- Increase school district transportation, especially for after school events when no yellow bus service is available (5:30-6:30 pm).
- Work with Clatsop Community College to implement a Universal Transit Pass program for students and staff, similar to the Tongue Point Job Corps agreement. Move the CCC stop to the corner of 16<sup>th</sup> and Lexington Streets to avoid a hairpin turn and steep grade navigating the campus parking lot. Match Route 10/101 times to class start (8 am) and end times (9 pm). SETD should send a representative to CCC's fall orientation.
- Post real-time passenger information at major stops (Transit Center, CCC). Get WiFi on buses.
- Enhance bus stop security with better lighting.
- During roadway construction, great opportunity to expand sidewalk, bicycling, and transit infrastructure.
- Consider a parks shuttle that, for example, shuttles people back and forth between each end of the Fort to Sea trail.
- Expand RidePal.
- Make the monthly pass tied to the date of purchase, not the calendar month.
- Conduct more outreach to human services agencies and employers to promote transit. Memorial Hospital plans to expand and parking is tight – this agency might potentially be interested in a pass program. Stakeholders felt many employers in Seaside and Cannon Beach would be willing to provide employees with bus passes. Due to labor shortages, some employers are already paying for peoples' driving mileage to ensure enough staff.
- Many stakeholders noted the need for service to run until at least 9 pm. *Note: As of August 2015, service now runs until 9:50 pm on Route 101 (last trip leaving Seaside at 8:47 pm), Route 10 runs until 9:12 pm (last trip from Astoria to Warrenton at 8:37 pm), and Route 20 runs until 8:55 pm (last bus leaving Cannon Beach at 8:37 pm).*
- Implement park-and-ride facilities in Seaside (north end and south end), and at the U.S. 26 interchange.
- Create a year-round system map and information and a seasonal version.
- Promote Route 10 as a tourism route as it goes all over the city of Astoria.

## SETD STAFF CONVERSATIONS

The project team met with bus operators and SETD staff to understand operational issues and opportunities as well as ideas for operation of SETD as an agency.

### Key Findings

- Route 101 did not yield much ridership from Seaside Providence Hospital. *Note: Route 101 no longer deviates into the hospital during its first run of the day.*
- Route recovery time is often eaten up during summer due to traffic on Routes 10 and 101.
- Speed bumps in Sunset Beach and Clatsop Community College parking areas are hard on the buses and passengers. A shelter is needed at Sunset Beach.
- Paratransit demand continues to climb.
- System materials need to be comprehensible for those who do not speak English or those who do not read.
- Need real-time arrival information at the Transit Center.

## RIDER SURVEY

An on-board survey conducted in May and July resulted in 228 total responses. Data collected included rider demographics, travel patterns, and customer satisfaction.

### Who are SETD's Riders?

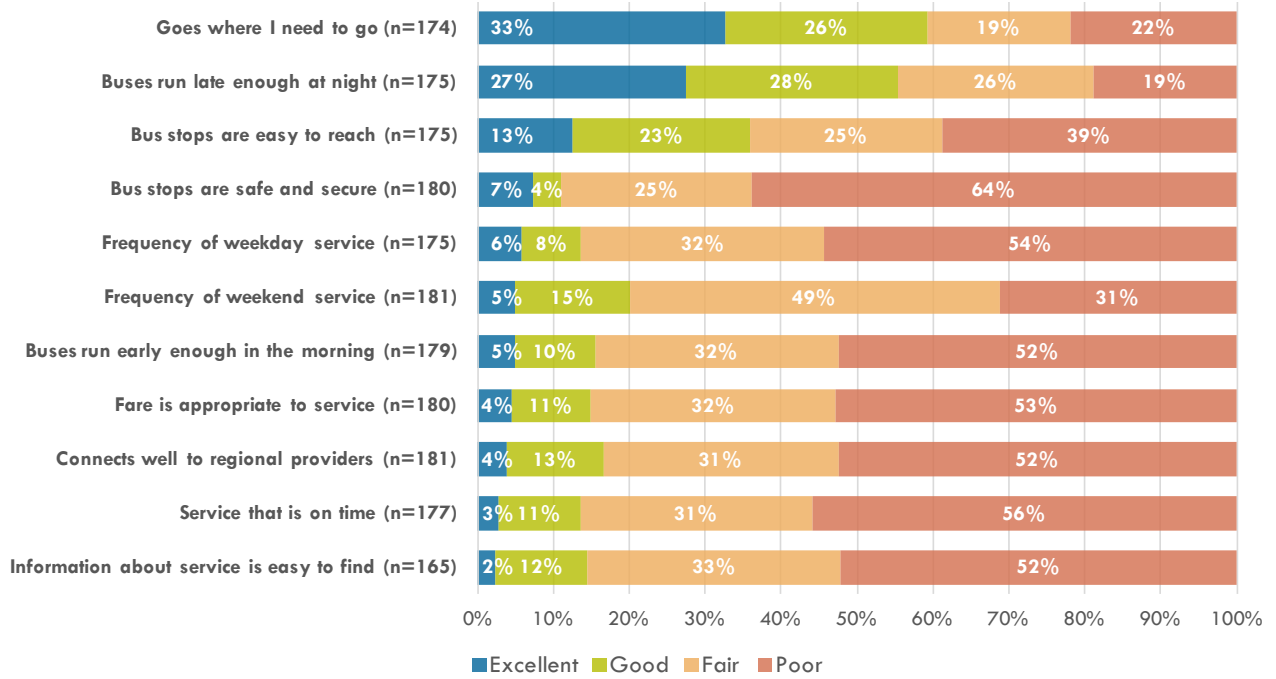
- |                       |   |
|-----------------------|---|
| <b>Demographics</b>   | <ul style="list-style-type: none"><li>▪ Gender: 48% female, 41% male</li><li>▪ Ethnicity: 65% white, 17% two or more; 10% Hispanic/Latino</li></ul>   |
| <b>Socioeconomics</b> | <ul style="list-style-type: none"><li>▪ Employment status: 38% employed full-time, 18% part-time</li><li>▪ Income: 31% below \$10,000; 27% between \$10,000-\$14,900</li></ul>  |
| <b>Transportation</b> | <ul style="list-style-type: none"><li>▪ Driver's License: 63% have no driver's license</li><li>▪ Vehicle Availability: 63% have no working vehicle</li></ul>  |
| <b>SETD Usage</b>     | <ul style="list-style-type: none"><li>▪ Access to bus stop: 85% walk to and from the bus stop</li><li>▪ Frequency of use: 66% use SETD 3-5+ days per week</li><li>▪ Fare: 62% paid a cash fare; 21% used a monthly pass</li></ul> |

### Customer Satisfaction

Overall, respondents are happiest with bus route coverage and service span in the evening—these two responses got the most “excellent” rankings (Figure 5-2). More than half of those responding to each service evaluation topic, however, ranked as “poor” the service’s bus stop safety, frequency of weekend service, early morning service, fare, regional connections, on-time performance, and availability of information. Including “fair” rankings, the biggest areas for improvement are bus stop safety and security and weekday service frequency.

Sunset Empire Transportation District

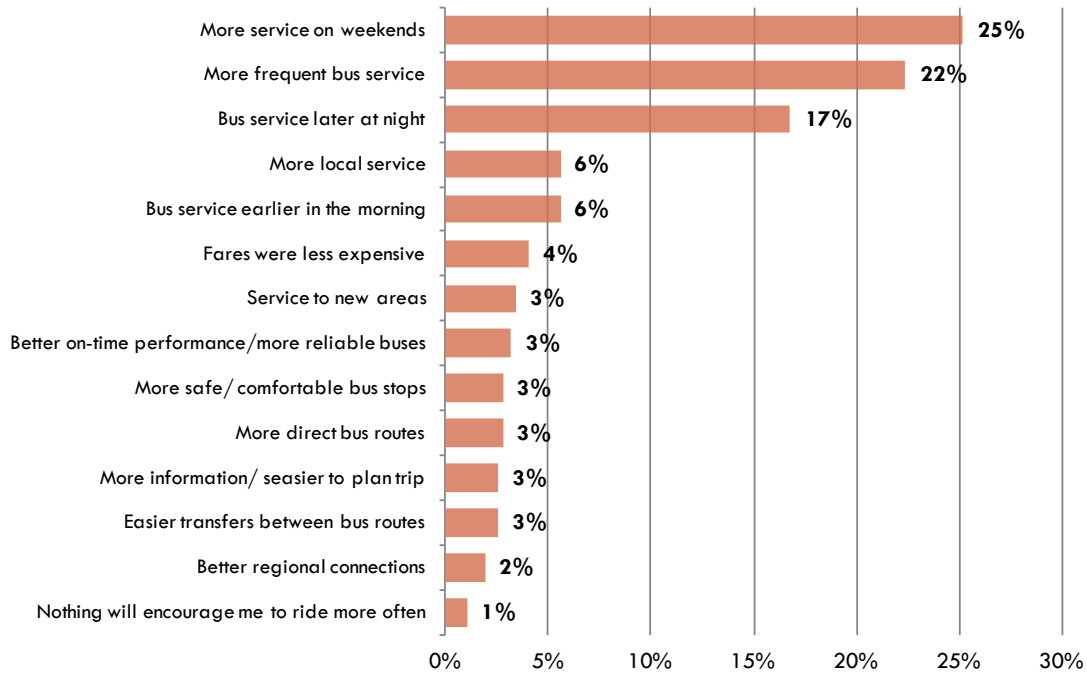
Figure 5-2 Satisfaction with Transit



Q16: Please rate the following items about transit in your area; non-responses removed.

The next question asked people to cite their top service improvements (Figure 5-3). More service on weekends and increased frequency were the top two requests, which is consistent with the items ranked poorly in the previous question.

Figure 5-3 Top Service Improvements Requested by Respondents



Q17: Please consider the potential service improvements shown below and select up to 3 that would help you choose to ride transit more often. n = 179 with 465 selections; non-responses removed



## COMMUNITY SURVEY

A primary goal of SETD is to increase ridership and better serve community needs. A community survey was distributed in May 2015 to gather information on peoples’ opinions about transit.

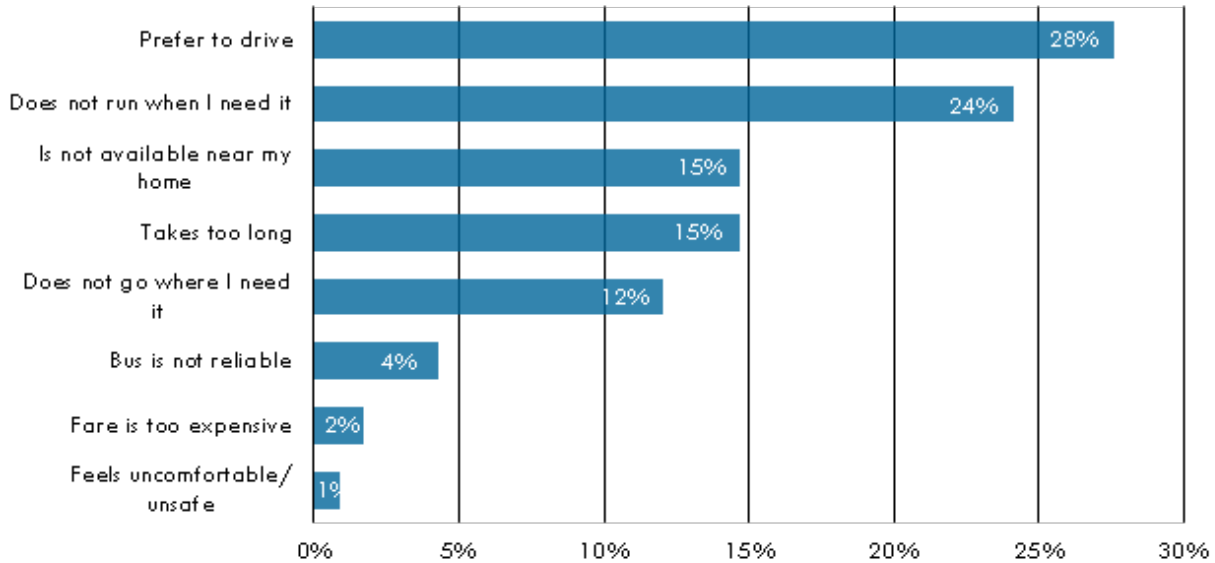
### Transit Usage

More than half of respondents reported having taken transit in the past year. Of those people, nearly half took SETD service. More than 25% used TriMet service in the Portland area, and nearly 21% used Northwest Point service (e.g., Astoria – Portland).

### Attitudes Toward Transit

Respondents gave many reasons why transit does not currently work for them (Figure 5-4). The top response (28%) is that respondents simply prefer to drive; this is not surprising in many communities. However, nearly as many people (24%) responded that transit does not run *when* people need it. Service also takes too long or does not go *where* people need it to.

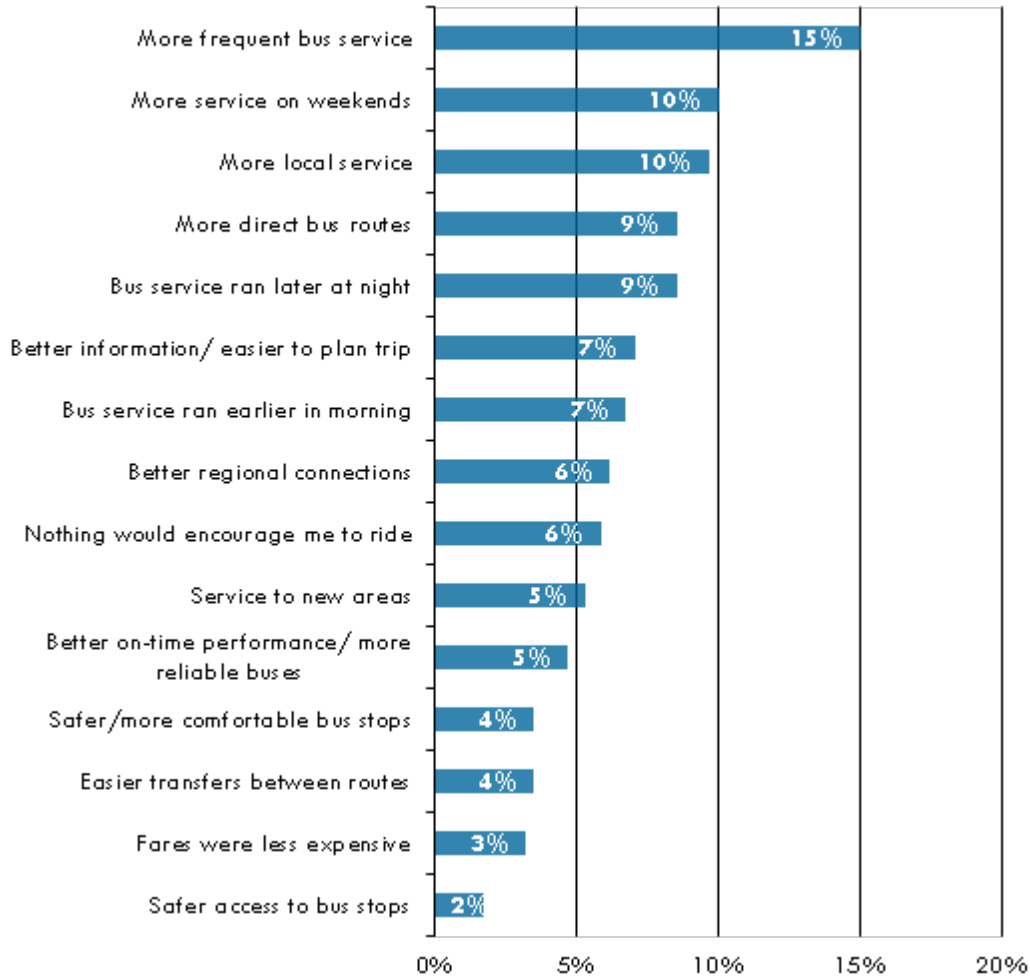
Figure 5-4 Reasons why public transportation does not meet travel needs.



Q9: Why isn't public transportation a good option for you? (n=142)

The most popular service element that would encourage respondents to try public transportation or use it more often is more frequent bus service (Figure 5-5), which is consistent with the complaint that service does not run when it is needed. More weekend and local service as well as more direct and later service were also priorities for respondents.

Figure 5-5 Service elements to encourage non-riders to try public transportation or use it more often.



Q10: What would encourage you to try public transportation, or use it more often? Non-responses removed. (n=142)

Respondents were asked when service should start and end. Nearly 40% of respondents said service should begin at 6:00am, which is when some SETD service does start on weekdays. However, respondents either were not aware of it, or the routes that serve them still may not arrive at their destination as early as required. Another 22% stated that morning service should begin at 5:00 am.

Of those that said later service would encourage increased ridership, about 60% of respondents said service should end at 10:00 pm or earlier (SETD has since extended service hours until nearly 10:00 PM on some routes). Nearly 40% of respondents said service should continue until 11:00 pm or midnight.

### EXISTING CONDITIONS OUTREACH

Staff from the project team and SETD gathered input from the general public at four locations throughout the county on June 19-20, 2015. Stations showing project information, community demographics, and service maps were set up in places where people already frequent, including:

Passerbys were asked about public transportation needs, familiarity with SETD service, the role of transit in the community, and desired service improvements (for those who currently ride). A mix of both riders and non-riders gave feedback.

Figure 5-6 Outreach events drew both riders and non-riders to offer opinions on public transportation needs



## Key Findings

- Respondents either take SETD today and highly value it or do not take the bus but feel it is an important part of the community.
- Growth in Knappa and Svensen could support transit.
- Service should run later – e.g. the Rite Aid in Warrenton is open until 9 pm. On weekends, service should run until 7 or 7:30 pm.
- More frequency needed on weekend service.
- Having a big break in the Route 21 and Pacific Connector services midday on weekends hurts business since this is a key shopping time.
- Fares seem inequitable. Seaside to Cannon Beach costs \$1, but Sunset Beach to Fred Meyer costs \$2.
- Buses to Cannon Beach need to arrive before normal working hours and leave after stores close.
- Real-time information is needed along with higher visibility stops and information signs. Larger shelters are needed at places like McDonald’s in Seaside.
- People are confused by the SETD acronym; sounds similar to the area recreation district.
- More access is needed to schedules and service information.

## GOALS AND SERVICE OPPORTUNITIES OUTREACH

Three outreach strategies were used to obtain input from transit riders and the general public on service opportunities and goals:

- An on-board survey of riders conducted by SETD staff during the weeks of December 7 and 14, 2015
- An online survey publicized and distributed to members of the general public in the SETD service area between December 14-28, 2015
- Outreach events conducted at several locations in the SETD service area on December 11-12, 2015

Figure 5-7 Community Event Photos



## Key Findings

The general public and rider surveys differed on a number of important characteristics. In general, riders placed a higher priority on local improvements while the general public placed higher priority on regional improvements:

- **Rider Survey:** Riders were primarily concerned with filling in specific *local* service gaps.
  - Shopper shuttles were given a high priority as a possible service enhancement.
  - Increased service in Seaside and Astoria was given high priority.
- **General Public Survey:** The general public was primarily concerned with *regional* coverage and transit performance.
  - The performance and availability of regional service were key priorities of respondents.
  - General frequency, time span, and reliability improvements were prominent desires among respondents.
- **Community Outreach:** Non-riders were particularly interested in learning about the bus system in general, highlighting the need to make service consistent and easy to understand and communicate. Riders had a variety of opinions on service options; in particular:
  - Riders were supportive of plans for later evening service.
  - Riders were generally supportive of *well-timed* transfers.

## 6 COMMUNITY TRANSPORTATION NEEDS

The existing conditions analysis, system assessment, and wealth of stakeholder and community input reveals the following transportation needs.

### TRANSIT MARKETS

- There is general consensus among stakeholders that current service attracts lower-income individuals/households and those that do not have other transportation options.
- A high share of riders do not have a working vehicle in their household (about a third in the summer survey and over 60% in the spring survey).
- Most riders are frequent riders who are employed full or part-time.
- The community's transit needs are very different in the summer in terms of travel patterns and the hours of service. In particular, later service is needed – until 9 or 10 pm or later.
- Residents are open to trying transit—a quarter of residents who responded to the community survey have used TriMet service in the Portland area and 20% have used Northwest Point—and expressed a willingness to take local services along the coast.
- Head Start on Alameda Avenue in Astoria needs service.

### GEOGRAPHIC

- Topography and local stop access are a barrier to those unable to walk longer distances, e.g., seniors.
- Service is used for many in-town trips (e.g., within Astoria, within Cannon Beach, etc.)
- Non-Riders are interested in regional service
- Veterans need to get to the Veteran's Administration (VA) hospital in Portland for medical appointments; these trips are currently served by the Disabled Veterans of America (DAV) van, but there are scheduling challenges. Veterans in Tillamook County also need to get to Camp Rilea.
- There is a need for medical trips to access to specialists located outside of the county, e.g., in Longview and Portland.
- Astoria:
  - The middle of Astoria is not well covered, e.g., north of Niagara Avenue and south of northern W. Marine Drive, and stop access is challenging due to steep topography.
  - Service misses major destinations on weekends, e.g., Safeway in Astoria.
- Seaside:

- The southwest portion of Seaside, e.g., west of Necanicum Drive and south of 1<sup>st</sup> Street where there are many origins and destinations, is not served.

## TEMPORAL

- Residents desire more frequent service and weekend service
- Nighttime service is needed on weekends.
- Lack of evening hours are key to serve low-income jobs.
- More frequency is needed particularly on Route 101.
- More frequency is needed in Warrenton. This is in part an issue of marketing and schedules rather than the actual number of trips. Regular passengers realize that two routes serve Warrenton-Hammond, but several members of the public requested more service to that community, so some people may not realize this. According to stakeholders, Warrenton-Hammond contains a number of low-income housing areas, partially resulting from housing price increases in Astoria. Ideally the Route 10 trips through Warrenton-Hammond could also be branded as Route 15 so passengers understand they can board either bus.
- Related to Route 21, stakeholders stated that Cannon Beach is becoming a year-round destination and that such a long break in weekend service during peak shopping times may dissuade transit travelers.
- The long break in Pacific Connector service should be closed.
- For Seaside residents, the first trip of the day leaving Seaside gets people to Middtown in Cannon Beach at 9:18 am. For stores that open at 10 am, employees must typically report at 9 am, therefore the first trip of the day may be too late for employees to use.
- Cannon Beach employees often get out of work at 10:30 pm-Midnight.

## ORGANIZATIONAL/COORDINATION

- Uses that have located away from major transit corridors require significant deviations and increase travel time for all riders.
- It is necessary to get multiple services to communicate/coordinate and prioritize improvements to the built environment – sidewalks and bike access.
- Transit is not always “at the table” during the development process.

## OPERATIONAL

- On-time performance a major passenger priority; summer congestion along U.S. 101 and crossing the Youngs Bay Bridge has major impacts on reliability.
- As a tourism-focused transit provider, SETD service varies on weekdays and weekends and on and off season. The many route variants and name changes between weekday, weekend, and seasonal service may unnecessarily increase system complexity and the community’s ability to understand how to ride the service.
- Cost is an issue for human service agencies; need to identify opportunities for cost sharing.
- Fare equity is an issue. Zones work for longer-distance connections like Seaside-Astoria but for example community members and/or riders felt that fares should be less expensive

for a relatively short-distance regional trips between Sunset Beach and Warrenton trip, or for short local trips such as within Cannon Beach.

- Route 21 and Pacific Connector run on top of each other in Cannon Beach on weekends, duplicating service.
- Route 21's weekend service pattern in which some trips serve Seaside and some do not are confusing.
- Better transfers are needed between Route 10 and 101 rather than relying upon radio communication.
- Route 101's travel time is degraded by its many deviations into local service.
- Route 15 operates at very irregular intervals due to its tie to the Lower Columbia Connector schedule.

## CAPITAL

- There is a need for signed stops, shelters at major stops or at stops far from a front door, and lighting and security at some stops
- A transit center is needed in Seaside
- Speed bumps at Sunset Beach and Clatsop Community College are a comfort issue; improvements are needed.
- There is a desire for high-quality vehicles. For example, it is difficult to see out of the front of certain vehicles.
- Current vehicles are difficult for those with mobility impairments or older adults to board, and deploying the lift can take 2-3 minutes
- There is a need to improve radio interoperability with TCTD and CC Rider

## INFORMATION & MARKETING

- Lack of information and marketing is seen as a major barrier. Marketing improvements are needed to make the system more “legible.”
- More detailed route maps are needed to convey how the system operates.
- People do not know where the bus runs or where it stops. There is a need for more stop poles and/or more fixed stops to identify where transit runs on the ground (see stop infrastructure). Signs do not include schedules. Stops and shelters are an effective marketing tool for transit.
- Printed information is important. Clatsop County communities are not the “big city” – people still use the library, do not have smart phones, etc. Do not take printed materials for granted.
- Real time information is highly desirable.
- People are unaware of ADA paratransit or even what it is.

## SERVICE OPPORTUNITIES

During the past year, SETD has already implemented a number of changes desired by staff, stakeholders, and the public – e.g., increasing frequency on Route 101, extending evening hours on key regional routes, conducting a wage study, and instituting driver lunch breaks.

Opportunities identified through the analysis and community and stakeholder outreach conducted as part of this task include:

- There is a general consensus is that there is an opportunity to make transit more attractive, e.g., based on the cost of driving (high gas prices), but that better information and marketing is the major barrier.
- Frequency is important, but there is a general consensus is that hourly service would be sufficient given community density.
- Increased school transportation (high school)
- Better timed schedules to major destinations, e.g. Clatsop Community College
- More convenient transfers, especially between Route 10 and 101.
- Create safer crossings at major stops such as along U.S. 101 and U.S. 30
- Provide a consistent location for transfers to Tillamook County Transportation District
- Expand partnerships similar to Tongue Point's pass program to Clatsop Community College, Columbia Memorial Hospital, other major employers
- Improve marketing and providing schedules to present SETD information regularly around community
- Seaside Hospital was identified as a key destination in the community survey, but has relatively low ridership, indicating there is an opportunity to better market service.
- Consider renaming the system. There is confusion with the Sunset Empire Recreation District. People are also not sure what service area "Sunset Empire" covers.



## 7 GOALS & SERVICE PRINCIPLES

Each community has different goals that affect the provision of transit and other public services. Running every type of transit service throughout Clatsop County is neither financially possible nor desired. Instead, the priorities of the community must be used to decide how important public transit stands in relation to other services and what neighborhoods and markets transit should serve. Establishing service design principles will also help SETD explain service decisions to the public.

For additional details regarding goals and objectives, see Volume II, Section K.

### DEFINITIONS

Goals and objectives are defined as follows:

- **Goals** establish the overall policy direction and organizational philosophy. These are typically value statements.

**Objectives** offer a means to meeting a goal. They are typically action-oriented strategy statements and should be understandable, specific, attainable, and measurable. Objectives can be met through a variety of actions. For example an objective to reduce transit travel time can be achieved by eliminating route deviations, providing more direct service, traveling on higher speed roads, investing in traffic congestion relief solutions, and/or giving transit a priority at congested intersection.

### PROPOSED GOALS AND OBJECTIVES

Based upon public and stakeholder input, as well as feedback from the project advisory committee, the team created a list of service goals and objectives for SETD, shown in Figure 7-1.

Figure 7-1 Goals and Objectives

| Goal  | Objective   | Highest Priority (Public Input) |
|---|---|---------------------------------|
| 1. <b>Efficiency:</b><br>Provide cost-effective public transportation <sup>2</sup>                | A. Match service types to appropriate land use densities                      |                                 |
|   | B. Increase efficiency of transit services                                    | #6                              |
|   | C. Maintain efficient cost per service hour                                   |                                 |
| 2. <b>Mobility:</b> Serve a wide range of mobility needs within budget constraints <sup>2,4</sup> | A. Provide service all day covering peak times for multiple job sectors.      | #1                              |
|   | B. Increase service on corridor segments serving local businesses             |                                 |
|   | C. Accommodate seasonal demand with increased hours to serve nighttime travel |                                 |
|   | D. Provide weekend service covering major trip generators                     | #5                              |
|   | E. Coordinate services with intercity providers                               |                                 |
|   | A. Increase access to transit for Clatsop County residents                    | #4                              |

| Goal   | Objective  | Highest Priority (Public Input) |
|--|--|---------------------------------|
| <b>3. Accessibility:</b><br>Ensure Service Accessibility <sup>4</sup>  | B. Maintain lifeline service to rural areas of county  |                                 |
| <b>4. Reliability:</b><br>Provide reliable transportation <sup>6</sup>   | A. Adhere to scheduled run times   | #2                              |
| <b>5. Sustainability:</b><br>Compete with SOV travel and reduce vehicle miles traveled per capita <sup>5</sup> | A. Reduce travel time on high-ridership routes   |                                 |
|  | B. Increase ridership on Primary Transit Network <sup>7</sup>  |                                 |
|  | C. Operate service on all primary transit networks with enough frequency to make transit a convenient option | #3                              |
| <b>6. Capacity:</b><br>Ensure sufficient system capacity <sup>4</sup>  | A. Provide adequate seating capacity   |                                 |
|  | B. Ensure adequate on-board bicycle capacity   |                                 |
|  | C. Provide adequate ADA Paratransit capacity   |                                 |

Notes:

<sup>1</sup> Standards presented in the performance metric column are preliminary thresholds of acceptable performance based on peer systems and industry norms. (To be refined in Memo #8)

<sup>2</sup> Represents a current SETD goal

<sup>3</sup> Represents a Title VI required measure (system-wide service standard per FTA Circular 4702.1B)

<sup>4</sup> Represents a Comp Plan/TSP goal

<sup>5</sup> Represents the goal associated with the Transportation Planning Rule (TPR) benchmark and SETD desire to increase ridership

<sup>6</sup> Represents a stakeholder goal / SETD concern

<sup>7</sup> Primary Transit Network, as defined in Memo #3, are the most densely developed corridors or have the highest future potential population/employment density, and/or connect the most significant transit demand generators. They have the highest potential to warrant investments in higher levels of transit service (e.g., more frequent or more direct service).

<sup>8</sup> Service cancellations can be eliminated or minimized through increased reliability and sufficient spare vehicles.

<sup>9</sup> A trip is considered "denied" if the trip cannot be accommodated one hour before or one hour after the desired time. Denials are not permitted under the ADA.




## SERVICE DESIGN PRINCIPLES

Defining service types leads to different performance measure categories, and design guidelines help justify service planning decisions.

### Service Types

SETD generally provides three types of service as shown in Figure 7-2. Performance measures vary based upon types, because each one serves a different purpose and market. Some services are a hybrid of these service types, such as Route 20, which operates as a local fixed-route in Cannon Beach and Seaside, but provides intercity service between these communities. Constituents continually ask for service changes or justification for where routes run and when they operate. Creating a policy framework including service types and determining the coverage and productivity balance allow the transit agency to defend decisions and justify service design.


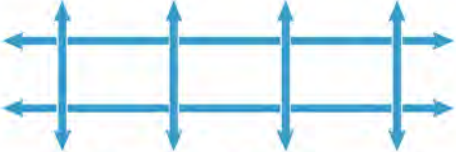
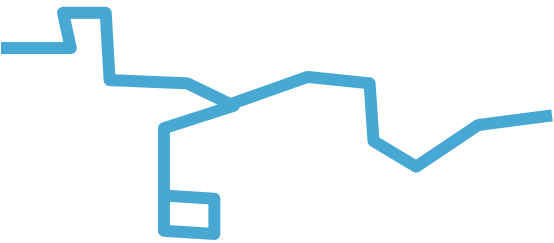




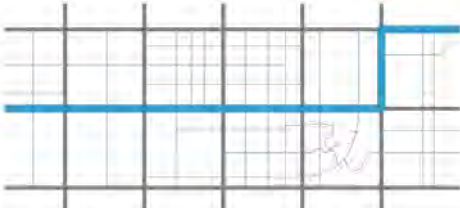
Figure 7-2 SETD Service Types

| Service Type   | Characteristics   |
|--|---|
| <p><b>Intercity Routes</b></p>          | <p>Intercity routes operate along primary arterials. They offer relatively frequent, simple, and direct service. Intercity routes include Route 30, Route 101, portions of Route 20, and the Pacific Connector, which provides weekend service on Routes 20 and 101.</p>  |
| <p><b>Local Routes</b></p>              | <p>Local routes serve major destinations but also run along local streets. Local routes often act as feeders, bringing people to hubs where they can transfer to Intercity routes. Productivity is usually lower than Intercity routes. Local service includes Route 10, Route 15, portions of Route 20, Route 21, and the Seaside Trolley.</p> |
| <p><b>Demand-Response Services</b></p>  | <p>Demand response service (Dial-a-Ride, ADA Paratransit) offers curb-to-curb service upon request. Demand response service operates within a geographically limited area, require advance reservations, and will pick up and drop off passengers anywhere within the defined zone.</p>   |

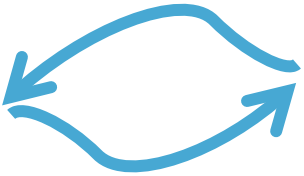





## Service Design Guidelines

Service design guidelines to provide an approach to structuring and evaluating services. In many cases, transit agencies find that over the years, land use decisions such as building a hospital or mall far from the center of town, or various requests from riders, cause a direct and simple route to become long and circuitous. When services underperform and a particular route warrants closer inspection, comparing the route design against these guidelines often helps pinpoint the reason why performance is suffering. These principles are summarized in Figure 7-3.

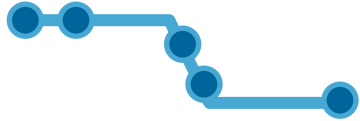
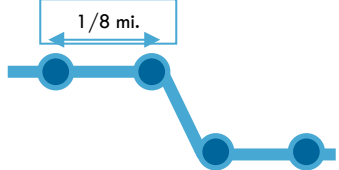




Figure 7-3 Service Design Principles

| Principle                          | Benefit  | Discouraged   | Recommended   |
|------------------------------------|--|---|---|
| Service should be simple           | Passengers can quickly and easily understand the service, where it goes, and the travel time.                  |  <p>Complex</p>   |  <p>Simple and intuitive</p>                           |
| Routes operate along a direct path | Routes are easier to understand and navigate when they follow a direct line.                                   |  <p>Circuitous, complicated</p>                           |  <p>Direct, easy to understand</p>                     |
| Minimize route deviations          | Fewer directional changes make the route easy to understand and remember. It also reduces overall travel time. |  <p>Out of direction travel, with longer travel time</p> |  <p>Direct route, shorter travel time</p>              |
| Operate major routes on arterials  | Passengers have a good knowledge of major roads and use them for reference.                                    |  <p>Travels slowly on local streets</p>                 |  <p>Travels on main roads with many destinations</p> |

Sunset Empire Transportation District

| Principle                                | Benefit  | Discouraged  | Recommended   |       |       |       |       |       |  |       |       |       |       |       |       |
|--|--|--|---|-------|-------|-------|-------|-------|--|-------|-------|-------|-------|-------|-------|
| Routes should be symmetrical             | A route that operates on the same street in both directions makes it easy for riders to return to their starting point.  |  <p><b>One-way service</b></p>   |  <p><b>Two-way service</b></p>               |       |       |       |       |       |  |       |       |       |       |       |       |
| Routes should serve well-defined markets | Routes need major destinations to anchor them and attract riders.  |  <p><b>Serves areas with little demand</b></p>   |  <p><b>Serves major destinations</b></p>     |       |       |       |       |       |  |       |       |       |       |       |       |
| Service should be well-coordinated       | Coordination between different services minimizes redundancy, balances passenger loads, and ensures short transfers.   |  <p><b>Lack of coordination</b></p>   |  <p><b>Service operates as a system</b></p> |       |       |       |       |       |  |       |       |       |       |       |       |
| Service should be consistent             | People can easily remember repeating patterns. Consistent schedules allow passengers to know when to catch a bus, without needing to remember the times for each trip. | <table border="1"> <tr> <td>10:21</td> <td>10:36</td> </tr> <tr> <td>10:54</td> <td>11:09</td> </tr> <tr> <td>11:28</td> <td>11:43</td> </tr> </table> <p><b>Irregular schedule</b></p> | 10:21   | 10:36 | 10:54 | 11:09 | 11:28 | 11:43 | <table border="1"> <tr> <td>10:30</td> <td>10:45</td> </tr> <tr> <td>11:00</td> <td>11:15</td> </tr> <tr> <td>11:30</td> <td>11:45</td> </tr> </table> <p><b>Consistent schedule</b></p> | 10:30 | 10:45 | 11:00 | 11:15 | 11:30 | 11:45 |
| 10:21                                    | 10:36  |  |   |       |       |       |       |       |  |       |       |       |       |       |       |
| 10:54                                    | 11:09  |  |   |       |       |       |       |       |  |       |       |       |       |       |       |
| 11:28                                    | 11:43  |  |   |       |       |       |       |       |  |       |       |       |       |       |       |
| 10:30                                    | 10:45  |  |   |       |       |       |       |       |  |       |       |       |       |       |       |
| 11:00                                    | 11:15  |  |   |       |       |       |       |       |  |       |       |       |       |       |       |
| 11:30                                    | 11:45  |  |   |       |       |       |       |       |  |       |       |       |       |       |       |

Sunset Empire Transportation District

| Principle                              | Benefit  | Discouraged  | Recommended  |
|--|--|--|--|
| Space stops appropriately              | Stop spacing needs to balance the needs of convenient access and reducing travel times. Stop spacing should be consistent and support the type of service being offered. |  <p><b>Inconsistent stop spacing</b></p>          |  <p><b>Consistent stop spacing</b></p>        |
| Service design should maximize service | Cycle time <sup>1</sup> and frequency must be matched to make the most efficient use of revenue hours.   |  <p><b>Inefficient use of time</b></p>            |  <p><b>Route maximizes service</b></p>        |
| Match vehicle type to service type     | Size vehicles according to ridership. Smaller vehicles may be better suited to operate on local streets.   |  <p><b>Vehicles not matched to service</b></p> |  <p><b>Vehicles matched to service</b></p> |

Notes: [1] Cycle time is the amount of time required for a bus to complete a full round trip on a route, including layover and recovery time, and be able to start another round trip

## 8 THE FUTURE OF SETD ... AND HOW WE GET THERE

The structure of a transit system – where routes run, when they operate, at what frequency, etc. – is derived from the overarching goals adopted by the community. For example, questions of whether to focus a large percent of transit resources on trunk routes such as arterials versus circulating through neighborhoods can only be answered by determining what types of service matter most to Clatsop County residents, employees, and visitors. Throughout this 16-month project, the project team worked with a technical committee, ODOT, SETD staff, stakeholders, and the public to create a distinct set of goals and objectives for public transportation (Chapter 7), which led into creation of service options at the route and system level.

Successful transit agencies must continue to evolve service as land uses, travel patterns, customer needs, and industry standards change. The service recommendations described here lead SETD toward a transit vision that builds upon existing ridership and creates a robust network connecting the small urban clusters where SETD service is concentrated while also providing important regional connections to smaller, rural communities and adjacent counties. Like all public agencies, SETD faces financial constraints, therefore this memo prioritizes each option based on cost and benefit to the community to provide a long-term roadmap for SETD.

The evolution of service opportunities from concepts to recommendations can be found in Volume II, Sections H, J, and L. Route maps by phase can be found in Volume II, Section N.

### LONG-TERM SYSTEM VISION

Figure 8-1 illustrates the long-term (20-year) vision for SETD services on weekdays and weekends, which the bullets below summarize for each route or market:

- **Route 30 / Lower Columbia Connector:** Rebrand service as Route 30 Lower Columbia Connector. Provide a more robust four round trips per day (which enhance service to Svensen/Knappa in addition to Rainier) and develop a weekly shopping shuttle in Svensen/Knappa. Differentiate routes by listing the destinations on the bus head signs.

**Route 101 (Astoria-Seaside):** Minimize travel times (primarily through improving the directness of the route) on this regional, highly productive route to attract new riders.

- In Astoria, run along northern W. Marine Drive to the Transit Center, then operate a short round trip to Clatsop Community College. Eliminating the loop pattern in Astoria enhances legibility and provides opportunity for the bus to utilize U.S. Business 101 to avoid summer congestion on Youngs Bay Bridge. The northern W. Marine Drive routing means this detour will not skip any stops.
- Serve the developing Ensign Lane/SE 19<sup>th</sup> Street/SE Huckleberry Street area with local Route 15 Warrenton/Hammond rather than regional Route 101.

- In Seaside, operate bidirectionally on U.S. 101. Extend service beyond Avenue S in Seaside to a southern turnaround in the vicinity of Avenue U and Beach Drive (or a future, centrally-located transit center in Seaside).
- Run Route 101 at hourly headways all day.

**Route 20 (Seaside-Cannon Beach):** Operate bidirectionally on U.S. 101 through Seaside (no service on Necanicum Drive or Wahanna Road). Implement pedestrian improvements (sidewalk infill and pedestrian crossings of U.S. 101) to facilitate this change. A Seaside Circulator local route (see below) would provide local circulation, including along Wahanna Road and serving Providence Hospital. Develop Park & Ride facilities in the north and south parts of Seaside. (Seaside Cinema in the north side and a to-be-determined location in the south), with an eventual goal of identifying a single, more central transit center location. Improve consistency of schedule/passenger information and transfers to Manzanita.

**Cannon Beach – Manzanita:** Negotiate with Tillamook County Transportation District (TCTD) to operate the Manzanita – Cannon Beach portion of weekday Route 20 and the weekend Pacific Connector consistently. One provider, preferably TCTD, would serve all trips on the Manzanita connection on both weekends and weekdays. This would enable re-timing of weekday Routes 20 and 101 to provide shorter transfers in Seaside. Operate four trips per day between Manzanita and Cannon Beach.

**Route 10 (Astoria Local):** Break up into two short, focused routes. Serve eastern Astoria via 10 East, return to the transit center, then circulate through western Astoria on 10 West. Add service to the interior of Astoria, potentially in conjunction with new service on U.S. Business 101. Brand all Route 10 service in Warrenton/Hammond as Route 15. Consider viability of transitioning local Route 10 E/W to flex-route service, allowing deviations from the route.

**Route 15 (Warrenton Local):** Enhance this route to provide more frequent service to the developing Warrenton retail area. Decouple Route 15 from Route 30 with its own vehicle and operate as two loops: one loop running around Warrenton/Hammond and one loop running along the Ensign Lane/SE 19<sup>th</sup> Street/SE Huckleberry area including Costco/Walmart. Time transfers at Fred Meyer for service to Astoria via Route 101.

**New Seaside Local Circulator.** Develop a local circulator focused on resident and employee needs, with timed connections to regional routes running along U.S. 101. This would help accommodate growth that is expected to occur on the east side of the city.

**Seasonal Weekday Route 21:** Rebrand as Route 20, since Route 21 service duplicates Route 20 once each hour. Stagger Route 21 with Route 20 to provide even headways. Work with Cannon Beach to evaluate adding a four-way stop sign at 1<sup>st</sup> and Hemlock Streets, which would improve pedestrian safety and traffic flow. Explore moving the Route 21 stop location serving Les Shirley Park to 1<sup>st</sup> and Beech Streets, with input from existing riders. This reduces running time to ensure a combined 20/21 stays on schedule.

**Weekend Pacific Connector (including weekend Route 21):** Brand and operate the Astoria-Seaside and Seaside-Cannon Beach portions of the Pacific Connector as Route 101 (Pacific Connector) and Route 20 (Pacific Connector), respectively, using similar routing and stops on weekends as on weekdays. Weekend Route 21 would be rebranded as Route 20. Increase service frequencies to 8-10+ trips per weekend day. Work with Cannon Beach to evaluate adding a four-way stop sign at 1<sup>st</sup> and Hemlock Streets, which would improve pedestrian safety and traffic flow. Explore moving the Route 21 stop location serving Les Shirley Park to 1<sup>st</sup> and Beech Streets, with input from existing riders. This reduces running time to ensure a combined 20/21 stays on schedule.

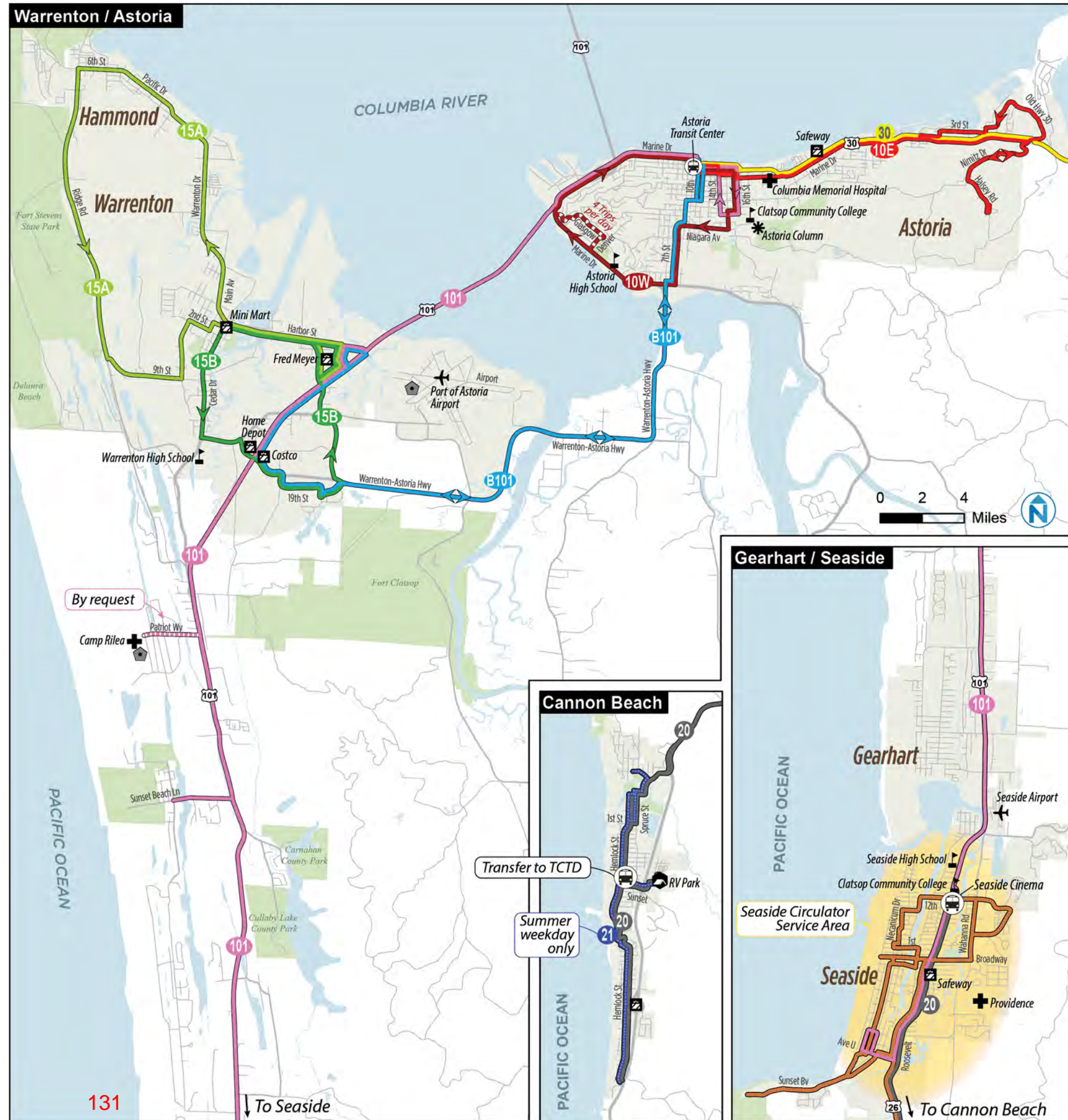
**New Route/Service on Business 101.** Consider a new route to serve planned development in the Miles Crossing area and provide a more direct connection between Astoria and the Walmart/Costco area. This could be an extension/redesign of Route 15.



**Community Shopper Shuttles.** Communities support shopper shuttles on one or two days of the week to transport people to major retail or sometimes medical destinations. These shuttles can provide basic service to places not well-served by fixed-route, such as the interior of Astoria. These can be supported financially through partnerships with other organizations such as the Astoria Downtown Historic District Association, or the private market.

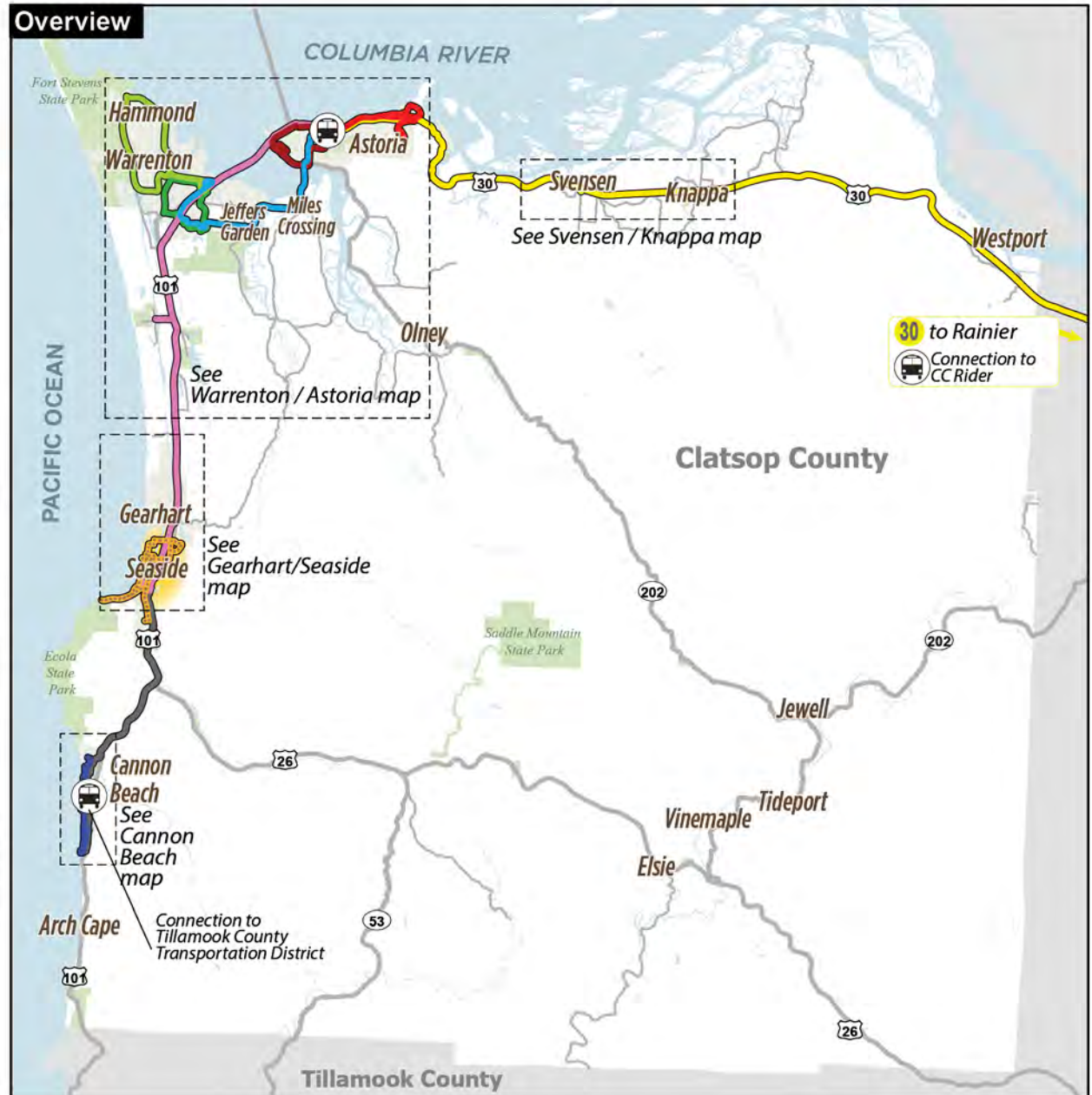
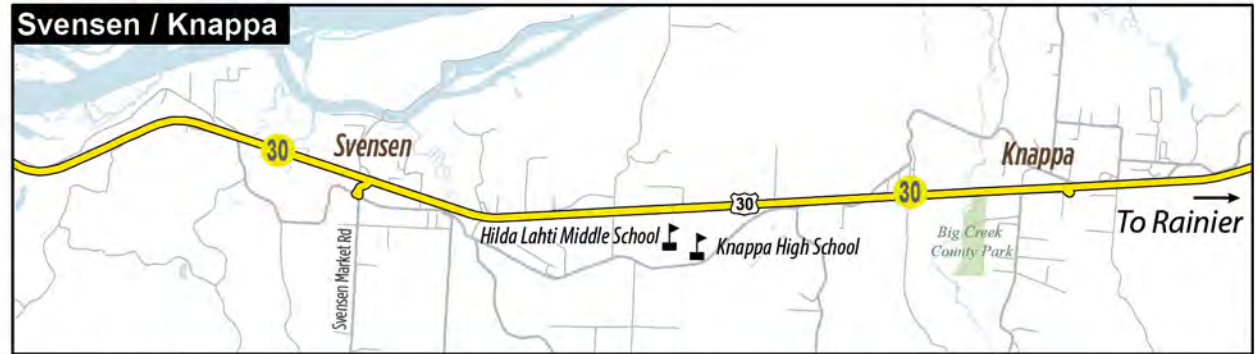
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Figure 8-1 Long Term Service Vision



**Long Term Service Concept**

- |               |                                |                      |
|---------------|--------------------------------|----------------------|
| Route 10 East | Route 101                      | <b>Landmarks</b>     |
| Route 10 West | Business 101                   | Attractions          |
| 4 Trips a day | Seaside Circulator             | Education            |
| Route 15 A    | Seaside Trolley Streetcar      | Airport              |
| Route 15 B    | Route 21 (Summer Weekday Only) | Coast/National Guard |
| Route 20      | Transfer Locations             | City Boundaries      |
| Route 30      |                                |                      |



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Sunset Empire Transportation District

Figure 8-2 Long-Term System Operating Plan

| Route Number or Name                  | Weekday Span of Service | Weekday Frequency               |  | Weekend Span of Service | Weekend Frequency               | Areas Served   |
|---------------------------------------|-------------------------|---------------------------------|--|-------------------------|---------------------------------|--|
| <b>Year-Round Service</b>             |                         |                                 |  |                         |                                 |  |
| 10E – Eastern Astoria                 | 5:45 a.m. – 10:00 p.m.  | 60 minutes                      |  | 7 a.m.-10 p.m.          | 60 minutes                      | Transit Center, Tongue Point, Emerald Heights                                  |
| 10W – Western Astoria                 | 5:45 a.m. – 10:00 p.m.  | 60 minutes                      |  | 7 a.m.-10 p.m.          | 60 minutes                      | Clatsop Community College, Astoria interior                                    |
| 15A – Warrenton/ Hammond Loop         | 6:00 a.m. – 10:00 p.m.  | 30 minutes                      |  | 7 a.m.-10 p.m.          | 60 minutes                      | Warrenton, Hammond, Fred Meyer, Mini Mart                                      |
| 15B – Warrenton Retail                | 6:00 a.m. – 10:00 p.m.  | 30 minutes                      |  | 7 a.m.-10 p.m.          | 60 minutes                      | High school, Walmart, Costco, NWSDS, Fred Meyer, Mini Mart                     |
| 20 – Seaside/ Cannon Beach            | 6:00 a.m. – 10:00 p.m.  | 60 minutes; 30 minutes peak     |  | 7:30 a.m.-10 p.m.       | 60 minutes                      | Seaside, Cannon Beach. Transfers to Manzanita                                  |
| 101 – Astoria Seaside                 | 6:00 a.m. – 10:00 p.m.  | 60 minutes; 30 minutes peak     |  | 7 a.m.-10 p.m.          | 60 – 120 minutes                | Astoria, Warrenton, Gearhart, Seaside, Cannon Beach                            |
| 30 - Lower Columbia Connector         | 6:45 a.m. – 8:00 p.m.   | 4 trips per day + 2 short trips |  | 6:45 a.m. – 8:00 p.m.   | 4 trips per day + 2 short trips | Astoria, Svensen, Knappa, Westport, Clatskanie, Rainier (Transfer to CC Rider) |
| Seaside Circulator                    | 7 a.m.-10 pm            | 60 min                          |  | 7 a.m.-10 p.m.          | 60 min                          | Seaside  |
| Dial-A-Ride/ Shopper Shuttle          | 1 round trip per week   | 1 round trip                    |  | ---                     | ---                             | Svensen/Knappa Miles Crossing  |
| <b>Seasonal Service (Summer only)</b> |                         |                                 |  |                         |                                 |  |
| 11                                    |                         | Based on cruise ship schedules  |  |                         |                                 | Astoria  |
| 21                                    | 11:00 a.m. – 6:00 p.m.  | 30 minutes                      |  | ----                    | ---                             | Cannon Beach   |
| 12                                    |                         | Based on cruise ship schedules  |  |                         |                                 | Astoria, Warrenton   |
| Seaside Streetcar Trolley             | ---                     | ---                             |  | 11:00 a.m. – 8:00 p.m.  | 60 minutes                      | Seaside  |

Outreach on the service vision conducted during June 2016 in Astoria and Seaside was met with favorable reaction from the public and SETD staff.

## PLANNING TIME FRAMES

A phased plan to achieve the long-term vision within reasonable financial constraints resulted in four time frames for implementation (Figure 8-3). Any cost-neutral recommendations can be implemented in the Immediate/Near-Term time frame, while further improvements will require additional resources.

Figure 8-3 Planning Time Frames and Funding Targets

| Time Frame          | Years                     | Funding Level Target                                |
|---------------------|---------------------------|---|
| Immediate/Near-Term | 0 to 1 years: 2016 – 2017 | Cost-Neutral / Near Cost-Neutral                    |
| Short-Term          | 2 – 4 Years: 2018 – 2020  | Low Growth: \$200,000 - \$300,000                   |
| Mid-Term            | 5-10 Years: 2021 – 2026   | Moderate Growth: \$400,000 - \$500,000              |
| Long-Term           | 11-20 Years: 2027 – 2036  | Flexible Service Plan - Not Financially Constrained |

## IMMEDIATE/NEAR-TERM ACTIONS

The following cost-neutral items can be implemented within one year as they require no operating or capital funding.

### Route 101 Weekday

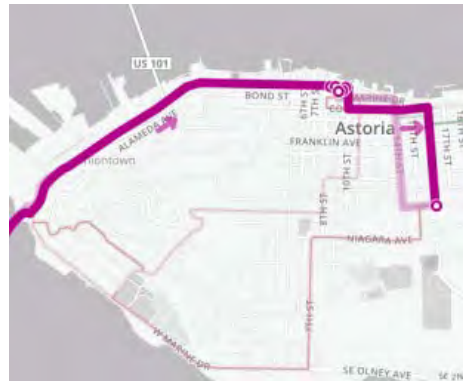
Entering Astoria, run Route 101 along northern W. Marine Drive to the Transit Center. Operate to Clatsop Community College and then back to the Transit Center, then proceed along northern W. Marine Drive back to Warrenton. This maintains direct service to Clatsop Community College and reduces service duplication with Route 10 (discussed below). Eliminating service on southern Marine Drive means that during congested summer months, Route 101 can travel via U.S. Business 101 into Astoria to enhance reliability.

Figure 8-4 Route 101 Immediate Actions

Existing Route 101 – Astoria



Route 101 – Astoria Immediate Term Recommendation



### Route 10 Weekday

Break Route 10 into two shorter routes serving specific markets. Route 10 East runs from the Transit Center through downtown Astoria, past Columbia Memorial Hospital, serves Emerald Heights, Tongue

Point, and the residential Cedar Street area, then returns to the Transit Center. Route 10 West departs the Transit Center, travels through downtown Astoria then south to Clatsop Community College. The route serves Peter Pan and Short Stop, then travels via Marine Drive back to the Transit Center. On four trips per day, Route 10W would serve Head Start located on Alameda Avenue. This reduces travel times for Astoria residents, provides more circulation through downtown, and serves a portion of Astoria's interior.

Figure 8-5 Route 10 Immediate Actions

Existing Route 10 (shown in red)



Route 10 East Outbound



Route 10 East Inbound



Route 10 West - Typical



Route 10 West Deviations to Head Start – approximately 4 times per day:



## Route 15

Both Route 15 and Route 10 serve the Warrenton/Hammond area, including Fred Meyer and the Mini Mart. Combined, the two routes provide 11 trips to Warrenton/Hammond. Have Route 10 show a Route 15 route sign when operating in Warrenton/Hammond, and public a combined Route 10/Route 15 schedule branded all as Route 15.

## Route 30 Weekday/Weekend

The term “connector” is used in any route that is part of the Northwest Connector network getting people to regional destinations. For this reason, the service along U.S. 30 is called the “Lower Columbia Connector.” Intuitive route names are based on the road they run on or a major destination, thus “Route 30” makes sense as the most logical route name. Append the Connector brand so the route becomes Route 30: Lower Columbia Connector, as CC Rider has already done in its schedules (Figure 8-6).

Figure 8-6 Sample CC Rider Schedule, Route 7

| <div style="background-color: #0070C0; color: white; padding: 5px; font-size: 24px; font-weight: bold; display: inline-block;">7</div> <span style="font-size: 24px; font-weight: bold; display: inline-block; vertical-align: middle;">Lower Columbia Connector</span> |                        |                          |              |  |                        |                         |
|---|------------------------|--------------------------|--------------|--|------------------------|-------------------------|
| Line 7 - Lower Columbia Connector SERVICE 7-DAYS A WEEK   |                        |                          |              |  |                        |                         |
| DEPARTURE TIMES TO ASTORIA TRANSIT CENTER   |                        |                          |              | DEPARTURE TIMES TO PORTLAND UNION STATION/SW SALMON ST. and SW 6th AV. |                        |                         |
| SW Salmon St/SW 6th Ave   | Portland Union Station | Scappoose-NE 1st/Prairie | St Helens TC | Rainier TC   | Clatskanie Safeway     | Arrive Astoria TC       |
| 6:00  | 6:30                   | 7:05                     | 7:30         | 8:30   | 9:00                   | 9:45                    |
| 2:00  | 2:30                   | 3:05                     | 3:30         | 4:30   | 5:00                   | 5:45                    |
| Astoria TC  | Clatskanie             | Rainier TC               | St Helens TC | Scappoose-NE 1st/Prairie   | Portland Union Station | SW Salmon St/SW 6th Ave |
| 6:45  | 7:35                   | 8:30                     | 9:00         | 9:25   | 10:15                  | 10:30!!                 |
| 2:45  | 3:35                   | 4:30                     | 5:00*        | 5:20*  | 6:15‡                  | 6:00* 6:30‡             |

## Route 20 Weekday

The portion of Route 20 that serves Necanicum Drive has very low ridership. Shift the route back onto U.S. 101. This allows Route 20 and Route 101 to operate in bidirectional loops in Seaside without missing any part of U.S. 101.

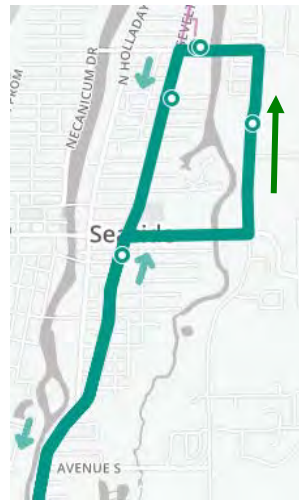


Figure 8-7 Route 20 Immediate Action

Existing Route 20 – Seaside



Route 20 – Seaside Route Recommendation



## Pacific Connector/Route 21 Weekend

Similar to Route 30, rebrand the Pacific Connector as Route 101: Pacific Connector so weekend and weekday service have consistent naming conventions. Rebrand Route 21 as Route 20 for the same reason. Without any new drivers, schedules for the two Pacific Connector and one Route 21 driver can be shifted to add a fourth trip to Pacific Connector and close the long midday gap in Cannon Beach on Route 21. Make Route 101/20 weekend routing consistent with weekday service and route buses along the Wahanna Road loop, serving Seaside Providence Hospital. Many Cannon Beach employees need to arrive at work before 9 am, but the first Route 21 of the day currently arrives at 9:15 am. Earlier weekend service is recommended in the mid and long-term, but Cannon Beach may be interested in implementing that recommendation in a shorter time frame.

## LOOKING AHEAD ... PRIORITIZATION & PHASING

Outside of the immediate terms steps SETD can take, achieving the community vision for transit involves additional operating and capital resources. Given SETD’s measured growth during the past few years (adding evening service, for example, on Routes 101, 10, and 20), service expansion and increased funding levels are viable assumptions. The project team and the Technical Project Advisory Committee discussed a series of service concepts once community outreach was complete. These concepts were also discussed with the public via mobile workshops, an online survey, and a rider survey. Based on the outreach outcomes, the service concept list was narrowed down to the top priority ideas and were fleshed out into concrete service recommendations including routing, scheduling, and capital requirements. The team created an evaluation framework and assessed how well each recommendation meets SETD’s six goals and 17 objectives. Based on these outcomes and expected funding levels, recommendations were phased into short (2-4 year), medium (5-10 year) and long (11-20 year) actions. Note that as is typical for a long-range plan, the long-term projects are not fiscally constrained.

Figure 8-8 displays these recommendations by phase, including a project code (for organizational purposes only), description, evaluation against goals, cost-benefit scoring, and overall priority. Since some recommendations are contingent upon one another, i.e. one cannot be implemented without another item first, some recommendations include multiple components affecting more than one route.

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Figure 8-8 Evaluation and Phasing of Service Recommendations

| Project Code | Service Area Affected  | Routes                      | Transit Markets / Benefits  | Summary Description   | SETD Goals & System Benefits                                |   |  |  |   |  | Costs          |                           | Evaluation / Phasing             |                |
|--------------|--|-----------------------------|---|---|---|---|--|--|---|--|----------------|---------------------------|----------------------------------|----------------|
|              |  |                             |   |   | 1. Efficiency: Provide cost-effective public transportation | 2. Mobility: Serve a wide range of mobility needs | 3. Availability: Ensure service availability | 4. Reliability: Provide reliable service | 5. Sustainability: Compete with SOV travel times and reduce VMT | 6. Capacity: Ensure sufficient system capacity | Operating Cost | Capital Cost (# of Buses) | Overall Rating: (Benefit & Cost) | Phase Assigned |
| 1            | Astoria, Warrenton, Hammond, Astoria-Seaside, Columbia/U.S. 30 | 101, 15A, 15B, 30           | <ul style="list-style-type: none"> <li>Faster regional weekday service</li> <li>Added regional coverage</li> <li>More local service (Warrenton)</li> <li>More local service (Svensen/Knappa)</li> </ul> | <ul style="list-style-type: none"> <li>Costco/Walmart area moved from Route 101 to Route 15</li> <li>Route 101 extends to Avenue U in Seaside</li> <li>Route 15 runs hourly, 6 am-7 pm. Split into two short routes serving retail and residential areas.</li> <li>Route 30 to Svensen/Knappa service increases by 2 trips per weekday (4 total)</li> </ul> | +   | +   | +  | +  | +   | +  | \$\$\$         | 1                         | High                             | Short-Term     |
| 2            | Astoria, Warrenton, Hammond                                    | 10E, 15A, 15B,              | <ul style="list-style-type: none"> <li>Weekend service (new)</li> </ul>   | <ul style="list-style-type: none"> <li>Route 15 operates Sat/Sun six times per day, 8 am-6 pm</li> <li>Route 10E operates Sat/Sun six times per day, 8 am-6 pm</li> </ul>   | +   | +   | N  | N  | +   | N  | \$\$           | 0                         | High                             | Short-Term     |
| 3            | Astoria - Seaside  | 101 / PC                    | <ul style="list-style-type: none"> <li>Weekend service (add frequency)</li> </ul>   | <ul style="list-style-type: none"> <li>Add 2-4 Sat/Sun trips (6-8 total) Astoria to Cannon Beach</li> </ul>   | N   | +   | N  | +  | +   | N  | \$             | 0                         | High                             | Short-Term     |
| 4            | Svensen/Knappa   | DAR                         | <ul style="list-style-type: none"> <li>Increase weekday accessibility</li> </ul>  | <ul style="list-style-type: none"> <li>Shopper shuttle pilot project</li> </ul>   | +   | N   | +  | N  | N   | N  | \$             | 0                         | Medium                           | Short-Term     |
| 5            | Astoria-Cannon Beach, Manzanita                                | 20, 101                     | <ul style="list-style-type: none"> <li>Regional weekday connections</li> <li>Faster transfers</li> </ul>  | <ul style="list-style-type: none"> <li>All Manzanita connections in Midtown Cannon Beach operated by TCTD</li> <li>Short (&lt;10 minute) transfers in Seaside for Route 101/20 passengers NB and SB</li> </ul>  | +   | +   | N  | N  | +   | N  | \$             | 0                         | High                             | Mid-Term       |
| 6            | Astoria-Seaside  | 101                         | <ul style="list-style-type: none"> <li>Regional weekday frequency</li> </ul>  | <ul style="list-style-type: none"> <li>Add 3 trips to Route 101. Hourly departures from Astoria 6 am- 11 pm.</li> </ul>   | +   | +   | N  | N  | +   | +  | \$\$           | -                         | High                             | Mid-Term       |
| 7            | Seaside  | New Route                   | <ul style="list-style-type: none"> <li>Local service (new) on weekday/weekend</li> <li>More direct regional service</li> </ul>  | <ul style="list-style-type: none"> <li>Create Seaside circulator. Run every 60 minutes 7 am-7 pm.</li> <li>Run Routes 20 &amp; 101 bi-directionally on U.S. 101</li> </ul>  | +   | +   | +  | N  | +   | +  | \$\$\$         | 1                         | High                             | Mid-Term       |
| 8            | Astoria, Warrenton   | 10E, 10W, 15A, 15B,         | <ul style="list-style-type: none"> <li>Weekend service frequency (Warrenton)</li> <li>Weekend service frequency (eastern Astoria)</li> <li>New weekend service (western Astoria)</li> </ul>             | <ul style="list-style-type: none"> <li>Add 5 trips to Route 15. Run hourly 8 am-6 pm</li> <li>Add 5 trips to Route 10E. Run hourly 8 am-6 pm</li> <li>Add 10W service. Run hourly 8 am-6 pm</li> </ul>  | +   | +   | N  | N  | +   | N  | \$\$           | 0                         | High                             | Mid-Term       |
| 9            | Astoria, Warrenton, Hammond, Seaside, Cannon Beach             | 10E, 10W, 15A, 15B, 20, 101 | <ul style="list-style-type: none"> <li>Add weekend morning hour of service</li> <li>Add weekend evening hours of service</li> </ul>   | <ul style="list-style-type: none"> <li>Routes 10E, 10W, 15A, 15B, 20, and 101 start at 7 am (up to 1 hour earlier)</li> <li>Routes end at 8 pm (up to 2 hours later)</li> </ul>   | N   | +   | +  | N  | N   | N  | \$\$           | 0                         | Medium                           | Mid-Term       |
| 10           | Cannon Beach – Manzanita                                       | 20, PC                      | <ul style="list-style-type: none"> <li>Regional weekday and weekend connections</li> </ul>  | <ul style="list-style-type: none"> <li>Add 4<sup>th</sup> weekday and weekend trip to Manzanita</li> </ul>  | +   | +   | N  | N  | +   | N  | \$             | 0                         | Medium                           | Mid-Term       |

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| Project Code | Service Area Affected                              | Routes                                 | Transit Markets / Benefits   | Summary Description   | SETD Goals & System Benefits                                |   |  |  |   |  | Costs          |                           | Evaluation / Phasing             |                |
|--------------|--|--|--|---|---|---|--|--|---|--|----------------|---------------------------|----------------------------------|----------------|
|              |  |  |  |   | 1. Efficiency: Provide cost-effective public transportation | 2. Mobility: Serve a wide range of mobility needs | 3. Availability: Ensure service availability | 4. Reliability: Provide reliable service | 5. Sustainability: Compete with SOV travel times and reduce VMT | 6. Capacity: Ensure sufficient system capacity | Operating Cost | Capital Cost (# of Buses) | Overall Rating: (Benefit & Cost) | Phase Assigned |
| 12           | Astoria, Warrenton, Hammond, Seaside               | 10E, 10W, 15A, 15B, Seaside Circulator | <ul style="list-style-type: none"> <li>Add weekday evening hours of service</li> </ul>         | <ul style="list-style-type: none"> <li>Routes 10E, 10W run until 10 pm (1 hour later)</li> <li>Routes 15A, 15B run until 10 pm (3 hours later)</li> <li>Seaside Circulator runs until 10 pm (3 hours later)</li> </ul>                          | N   | +   | N  | N  | +   | N  | \$\$\$         | 0                         | Medium                           | Long-Term      |
| 13           | Astoria-Seaside, Seaside-Cannon Beach              | 20, 101                                | <ul style="list-style-type: none"> <li>Increase weekday peak frequencies</li> </ul>            | <ul style="list-style-type: none"> <li>Operate Routes 20 and 101 every 30 minutes AM and PM peak</li> </ul>   | -   | +   | N  | N  | +   | +  | \$\$\$         | 3                         | Low-Medium                       | Long-Term      |
| 14           | Astoria, Warrenton, Hammond, Seaside, Cannon Beach | 10E, 10W, 15A, 15B, 20, 101            | <ul style="list-style-type: none"> <li>Add weekend evening hours of service</li> </ul>         | <ul style="list-style-type: none"> <li>Routes 10E, 10W, 15A, 15B, 20, 101 run til 10 pm (2 hours later).</li> <li>Routes run 7 am-10 pm.</li> </ul>   | -   | +   | +  | N  | N   | N  | \$\$\$         | 0                         | Low-Medium                       | Long-Term      |
| 15           | Svensen, Knappa, Westport, U.S. 30                 | 30                                     | <ul style="list-style-type: none"> <li>Weekday frequency</li> <li>Weekend frequency</li> </ul> | <ul style="list-style-type: none"> <li>Add two long trips to Rainier weekend and weekday (4 total)</li> <li>Add two short trips to Svensen/Knappa weekday (6 total)</li> <li>Add two short trips to Svensen/Knappa weekend (6 total)</li> </ul> | -   | +   | +  | N  | N   | N  | \$\$\$         | 0                         | Low-Medium                       | Long-Term      |
| 16           | Warrenton/Miles Crossing                           | New Route                              | <ul style="list-style-type: none"> <li>Local weekday service (new)</li> </ul>                  | <ul style="list-style-type: none"> <li>Add service on U.S. Business 101</li> </ul>  | -   | N   | +  | N  | N   | N  | \$\$\$         | 1                         | Low                              | Long-Term      |
| 17           | Astoria  | 10E, 10W                               | <ul style="list-style-type: none"> <li>Increase accessibility</li> </ul>                       | <ul style="list-style-type: none"> <li>Evaluate feasibility of flex route service</li> </ul>  | +   | N   | +  | N  | -   | N  | \$\$\$         | 1                         | Low                              | Long-Term      |

**Cost**

\$\$\$ = Most expense needed

\$\$ = Medium expensive

\$ = Low expense

[blank] = Cost neutral

**Evaluation**

+ = Supports / helps achieve goal

N = Neutral – neither hurts nor helps goal

- = May degrade progress toward goal

## Detailed Descriptions

Additional details on particular recommendations that have multiple components or provide new service types is provided below.

### Recommendation #1 Routes 15/30/101

One additional vehicle provides the ability to achieve several high-priority actions. Irregular scheduling in the growing Warrenton/Hammond area is caused by Route 15's tie to Route 30 (they use the same vehicle). Removing the Ensign Lane/Costco area from Route 101 is highly desired yet that area cannot go unserved. The current Route 101 turnaround in Seaside on Avenue S misses several key destinations. The new vehicle in this recommendation allows Route 15 to operate independently and for the route to be split into a figure eight, with the Fred Meyer/Mini Mart area as the crux. Route 101 no longer has to serve the Ensign Lane deviation, increasing travel times and attractiveness for regional travelers. The extra travel time will be used to pick up more passengers in Seaside.

Figure 8-9 Route 15/30/101 Short-Term Actions

Existing Route 15



Route 15A Warrenton-Hammond Loop Outbound Recommendation



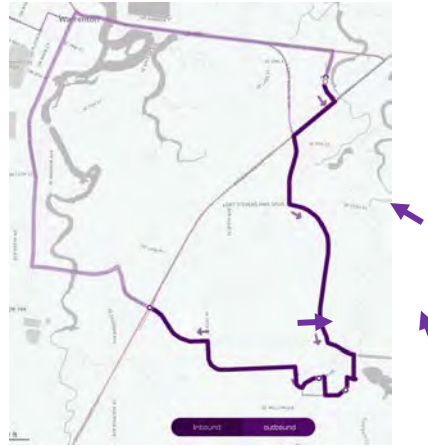
Route 15A Warrenton-Hammond Loop Inbound Recommendation



Route 15B Warrenton Retail Outbound Recommendation



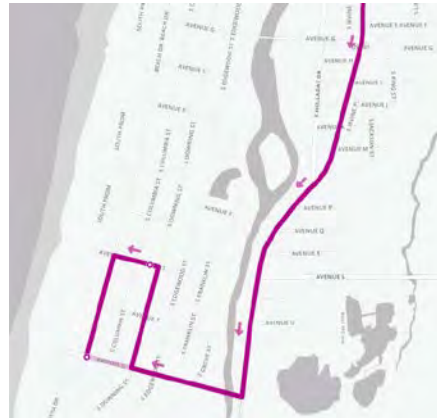
Route 15B Warrenton Retail Outbound Recommendation



Existing Route 101 – Seaside



Route 101 Seaside Recommendation



### Recommendation #2, 8, 9, 14: More weekend service

People need to accomplish errands, shopping visits, and other tasks during the weekend. Clatsop County is also a service community, meaning many employees must work on weekends. These four recommendations take an incremental approach to adding weekend service. First, unserved areas (eastern Astoria) receive service. Next, frequency would be added to Astoria and Warrenton/Hammond service over a basic span of 8 am-6 pm. Since many restaurants and grocery stores are open after these hours, the next steps would be extending service a little bit earlier and a little bit later system-wide. Finally, the long-term vision shows all primary routes running until 10 p.m. – the hour desired most by the public. If more funding is available, these four recommendations could be mixed and matched, combined, or implemented all at once.

### Recommendation #7: Seaside Circulator

Seaside and Warrenton were the fastest growing communities in Clatsop County. Seaside is also growing toward the east. Over time, a local year-round circulator route separate from the Seaside Streetcar can circulate local workers and residents.

### Recommendation #4: Svensen/Knappa Shopper Shuttle

A shopper shuttle is a demand-response service geared toward shopping trips. Passengers must schedule ahead, and all passengers are taken to a common destination such as Youngs Bay Plaza.

**Recommendation #16: Service on U.S. Business 101**

The reopening of the U.S. Business 101 bridge presents opportunity to link Astoria to the developing Miles Crossing area and Warrenton shopping area. Service used to run through this area. This route could also potentially serve the interior of Astoria.



**Recommendation #17: Astoria flex service**

Astoria’s topography makes walking to the fixed route challenging for those with mobility challenges. “flex service” still follows a set schedule and route, but allows passengers to call a request a pick-up off-route within a certain radius. To achieve flex service, routes must add some time to the schedule to accommodate deviations, whether they are called in or not. This adds some travel time for all riders, but could have a negligible impact for local ridership. Flex service open to the general public also covers SETD’s ADA requirement. Consider transitioning all or part of Route 10E/W to flex service long term.

**Cost Summary**

Figure 8-10 summarizes the additional and cumulative service hours and costs of the service recommendations for each of the planning time frames identified above. Existing costs are based on SETD’s fixed-route service hours and operating cost as of 2014.

The table also calculates fixed-route service hours and operating costs for each time frame on a per capita basis (relative to Clatsop County population), as a basis for comparison to other similar transit providers. The costs below do not take into account potential increases in service cost needed for any additional ADA Paratransit service. The service changes propose no new fixed-routes in the near, short, or medium term that would trigger additional ADA service. Similarly, there is relatively limited expansion of service hours beyond current hours, with the exception of weekend evening hours, and the ¾ mile buffer where ADA service is required based on the routes that are operated on weekday evenings.

Figure 8-10 Proposed Additional Annual Fixed-Route Service Hours and Operating Cost Summary

|                 | Service Hours |            | Operating Cost |             | Approx. Impl. Year | County Population [1] | Per Capita Metrics |                |
|-----------------|---------------|------------|----------------|-------------|--------------------|-----------------------|--------------------|----------------|
|                 | Additional    | Cumulative | Additional     | Cumulative  |                    |                       | Service Hours      | Operating Cost |
| Existing (2014) | 16,224        | 16,224     | \$869,000      | \$869,000   | 2014               | 37,750                | 0.43               | \$23           |
| Near-Term       | 100           | 16,324     | \$6,000        | \$875,000   | 2017               | 37,750                | 0.43               | \$23           |
| Short-Term      | 4,140         | 20,464     | \$225,000      | \$1,100,000 | 2020               | 38,461                | 0.53               | \$29           |
| Mid-Term        | 9,820         | 30,284     | \$535,000      | \$1,635,000 | 2026               | 39,358                | 0.77               | \$42           |
| Long-Term *     | 15,930        | 46,214     | \$871,000      | \$2,506,000 | 2036               | 40,521                | 1.14               | \$62           |

Notes: \* Long-term is considered a flexible service plan to be implemented based on future needs and service standards. [1] 2015-2035 population in 5-year increments from Technical Memo #3. Source: Portland State University, Population Research Center, Certified Population Estimates, 2015, and Oregon Office of Economic Analysis, Released 3/28/2013.

**Service Phasing Summary**

Figure 8-11 and Figure 8-12 summarize and illustrate the short-, mid-, and long-term service recommendations. The final plan will provide a detailed summary of recommendations by time frame.

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Figure 8-11 Existing and Proposed Service Summary by Time Frame – Incremental Changes

| Time Frame:  | Existing  | Near-Term: 0-1 Years   | Short-Term: 2-4 Years   | Mid-Term: 5-10 Years  | Long-Term: 11-20 Years  |
|--|---|--|---|---|---|
| <b>Regional</b>  |   |  |   |   |   |
| <b>Lower Columbia:</b><br>Route 30 / LCC                   | 2 daily trips Astoria-Rainier                         | Brand LCC as Route 30 LCC  | Add 2 weekday short trips to MERTS, Svensen / Knappa<br>Consider shopper shuttle to Svensen/Knappa  |   | Add 2 weekday and weekend trips Astoria-Rainier<br>Add 2 weekend short trips to MERTS, Svensen/Knappa |
| <b>Astoria – Seaside:</b><br>Route 101 / Pacific Connector | 60–120 min weekday<br>3 weekend trips                 | Reroute to stay on northern W. Marine Drive in Astoria with jog up to CCC<br>Brand weekend PC as Route 101 (PC)<br>Add fourth weekend trip | Reduce travel time by eliminating deviations to Ensign Lane<br>Extend to Avenue U & Beach Drive in Seaside<br>More frequent weekend service | 60 min weekday all-day<br>Earlier weekend and early evening service<br>Bidirectional routing on US 101 in Seaside<br>Improve transfers with Route 20<br>Remove Wahanna Road service | Consider more frequent weekday peak service<br>Consider later evening weekend service                 |
| <b>Seaside – Cannon Beach:</b> Route 20 and 21             | 60 min weekday<br>60 min weekend (2½ hour midday gap) | Brand as Route 20 (PC) on weekends<br>60 min weekday<br>60 min weekend (all-day)<br>Remove Necanicum Drive routing                         | Improve transfers with Route 101  | Earlier weekend and early evening service<br>Bidirectional routing on US 101 in Seaside   | Consider more frequent weekday peak service<br>Consider later weekend service                         |
| <b>Cannon Beach - Manzanita:</b> Routes 20 and 21          | 3 trips / day (1 by SETD, 2 by TCTD)                  |  |   | Add 1 trip/day (4 trips / day - operated by TCTD)   |   |
| <b>Local</b>   |   |  |   |   |   |
| <b>Astoria:</b> Route 10                                   | 60 min, 1 route<br>No local weekend service           | 60 min, break Route 10 into 2 shorter routes (10E, 10W)<br>Service to interior of Astoria and Head Start (four trips)                      | Weekend local service on 10E  | <ul style="list-style-type: none"> <li>▪ Additional weekend service (10E, 10W)</li> <li>▪ Additional weekday evening service</li> </ul>   | Additional frequency or coverage (flex-route)<br>Consider later evening weekend service               |



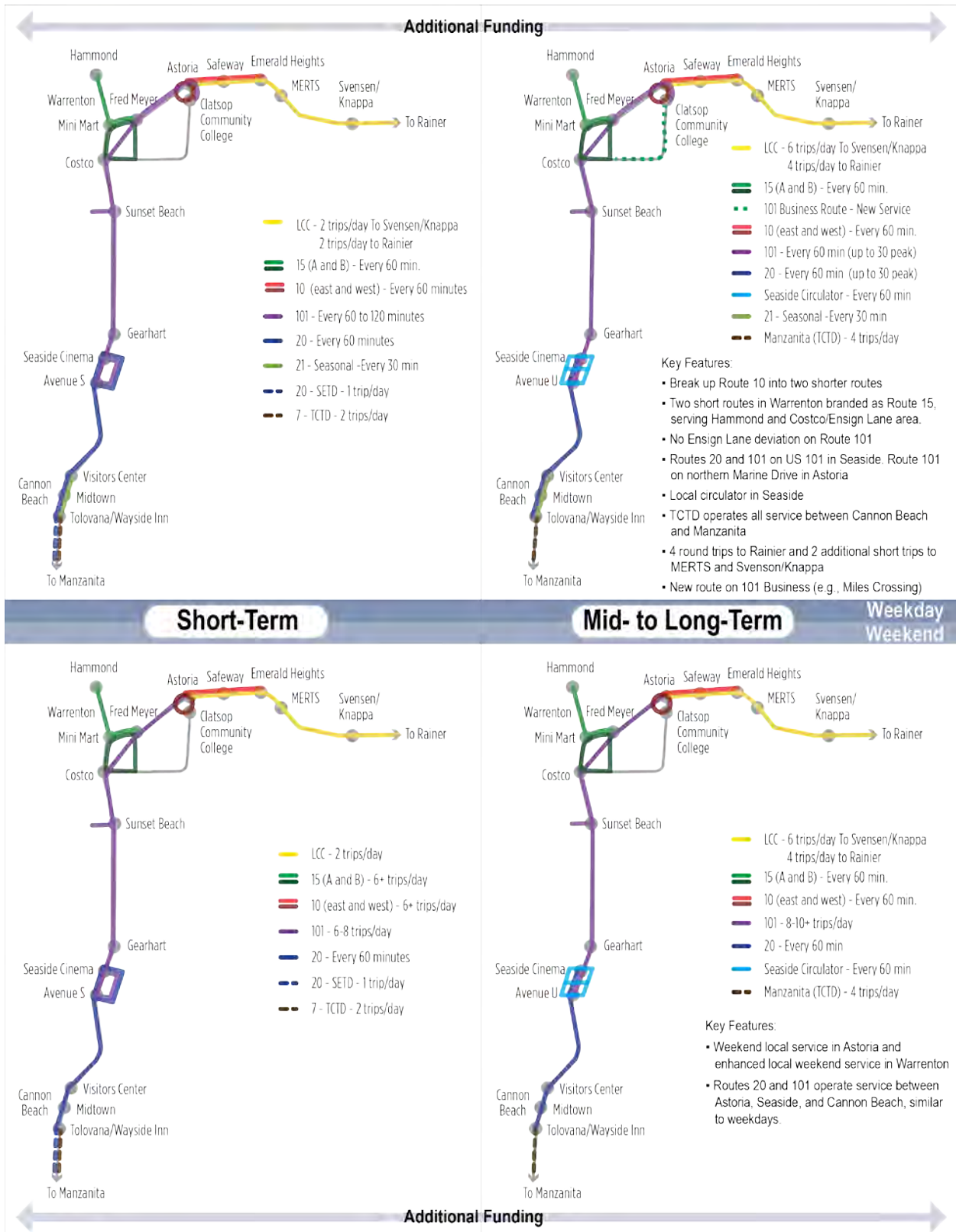
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| Time Frame:                | Existing   | Near-Term: 0-1 Years        | Short-Term: 2-4 Years   | Mid-Term: 5-10 Years   | Long-Term: 11-20 Years                               |
|----------------------------|--|-----------------------------|---|--|--|
| <b>Warrenton:</b> Route 15 | 11 trips, part of Routes 10 and 15                                     | Brand all trips as Route 15 | Separate from Route 30<br>Split into two routes: long turn to Hammond (15A), short-turn to Costco/Walmart area (15B)<br>Hourly weekday service<br>Weekend local service | <ul style="list-style-type: none"> <li>▪ Additional weekend service</li> <li>▪ Additional weekday evening service</li> </ul> | Consider later evening weekend service               |
| <b>Seaside:</b>            | <ul style="list-style-type: none"> <li>▪ Seasonal Streetcar</li> </ul> |                             |   | <ul style="list-style-type: none"> <li>▪ Implement Seaside Circulator</li> </ul>   | Consider later evening weekend service on circulator |

Notes: PC = Pacific Connector.

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Figure 8-12 Short, Mid, and Long-Term Service Recommendations



## Individual Recommendation Cost Details

Figure 8-13 provides the additional hours of service and operating cost needed for each individual recommendation. Due to overlap between certain actions and assumptions about order of implementation, annual cost totals differ slightly from Figure 8-10.

Figure 8-13 Order-of-Magnitude Additional Service Hours and Operating Costs for Individual Improvements

| Time Frame | Day of Week | Route              | Description   | Daily Hours | Days / Year | Annual Hours | Annual Cost |
|------------|-------------|--------------------|---|-------------|-------------|--------------|-------------|
| Near-Term  | Weekday     | 10                 | Restructure into two shorter routes, 10W and 10E. Cost-Neutral  | 0:00        | 255         | 0            | \$0         |
| Near-Term  | Weekday     | 20 / 101           | Redesign Routes 20/101 to operate along U.S. 101 in Seaside. Cost Neutral.  | 0:00        | 255         | 0            | \$0         |
| Near-Term  | Weekday     | PC / 20 / 101      | Restructure Route 21/Pacific Connector as Route 20/101. One additional service hour per day.                                | 1:00        | 104         | 104          | \$5,700     |
| Short-Term | Weekday     | 15                 | Separate bus to operate Route 15 service when Route 30 goes to Rainier (9:40 am - 2:45 pm)                                  | 7:00        | 255         | 1,785        | \$97,600    |
| Short-Term | Weekday     | 101                | Eliminate SE Huckleberry deviation; cost-neutral but requires additional resources for Route 15                             | 0:00        | 255         | -            | \$0         |
| Short-Term | Weekday     | 30                 | Shopper Shuttle Svensen/Knappa - 1 round trip per week.   | 1:05        | 52          | 56           | \$3,100     |
| Short-Term | Weekend     | 15                 | Operate Warrenton weekend service, separate Route 15 from from Route 30. Assume 1 bus, 10 hours.                            | 5:00        | 104         | 520          | \$28,400    |
| Short-Term | Weekend     | 10E                | Operate Astoria weekend service, separate Route 15 from from Route 30. Assume 1 bus, 10 hours.                              | 5:00        | 104         | 520          | \$28,400    |
| Short-Term | Weekday     | LCC                | 2 additional daily short round trips to MERTS/Svensen/Knappa  | 0:50        | 255         | 213          | \$11,600    |
| Short-Term | Weekend     | 20/101             | Additional Astoria - Cannon Beach weekend service. Assume 1 additional bus/operator shift.                                  | 8:00        | 104         | 832          | \$45,500    |
| Mid-Term   | Weekday     | 20                 | Renegotiate weekday service to Manzanita with TCTD.   | 2:16        | 255         | 578          | \$30,600    |
| Mid-Term   | Weekday     | 101                | Additional Route 101 midday trips (hourly all-day headways); 2 round trips.   | 4:15        | 255         | 1,084        | \$59,200    |
| Mid-Term   | Weekday     | Seaside Circulator | Implement Seaside Circulator, assume 1 bus, 12 hours initially, 60 minute headways (7-7 pm)                                 | 12:00       | 255         | 3,060        | \$167,300   |
| Mid-Term   | Weekend     | 10/15              | Operate Warrenton weekend service, separate Route 15 from Route 30. Assume 1 bus, 10 hours. (E.g., 7-6 every other hour)    | 5:30        | 104         | 572          | \$31,300    |
| Mid-Term   | Weekend     | 10/15              | Operate Astoria weekend service, separate Route 15 from from Route 30. Assume 1 bus, 10 hours. (E.g., 8-7 every other hour) | 5:30        | 104         | 572          | \$31,300    |

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| Time Frame | Day of Week | Route                           | Description   | Daily Hours | Days / Year | Annual Hours | Annual Cost |
|------------|-------------|---------------------------------|---|-------------|-------------|--------------|-------------|
| Mid-Term   | Weekend     | 20                              | Renegotiate weekend service to Manzanita with TCTD.   | 2:16        | 104         | 236          | \$13,200    |
| Mid-Term   | Weekend     | 101                             | Earlier Weekend Service on 101, 1 hour per day.   | 1:00        | 104         | 104          | \$5,700     |
| Mid-Term   | Weekend     | 20                              | Earlier Weekend Service on 20, 1 hour per day.  | 1:00        | 104         | 104          | \$5,700     |
| Mid-Term   | Weekend     | Seaside Circulator              | Implement Seaside Circulator, assume 1 bus, 10 hours, 60 minutes (8-6 pm)   | 10:00       | 104         | 1,040        | \$56,800    |
| Mid-Term   | Weekend     | 10,15,Seaside Circulator        | Early morning weekend service - 20 & 101 are separate line items: 10 (+1h), 15 (included in 12), Seaside Circulator (+1h) = +2h   | 2:00        | 104         | 208          | \$11,400    |
| Mid-Term   | Weekend     | 20,101,10,15,Seaside Circulator | Early evening weekend service: 20 (+2), 101 (+2), 10 (+1h), 15 (+2h), Seaside Circulator (+2h) = 9 total  | 9:00        | 104         | 936          | \$51,200    |
| Mid-Term   | Weekday     | 15                              | Provide Route 15 service when Route 30 bus is in Rainier, assuming Rec #7B is not implemented   | 7:00        | 255         | 1,785        | \$97,600    |
| Mid-Term   | Weekday     | 101/20                          | 4th weekday trip to Manzanita   | 2:16        | 255         | 578          | \$31,600    |
| Mid-Term   | Weekend     | 101/20                          | 4th weekend trip to Manzanita   | 2:16        | 104         | 236          | \$12,900    |
| Mid-Term   | Weekday     | 101                             | Additional Route 101 early evening service  | 2:00        | 255         | 510          | \$27,900    |
| Long-Term  | Weekday     | 10                              | Route 10 evening service - 1 additional service hours, e.g., 9-10 pm  | 1:00        | 255         | 255          | \$13,900    |
| Long-Term  | Weekday     | 10                              | Additional Astoria frequency and/or coverage (flex-route). 1 additional bus assumed, 12 hours daily. Does not include potential cost savings due to reduced ADA Paratransit demand.             | 12:00       | 255         | 3,060        | \$167,300   |
| Long-Term  | Weekday     | 15                              | Route 15 evening service - 3 additional service hours, e.g., 7-10 pm  | 3:00        | 255         | 765          | \$41,800    |
| Long-Term  | Weekday     | 15                              | Separate Route 15 fully from Route 30 and Route 10. Does not include potential savings from using Route 30 to do driver breaks and enables 3rd trip to Rainier. - 13 total hours, e.g., 6am-7pm | 6:00        | 255         | 1,530        | \$83,600    |
| Long-Term  | Weekday     | 20                              | Additional peak frequency Seaside - Cannon Beach  | 6:00        | 255         | 1,530        | \$83,600    |
| Long-Term  | Weekday     | 101                             | Additional peak frequency Astoria - Seaside Peak  | 6:00        | 255         | 1,530        | \$83,600    |

| Time Frame | Day of Week | Route                             | Description  | Daily Hours | Days / Year | Annual Hours | Annual Cost |
|------------|-------------|-----------------------------------|--|-------------|-------------|--------------|-------------|
| Long-Term  | Weekday     | 101B                              | Implement Business 101 Route - assume 1 bus, 14 hours, up to 60 minute headways. | 14:00       | 255         | 3,570        | \$195,100   |
| Long-Term  | Weekday     | LCC                               | 2 additional daily round trip to Rainier (4 total)                               | 5:15        | 255         | 1,339        | \$73,200    |
| Long-Term  | Weekend     | LCC                               | 2 additional daily round trip to Rainier (4 total)                               | 5:15        | 104         | 546          | \$29,800    |
| Long-Term  | Weekday     | Seaside Circulator                | Expand Seaside Circulator, additional weekday evening hours                      | 3:00        | 255         | 765          | \$41,800    |
| Long-Term  | Weekend     | 20,101, 10,15, Seaside Circulator | Later evening weekend service: 20, 101, 10, 15, Seaside Circulator               | 10:00       | 104         | 1,040        | \$56,800    |
| Long-Term  | Weekday     | LCC                               | 2 additional daily short round trips to MERTS/Svensen/Knappa                     | 0:50        | 255         | 213          | \$11,600    |

Note: Based on a cost of \$55 per hour (SETD cost from 2014 performance data).

## PROGRAMMATIC SUPPORT

The operation of service must be complemented by information, outreach, safe and secure bus stops, and other elements that support when and where bus routes run.

### Marketing and Information

A common refrain heard from stakeholders and the public is that people are not aware of bus service and how to ride. Yet many public input participants and employers expressed interest in taking a bus, showing a potential market for transit. The following strategies will make transit more accessible to a broader audience and also help existing riders.

#### System branding

SETD bus stop signs and buses employ a mix of the old “the Bus” logos as well the new logo and/or the Northwest Connector logo. Action items:

- Transition all bus stops to include the new SETD logo (left). This is a costly endeavor bus one that will reduce confusion.
- Include Northwest Connector logo (right) on stops served by Route 30: Lower Columbia Connector and Route 101: Pacific Connector.
- Repaint all buses with the new SETD logo.



#### Web site

An increasing number of people obtain transit information online. SETD’s web site already includes links to route and system maps, announcements, and rider alerts. Additional items to include:

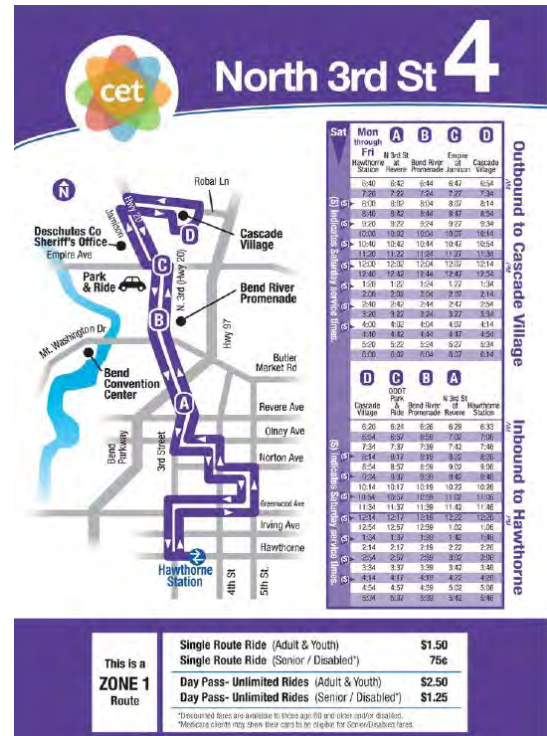
- Next Bus information (see Technology section below)
- Dial-a-Ride program information

**System & Route Maps**

SETD has undertaken a revamp of its current maps and schedules. Issues noted with current materials are addressed in these action items:

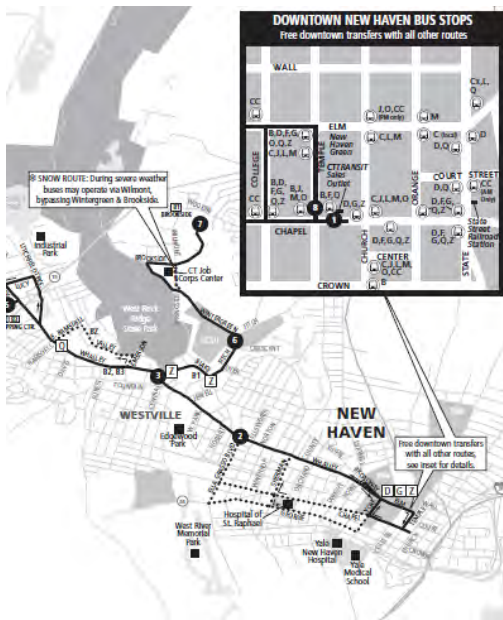
- 
- Create individual route maps and schedules. In addition to the system map, provide individual route maps. Color code routes and schedules. Include the direction of the bus on route maps (see Figure 8-14) and include major trip generators and the street network so riders can find stops.
- Add stop numbers or letters to route maps and schedules to allow the user to easily switch back and forth between the two. An example of a transit map with numbers corresponding to the schedule is shown in Figure 8-15.
- Reduce the number of stops on schedules. Currently the schedules have too many stops listed. SETD is a flag system, therefore schedules can just list the major stops with timepoints. Suggested timepoints are listed in Figure 8-16.
- Ensure that all system information is translated into Spanish.
- In places where routes operate as a couplet, such as in downtown Cannon Beach, install signage showing the route map so passengers understand that southbound service runs on Hemlock Street and northbound service runs on Spruce Street.

Figure 8-14 Color-coded individual route map and schedule



Sunset Empire Transportation District

Figure 8-15 Map with stops labeled with numbers (left) corresponding to schedule (right)



**WEEKDAY SERVICE**

**New Haven ▶ Whalley Avenue ▶ Amity Rd/Brookside**

| Timepoints   | 1   | 2                              | 3  | 4                                       | 5  | 6   | 7   |
|--------------|---|--------------------------------|--|---|--|---|---|
| <b>Route</b> | <b>Downtown New Haven<br/>Chapel &amp; Temple</b> | <b>Whalley &amp; Boulevard</b> | <b>Westville Center<br/>Whalley &amp; Blake<br/>(B1, B2, B3)</b> | <b>Jewish Community<br/>Center (B3)</b> | <b>Amity Road Terminus<br/>Amity Shopping Center<br/>(BB2, B3)</b> | <b>Southern CT State Univ<br/>Fitch Street (B1)</b> | <b>Brookside Terminus<br/>Augustine Street (B1)</b> |
| <b>B1</b>    | 4:35  | 4:43                           | 4:46   | ..                                      | ..   | 4:49  | 4:55  |
| <b>B3</b>    | 5:45  | 5:03                           | 5:06   | 5:13                                    | 5:11   | ..  | ..  |
| <b>B2</b>    | 5:15  | 5:22                           | 5:25   | ..                                      | 5:32   | ..  | ..  |
| <b>B1</b>    | 5:25  | 5:33                           | 5:36   | ..                                      | ..   | 5:39  | 5:45  |
| <b>B2</b>    | 5:35  | 5:42                           | 5:45   | ..                                      | 5:52   | ..  | ..  |
| <b>B1</b>    | 5:45  | 5:53                           | 5:56   | ..                                      | ..   | 5:59  | 6:05  |
| <b>B3</b>    | 5:50  | 5:58                           | 6:01   | 5:08                                    | 5:06   | ..  | ..  |
| <b>B2</b>    | 6:00  | 6:08                           | 6:11   | ..                                      | 6:20   | ..  | ..  |
| <b>B1</b>    | 6:10  | 6:18                           | 6:21   | ..                                      | ..   | 6:24  | 6:30  |
| <b>B3</b>    | 6:15  | 6:23                           | 6:26   | 5:33                                    | 5:31   | ..  | ..  |
| <b>B2</b>    | 6:20  | 6:28                           | 6:31   | ..                                      | 6:40   | ..  | ..  |
| <b>B1</b>    | 6:30  | 6:38                           | 6:41   | ..                                      | ..   | 6:44  | 6:50  |
| <b>B2</b>    | 6:40  | 6:48                           | 6:51   | ..                                      | 7:00   | ..  | ..  |

Figure 8-16 Sample timepoints and numbers matched to route maps

| Timepoint                   | Stop                      | Timepoint        | Stop                                  | Timepoint       | Stop                          |
|-----------------------------|---------------------------|------------------|---------------------------------------|-----------------|-------------------------------|
| <b>Route 101 Southbound</b> |                           | <b>Route 10E</b> |                                       | <b>Route 15</b> |                               |
| A                           | Clatsop Community College | 1                | Transit Center                        | 1               | Transit Center                |
| 1                           | Transit Center            | 2                | 16th & Exchange                       | 2               | Fred Meyer                    |
| 2                           | Fred Meyer                | 3                | Hospital (East)                       | 3               | Mini Mart                     |
| 3                           | Probation Office          | 4                | Gateway Apartments                    | 4               | Pacific Drive & Willow Street |
| 4                           | Senior Services           | 5                | Safeway (East)                        | 5               | Fort Stevens                  |
| 5                           | Costco                    | 6                | Emeraldn Heights - Kincaid and Nimitz | 6               | 2nd & Alder                   |
| 6                           | Camp Rilea                | 7                | Emeraldn Heights - Mitscher Shelter   | 2               | Fred Meyer                    |
| 7                           | Sunset Beach              | 6                | Emeraldn Heights - Kincaid and Nimitz | 7               | Costco                        |
| 8                           | Bud's RV                  | 8                | Job Corp                              | 1               | Transit Center                |
| 9                           | Seaside Cinema            | 9                | 45th and Cedar                        |                 |                               |
| 10                          | Avenue S and US 101       | 5                | Safeway (west)                        |                 |                               |
| 11                          | McDonal'd                 | 4                | Gateway Apartments                    |                 |                               |
| <b>Route 101 Northbound</b> |                           | 3                | Hospital (West)                       |                 |                               |
| 9                           | Seaside Cinema            | 2                | 16th & Exchange                       |                 |                               |
| 8                           | Bud's RV                  | 1                | Transit Center                        |                 |                               |
| 7                           | Sunset Beach              | <b>Route 10W</b> |                                       |                 |                               |
| 6                           | Camp Rilea                | 1                | Transit Center                        |                 |                               |
| 3                           | Probation Office          | 2                | 16th & Exchange                       |                 |                               |
| 4                           | Senior Services           | 3                | Clatsop Community College             |                 |                               |
| 5                           | Costco                    | 4                | Peter Pan                             |                 |                               |
| 2                           | Fred Meyer                | 5                | Short Stop                            |                 |                               |
| 1                           | Transit Center            | 6                | Astoria High School                   |                 |                               |
| A                           | Clatsop Community College | 7A               | DMV                                   |                 |                               |
|                             |                           | 7B               | Head Start                            |                 |                               |
|                             |                           | 8                | Department of Human Services          |                 |                               |
|                             |                           | 1                | Transit Center                        |                 |                               |

## Community Outreach

Building a wider base for transit increases transit's exposure throughout the community and adds more riders. Action items cover the range of markets; all items were brought up as opportunities by stakeholders and the public.

- Develop list of organizations to conduct outreach to classified by market type. For example, Students, Employers, Older Adults, Spanish-speaking population, etc. Create a calendar and have the SETD mobility manager or other staff visit these organizations on a periodic basis. For example, the Seaside Chamber of Commerce meets weekly for breakfast. SETD could stop in to let people know about transit or gather input every quarter or even every six months.
- Create a package of information and a presentation so SETD can easily attend various presentations.
- Work with Seaside Providence Hospital to understand how SETD can best meet the needs of hospital staff and patients. The hospital is willing to assist by surveying staff.
- Continue developing a transit pass program with Clatsop Community College.
- Conduct outreach to Columbia Memorial Hospital in Seaside. The hospital plans to expand and is experiencing parking shortages, thus may be interested in an employee transit pass.
- Reach tourism agencies to ensure SETD service information is up to date in hotel and visitor guest books.
- Conduct outreach to seasonal employers such as Hallmark's and Mo's to determine interest in purchasing bus passes for employees. Work with the City of Cannon Beach to develop remote parking locations in tandem with bus passes, such as at the south end of the city or at the US 101/US 26 junction.
- Consider remove RV parking at a locations served by SETD to attract RV tourists to park and take the bus into town for shopping, restaurants, etc.

## National Park Service Opportunities

Expanding the role of SETD to the recreation and public health market is possible by partnering with the National Park Service. For example, the six-mile Fort to Sea trail from Fort Clatsop to Sunset Beach is a population, but requires hikers to either walk the trip back (another six miles) or arrange for a pick-up. Operating a weekend-only shuttle between each end of the trail during certain months of the year is of interest to the NPS and could be possible through a cost-sharing partnership.

## Guaranteed Ride Home

The biggest obstacle to people trying transit is a fear of the "what ifs." People wonder, "If I take the bus, what happens if I have to work late? What if my child gets sick and I have to pick them up?" Guaranteed Ride Home programs are offered by transit agencies across the country as a way of alleviating that fear. In partnership with taxi companies, the agency can offer passengers a set number of taxi trips per year that can be used in the case of an emergency, free of charge. Sponsors of these programs have found that most people do not end up using all of their allotted taxi trips; instead, GRH provides a safety net and reassurance.

## Technology

How people access information and how people expect to access information has changed drastically. An increasingly "online" populace wants to obtain information online and through smartphones. By far the biggest request heard was for SETD to employ **real-time passenger information** via web or mobile



apps (such as Next Bus). SETD is working to add GPS devices to vehicles, which will enable this technology.

## Fares

SETD's fare policies and fare collection are instrumental in meeting the community's mobility needs and the organization's operational goals. The fare structure and fare collection procedures will affect:

- Fare revenue levels
- Operating costs (including fare collection costs and costs related to fare collection based travel time delays)
- Driver/rider interactions
- Travel affordability

No one fare system can meet the needs of every community and should be developed to meet organization and community goals. The following fare system goals were identified by SETD staff and reviewed by the TPAC.

- **Consistency.** Distance-based fares should reflect length of trip completed and multi-ride fare instruments should be priced such that the relative price differentials between passes reflect the relative benefits provided.
- **Simplicity.** SETD should offer a limited number of fare instruments and they should be easy to understand, obtain, and use.
- **Support transfers.** Fare instrument availability and pricing should not penalize riders when they make required transfers to complete a cross-region or cross-town trip.
- **Fare revenue retention.** Discounts on multi-ride passes or for specific rider groups should not excessively reduce fare revenues beyond expected subsidy levels.
- **Operations impacts.** The fare collect system should not put excessive burdens on bus operators in terms of their role in selling fare media, enforcing fare policy, or being delayed while fares are processed.

As noted, the current SETD fare structure has led to some confusion and user concerns. And the current fare system may not be optimal for addressing linked trips that require transfers-an issue that will likely grow as the long-term vision for this system is realized. The following recommendations address some of the inconsistencies with the current pricing and/or improvements to the general fare collection system. Each recommendation notes which of the fare collection system goals are being addressed.

- **Review distance-based fares.** SETD essentially has a zone-based fare structure on routes serving U.S. 101 and U.S. 30, but is conveyed in a series of city-pair fares. The use of "All Other Location" fares on the U.S. 101 routes can lead to confusion. And some user have concerns that Astoria/Warrenton to Sunset Beach trips are priced too high. It may help to identify clear zone boundaries on the route maps and associate fares for travel within any zone, travel between two zones, or travel between three zones. The current base fare pricing can be retained as the \$1, \$3, and \$4 fares reflect such travel. Sunset Beach can be placed in either "Zone 1" or Zone 2" as it's roughly the midpoint between Warrenton and Gearhart. If pursuing this recommendation, SETD should review ridership from Sunset Beach to see where these riders are traveling and what fare revenue impacts may stem from considering them as local trips in either "Zone 1 or Zone 2." The Lower Columbia fares for travel along U.S. 30 can remain as intercity fares as the distances are greater and the number of intermediary stops are limited. **(Goals addressed: Consistency, Simplicity)**

- **Review multi-ride pass offerings and pricing.** The current passes have raised a number of concerns including: a disconnect from the distance-based fares for single-ride fares; inconsistent level of discounts for qualifying rider groups; inconsistent pricing for similar pass terms; and an excessive number of options relative to needs. When addressing pass prices SETD should keep the following principles in mind. **(Goals addressed: Consistency, Simplicity, Fare Revenue Retention, Support Transfers)**
- **Pass multiplier value.** A pass price should reflect the desired discount level. The multiplier value is the pass price relative to the base standard fare. For instance, the \$45 monthly pass has a multiplier of 45 relative to the \$1 base for local travel. This is a relatively high value (i.e. a low discount) when compared to others in the transit industry. The multiplier of 45 results in the user paying for 22.5 round trips per month, regardless of the number of trips taken. But the same monthly pass is good for longer-distance travel resulting in a multiplier of only 15 (i.e. a much greater discount) for Astoria to Seaside travel. This is extremely low relative to peers and results in a user riding for free after 7.5 round trips. SETD should consider a consistent multiplier value based on a desired multi-ride discount level and apply it to all the distance-based fares. This implies there will be a pass for each base fare offered.
- Day passes are useful if riders infrequently travel a lot in a day or make transfers when each leg of the trip involves a fare. The current \$5 day pass price is relatively high. Most agencies price day passes in the 2 to 4 times the base fare range. Those offering a break for transferring passengers will aim toward the lower value. As with the other passes, the day pass should either be limited to local travel or have additional day passes for “zonal” travel and priced relative to a distance-based cash fare. Day passes should be made available for sale in as many locations as possible to support spontaneous travel by infrequent riders. These could be sold on buses provided the transactions do not negatively impact dwell and travel time.
- **Discounted fares and passes.** Discounts for special populations are common in the industry. These recognize affordability concerns and offer incentives for taking fixed-route service when users also qualify for demand-response service. The only requirement for discounted fares are found in urban areas where providers have to offer half-fares to cash paying riders during non-peak times. But the reduced fares are often extend to pass users and are found in rural areas as well. SETD should consider a consistent discount level and provide it toward all single-ride and pass prices.
- **Number of fare instruments.** The above recommendations will result in a greater number of fare media for SETD, but these should be simple to communicate to riders as the passes and discounts mirror a finite set of base fares. But some of the current pass offering should be reconsidered in the name of simplify and consistency. Annual passes are quite expensive and probably don’t make sense for typical riders. Similarly the quarter passes for students are priced the same as monthly passes for K-12 students. And CCC students pay twice the monthly price for quarter and ten times as much for an annual pass. SETD should consider retaining the monthly pass as an affordable option for students and possibly offering a longer term pass for the academic year after working with the schools/college if the institution or student bodies can provide subsidies for any additional discounts.
- **Transfer slips.** Future changes to the SETD system will increase the need to transfer as some routes are simplified. SETD should make transfers as convenient and affordable as possible. As mentioned, day passes can be used to offer a price break to those required to make transfers and do not travel enough or have the funds for a monthly pass. Alternatively SETD could offer free transfers. But this implies the providing of transfer slips on originating buses and the validation of these slips on destination buses. To avoid too much fare evasion, transfer slips are often encoded with date codes and the originating driver notes the time of day when issued to that they cannot be

used all day. In many systems the use of transfer slips increase the number of conflicts between drivers and riders when validating transfers. As a result the popularity of day passes is increasing. .  
**(Goal addressed: Support Transfers)**

## CAPITAL INVESTMENTS

### Transit-Specific Improvements

#### Vehicles

Vehicle replacement is needed on a rolling basis, and SETD has budgeted for such replacements. For future models, determine the cost of low-floor cutaway and transit vehicles. These are often higher cost, but have several advantages:

- Easily-deployed wheelchair lift at the front of the bus. SETD drivers would no longer have to get out of the vehicle and board wheelchair passengers through the back. This greatly reduces the amount of time spent loading and unloading wheelchair passengers.
- Level boarding helps all passengers with mobility challenges or who are carrying children, groceries, etc.
- Passengers have clear visibility out the front and sides of the buses.

Figure 8-17 SETD Vehicles



Current SETD vehicles (left) force passengers to climb up a steep set of steps. Low-floor cutaway vehicles are used in many transit agencies (top right). Pacific Transit utilizes low-floor full-size transit vehicles (bottom right).

The cost of SETD's current vehicles range from \$94,000-\$120,000 depending on length and capacity. The operating plan presented requires an additional seven total vehicles: 1 in the short-term, 1 in the mid-term, and five in the long-term.

### **Park & Ride**

Park & Ride locations reach the part of the population that is not within walking distance of transit. Locations in north and south Seaside as well as a location near the U.S. 26 and U.S. 101 interchange were mentioned as potential locations. Building up service infrastructure at these sites may entail an indoor waiting area, bicycle parking, restrooms, and real time information.

### **Seaside Transit Center**

Continue exploring locations for a transit center in Seaside given this area's growth.

### **Bus Shelters**

Additional bus shelters, as discussed in the performance standards chapter, are warranted at high-ridership locations. More than one shelter or larger shelters are needed at the highest ridership stops.

### **Bus Stop Signs**

Once SETD determines which stops to officially list in the route schedules, install bus stop poles with service information at these stops. Bus stop signs all visibility to the system and let people know where service runs. Glass box schedule rectangles are handy because they allow the agency to easily replace system information as needed.

### **Relocate Clatsop Community College Stop**

During Patriot Hall reconstruction, the SETD bus stop located in the parking lot of CCC near the library back door was relocated. Move this stop permanently to the corner of 16<sup>th</sup> and Lexington. This still provides easy access to CCC's front door, but removes a long and steeply sloped deviation into CCC's parking lot.

### **Replace Speed Bumps**

Speed bumps in the Clatsop Community College and Sunset Beach stop areas are jarring for passengers and the bus. Replace these sharp speed bumps with speed humps (which have a gentler slope and rounded top).

### **Roadway/Signal Improvements**

The following improvements, illustrated in Figure 8-19, are recommended to improve transit safety and on-time performance at several roadways/intersections served by current SETD routes. SETD would need to coordinate with the applicable agencies/jurisdictions to identify and secure funding for specific improvements. In most cases, the other agencies or jurisdictions would be responsible for constructing the improvements. Figure 8-18 summarizes both the high priority improvements identified below and shown on the map, and other planned improvements that could benefit transit operations and safety.

Sunset Empire Transportation District

Figure 8-18 Summary of Recommended Roadway/Signal Improvements

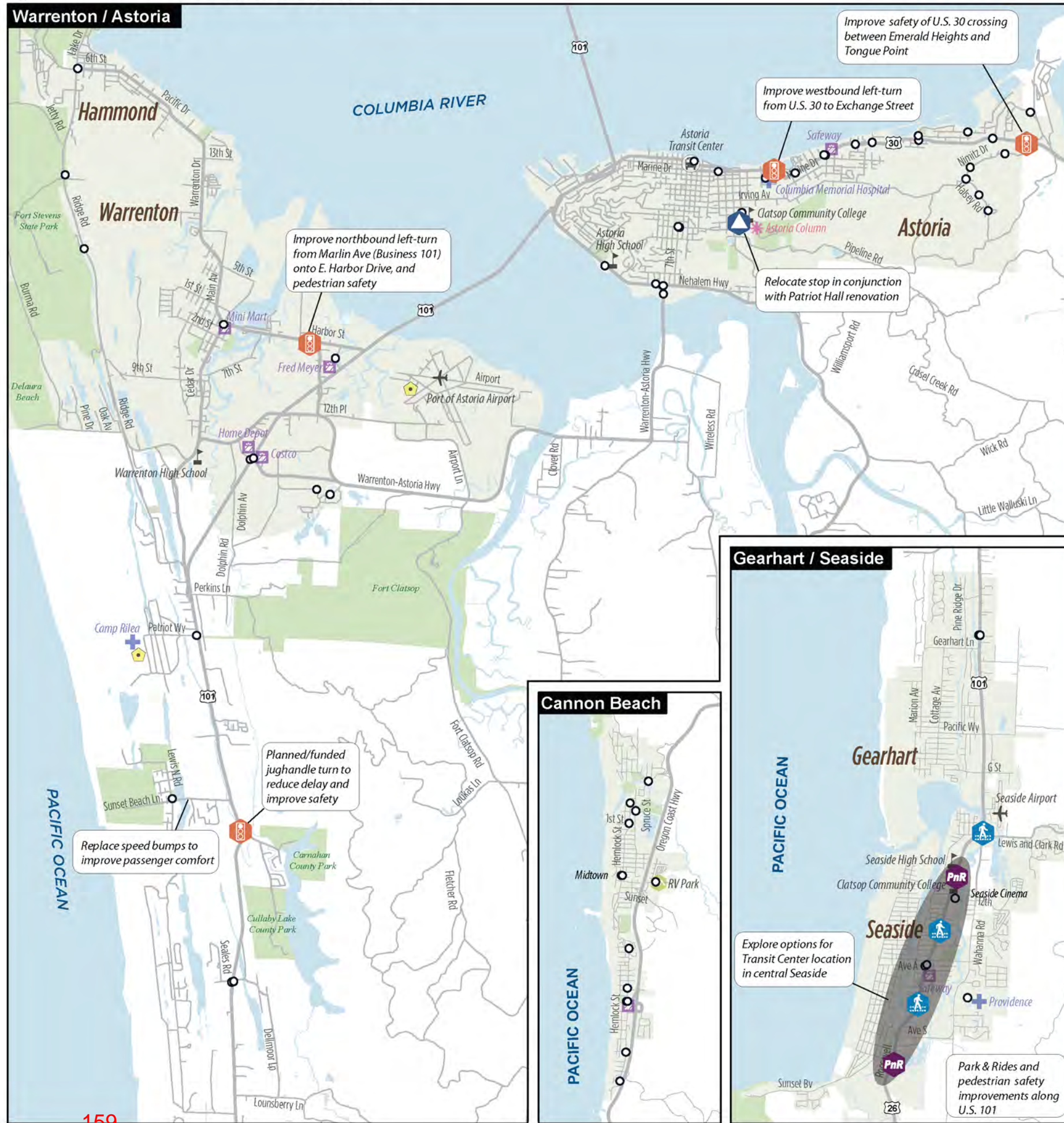
| Improvement Location   | Relationship to SETD / Coordination Needs   | Priority for SETD | Existing TSP / Project Number / Priority   | Cost                        |
|--|---|-------------------|--|-----------------------------|
| <b>High Priority Improvements for Transit</b>                                  |   |                   |  |                             |
| Sunset Beach Lane at U.S. 101 Jughandle Turn                                   | Reduce delay, improve safety for NB left-turn onto U.S. 101. Turn should be designed to accommodate transit vehicles.   | High              | Clatsop County, D20: US 101/Sunset Beach Road (Financially-constrained short-term - Funded)  | Funded                      |
| U.S. 30 at Nimitz Drive / Maritime Road, Astoria                               | Reduce delay, improve safety for southbound transit vehicles needing to cross U.S. 30. Astoria TSP includes other improvements to this intersection (e.g., realignment/turn lanes). | High              | Astoria TSP, D9: US 30/Nimitz-Maritime Road Safety Enhancement (Long-Term Phase 2 Aspirational)  | \$242,000                   |
| Marine Drive at Exchange Street, Astoria                                       | Reduce delay, improve safety for westbound transit vehicles needing to make this left-turn.   | Medium            | Astoria TSP, D6: US 30/ Exchange Street / 23 <sup>rd</sup> Street Safety Enhancement (Long-Term Phase 4 Aspirational)  | \$1,547,000                 |
| Marlin Avenue (Business U.S. 101) at E. Harbor Drive, Warrenton                | Reduce delay and improve pedestrian safety.   | Medium            | -  |                             |
| <b>Other Improvements with Potential Relationship to Transit</b>               |   |                   |  |                             |
| US 30 / 16 <sup>th</sup> Street Capacity Enhancement, Astoria                  | Reduce delay and improve safety for existing inbound Route 101, and/or future westbound east Astoria route.   | Medium            | Astoria TSP, D6: US 30/ Exchange Street / 23 <sup>rd</sup> Street Safety Enhancement (Long-Term Phase 4 Aspirational)  | \$1,547,000                 |
| Irving Ave. Extension to connect with Nimitz Drive, Astoria                    | Could enable service to be provided south of U.S. 30 and provide a more efficient means of serving Emerald Heights. Design to accommodate transit vehicles and stops.               | Low               | Clatsop County, D08: Irving Ave, East Terminus – Nimitz Drive. (Financially-constrained short-term). Astoria TSP, D30 (Long-Term Phase 4 Aspirational)                 | \$7,000,000                 |
| U.S. 30 / Liberty Lane Intersection Realignment / SB Left-Turn Pocket, Astoria | Accommodations for transit could enable future service to MERTS.  | Low               | Clatsop County, D07: (Aspirational Long-Term Ph 4). Astoria TSP, D10 (Long-Term Phase 2 Aspirational)  | \$400,000                   |
| Spot U.S. 101 Improvements, Astoria-Seaside                                    | Providing transit vehicles with the ability to bypass bottlenecks improves on-time performance and coordination between routes.   | Medium            | Clatsop County, D21: US 101, Patriot Way – Sunset Beach Road (Aspirational Ph 2)<br>Clatsop County, D30: US 101, South of Seaside, MP 22.6 - 23.17 (Aspirational Ph 2) | \$10,000,000<br>\$4,000,000 |

Sunset Empire Transportation District

| Improvement Location  | Relationship to SETD / Coordination Needs   | Priority for SETD | Existing TSP / Project Number / Priority   | Cost  |
|---|---|-------------------|--|---|
| U.S. 101 Business Improvements, Miles Crossing / Warrenton                    | Accommodations for transit could benefit future service on Business 101.  | Medium            | Clatsop County, D11-D13: (Financially-Constrained Short-Term / Aspirational Long-Term Ph 4). Astoria TSP, D33 (Long-Term Phase 3 Aspirational) | \$5,600,000<br>\$10,000,000<br>\$350,000<br>\$5,470,000 |
| 19 <sup>th</sup> St. Extension to Dolphin Rd. at Rainbows End Lane, Warrenton | Could provide an alternative route if U.S. 101 is congested and/or a means for Route 101 to efficiently serve the Walmart/Huckleberry area. | Medium            | Clatsop County, D14: (Financially-Constrained Short-Term) – Coordinated with Warrenton   | \$5,255,000   |

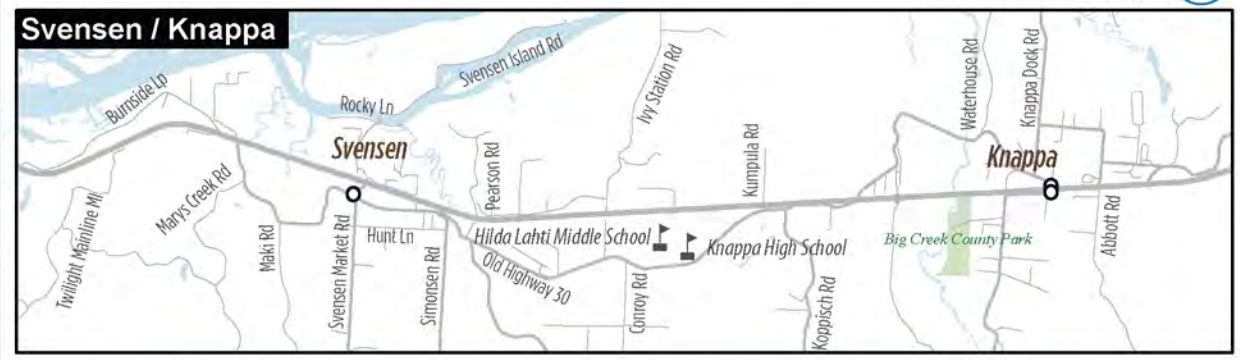
Figure 8-19 shows the location of the most relevant transit-related roadway improvements.

Figure 8-19 Recommended Capital Facility Improvements



**Capital Facilities**

- |  |                                 |  |                      |
|--|---------------------------------|--|----------------------|
|  | Roadway/Signal Improvements     |  | Landmarks            |
|  | Major Stop Improvement/Change   |  | Attractions          |
|  | Park and Ride                   |  | Education            |
|  | Pedestrian Crossing Improvement |  | Airport              |
|  |                                 |  | Transfer Locations   |
|  |                                 |  | Medical              |
|  |                                 |  | Shopping             |
|  |                                 |  | Coast/National Guard |
|  |                                 |  | City Boundaries      |
|  |                                 |  | Existing Stops       |
- 0 2 4 Miles



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## TRANSIT-SUPPORTIVE LAND USE

Transit-supportive land use refers to the integration of land use and transit via the creation of compact, walkable, mixed-use neighborhoods within walking distance of a transit stop or station. This pattern of development brings together people, jobs, and services and is designed in a way that makes it efficient, safe, and convenient to travel by walking, bicycling, or riding transit. These same elements also apply to “pedestrian-oriented development” and can be realized at scales ranging from “nodes” to complete neighborhoods. Figure 8-20 illustrates the interdependence between land use, bicycle and pedestrian access, and transit. All three elements are needed to achieve community (and transit) goals – increasing transit ridership, reducing vehicle miles-traveled, and enhancing mobility for all residents.

Figure 8-20 Relationship between Land Use, Transit Service, and Bicycle/Pedestrian Access



## Primary Transit Corridors

Primary transit corridors are not bus routes or a service plan, but a policy tool to help SETD, Clatsop County, and other local jurisdictions manage land use, public infrastructure, and transit service provision. These corridors support a long-term policy goal of providing service that is frequent enough to be convenient. Primary transit corridors help accomplish this policy goal by:

- Identifying where SETD will focus future investments in service capacity, frequency, and amenities – along identified corridors consistent with areas where local jurisdictions will focus land use planning. Influencing zoning and development policies to encourage intensification of land use around transit corridors is a key element of providing the necessary level of ridership and accessibility to support improved transit service.
- Providing direction to local jurisdiction engineers and planners about where street rights-of-way should be designed and managed to help maintain transit operating speed and reliability. This enables transit to provide the best possible user experience, prevents timed-transfer connections from breaking down, and allows transit operating resources to be spent on improving service, rather than simply maintaining headways as traffic congestion increases.

- Encouraging dense and/or transit-intensive land uses to locate on primary/secondary corridors, or at a minimum, along the supporting network. Defining transit corridors communicates preferred locations for uses that generate high transit demand and/or that desire to have transit service. For example, if a planned land use that is known to require transit, such as a social services office, senior facility, or school, chooses not to locate on a primary corridor, they do so with the knowledge that they may not get the best transit service, or any at all. When such uses locate away from transit, they inevitably create pressure for the transit agency to provide service where it cannot be done efficiently.

The preliminary corridors described in this memo are categorized into several tiers based on the type of service provided, e.g., local and regional, and based on their potential for future transit demand and likely phasing:

- **Primary corridors** are the most densely developed corridors or have the highest future potential population/employment density, and/or connect the most significant transit demand generators. They have the highest potential to warrant investments in higher levels of transit service (e.g., more frequent or more direct service).
- **Secondary corridors**, categorized as local or regional, may be less densely developed or have longer-term development potential, and/or serve important but less significant activity centers. They do not warrant the highest levels of service, but are important parts of the SETD system.
- **Potential corridors** could be elevated to a primary or secondary transit corridor(s) if land uses become more transit-supportive (discussed above) and destinations that generate transit demand develop along the corridors. These corridors may have existing service or may not currently be served by transit.

The recommended corridors are illustrated in Figure 8-21.

## Code Recommendations

Land use regulations, present in comprehensive plans and development code, ultimately have the power to create transit-friendly streets with sidewalks, bicycle amenities, and park-and-rides, for example. Over time, integrate recommended comprehensive plan policies into TSP updates and other plans (Figure 2-14) and (Figure 2-15).

Given the level of development in Warrenton, specific language that is adoption-ready for this jurisdiction has been provided in Volume II, Section G.

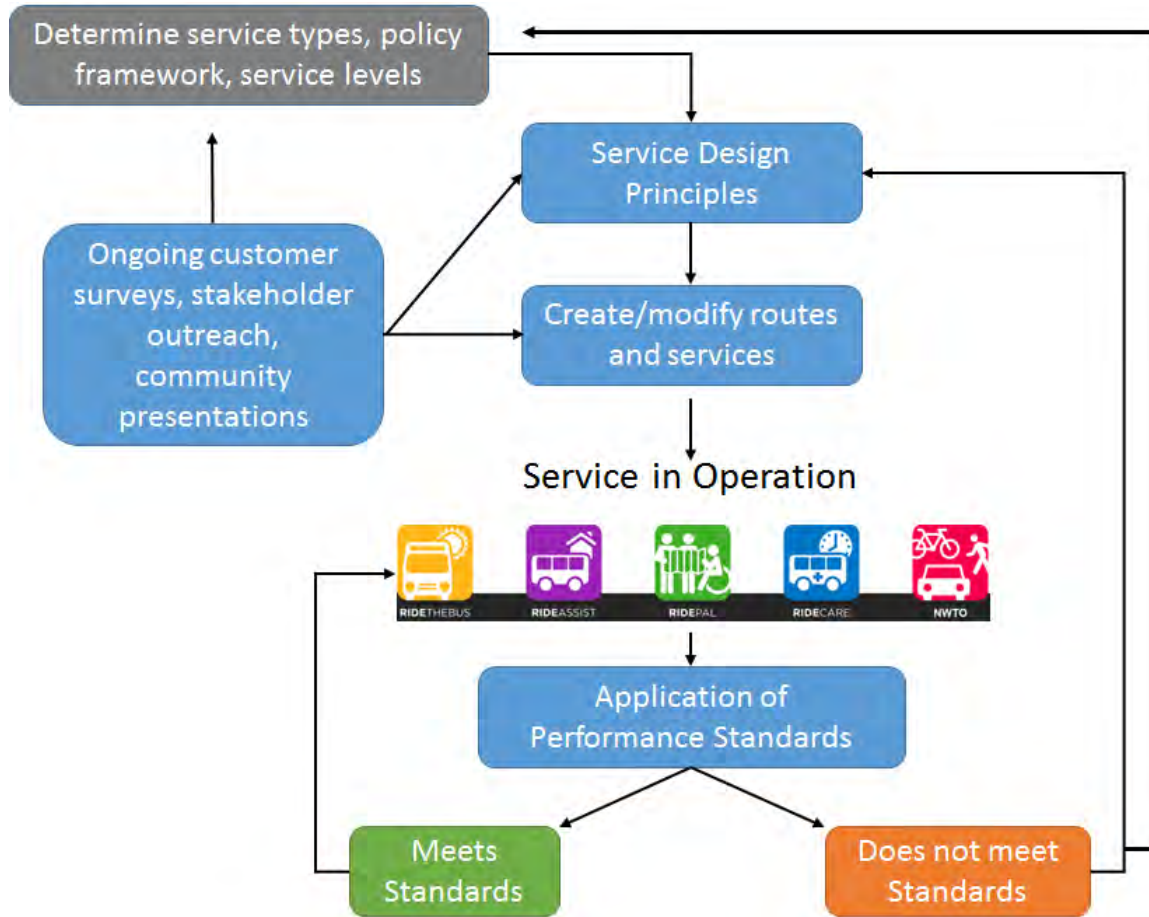


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## 9 EVALUATING PROGRESS

System goals, objectives, performance measures, public input, and actual operation of service are all part of an ongoing process to continually evaluate and improve service. SETD can determine the right level and frequency of service evaluation that is meaningful without being burdensome to staff. The performance framework guides how routes are structured and operated. More information on benchmarks including a peer review of SETD performance compared to regional providers can be found in Volume II Section M.

Figure 9-1 Process for Ongoing Benchmarking and Modification of Service to Meet Customer Needs



For all peer review data, see Appendix C.

Performance measures lead from community and agency goals, and often include a performance standard as well. A definition of these terms is as follows:

- A **performance measure** is a basis for comparison, or a reference point against which other factors can be evaluated. As an example, a performance measure could be how much access a population has to transit service as a way to achieve accessibility.
- A **performance standard** (also known as a “target” or “benchmark”) is defined as a recommendation that is quantifiable. Performance standards are related to a particular performance measure and reflect the acceptable level of performance of that measure. The standards have been defined by using industry standards as well as a review of SETD’s peers.

## SERVICE LEVEL STANDARDS

A route’s hours of operation and frequency, along with other service level characteristics, play a major role in attracting riders. Passengers value convenience and reliability. Service every three hours or service that ends at 6 pm does not provide a convenient option. Service hours and frequencies have a major impact on cost; however, too little investment in service levels results in empty buses.

Figure 9-2 displays performance measures for this category, a brief definition, where to collect the data, how SETD currently performs on the measures, and guidance on metrics for each service type. In some cases benchmarks are the same for each service type, while in other cases the performance measure is the same but the metrics are different.

## COST EFFICIENCY STANDARDS

Cost efficiency points to how well SETD’s level of output (service hours and miles) matches against the cost to operate such service (Figure 9-3)

## SERVICE EFFICIENCY STANDARDS

Transit services utilize public dollars and are responsible to operate in an efficient manner. Figure 9-4 lists metrics that speak to a system’s efficient use of resources.

## PASSENGER COMFORT/SAFETY STANDARDS

This set of benchmarks (Figure 9-5) is mostly already tracked by SETD, and speaks to customer satisfaction beyond simply when and where service operates. The key metric not currently tracked is on-time performance, or schedule adherence. Given known summer congestion problems and the problems it causes for SETD riders, tracking on-time performance is crucial to pinpointing exactly when and how often buses are excessively late or trips are missed.

## PASSENGER AMENITY STANDARDS

Every transit trip involves waiting at the stop for a certain amount of time. Passenger amenity standards and benchmarks address making that wait feel safe and comfortable as possible, given limited resources. To help SETD determine where to invest in stop amenities, standards based on ridership levels can be created. This will help the agency handle requests and justify actions. Based upon the spring and summer ridechecks, the general thresholds for high, medium, and lower ridership stops were used to create three tiers of bus stops (Figure 9-6). Note that shelters are already planned and funded for the new Walmart site, and SETD is also undertaking a process with Northwest Connector to fund additional stop amenities.

Figure 9-2 Service Level Standards

| Performance Measure                        | Definition   | Data Source           | SETD Performance (Route No.)   | Performance Standards <sup>1</sup>                                    |  |                              |
|--|--|-----------------------|--|---|--|------------------------------|
|  |  |                       |  | Intercity Fixed-Route <sup>2</sup>                                    | Local Fixed-Route                                  | DAR or ADA Paratransit       |
| Service coverage                           | Higher population and employment densities support higher levels of transit.   | Census                | Routes hit population centers with 5-59 people per acre  | 8-12 people or jobs per acre within ¼ mile of route in urban clusters | 6-8 people or jobs per acre within ¼ mile of route | >0.5 people or jobs per acre |
| Minimum span of service – Weekday          | Route start and end times determine how many people will use service.  | Service schedules     | Intercity: 6 am-10 pm<br>Local: 6 am-7 pm  | 6 am-10 pm  | 7 am-7 pm  | Same as fixed route          |
| Minimum span of service – Weekend          | Route start and end times determine how many people will use service.  | Service schedules     | Intercity: 8:30 am-5:30 pm (PC), 7:30 am-5:30 pm (30)<br>Local: 6 am-6 pm (15); 9 am-6 pm (21) | 8 am-8 pm   | 8 am-6 pm  | Same as fixed route          |
| Service frequencies – Weekday <sup>3</sup> | Service frequency is a key characteristic for attracting riders, but also has a major impact on operating cost.  | Service schedules     | 60 minutes (10, 20, 101);<br>30-220 minutes (15);<br>2 trips (30)                              | 60-45 minutes   | 60-120 minutes                                     | NA                           |
| Service frequencies – Weekend <sup>3</sup> | Service frequency is a key characteristic for attracting riders, but also has a major impact on operating cost.  | Service schedules     | 30-220 minutes (15);<br>3 trips (PC);<br>30-160 minutes (21)                                   | 60-120 minutes  | 60-120 minutes                                     | NA                           |
| Vehicle loading <sup>3</sup>               | To ensure passenger comfort, agencies set standards for how many standees are acceptable on a route. On long-haul trips, it is more important to provide a seat for comfort. | Ridecheck or APC data | Not tracked  | 100%  | 120%   | NA                           |
| Service hours per capita                   | This metric shows how much service is provided to the community.   | Rural NTD             | Intercity and Local Fixed Route: 0.43<br>DAR/ADA: 0.1  | 0.45 - 0.64   |  | 0.12 - 0.28                  |
| Ridership per capita                       | This metric shows how much service is consumed by the community.   | Rural NTD             | Intercity and Local Fixed Route: 4.73<br>DAR/ADA: 0.17   | 4.73 – 8.61   |  | 0.39 - 0.61                  |

Sunset Empire Transportation District

| Performance Measure               | Definition   | Data Source | SETD Performance (Route No.)     | Performance Standards <sup>1</sup>  |                   |                        |
|-----------------------------------|--|-------------|----------------------------------|---|-------------------|------------------------|
|                                   |  |             |                                  | Intercity Fixed-Route <sup>2</sup>  | Local Fixed-Route | DAR or ADA Paratransit |
| Service Availability <sup>3</sup> | Service availability is required in Title VI analysis, and the FTA often cites percent of population as a way of measuring availability. | Census      | 58.3% within a ¼ mile of transit | Set by each community. FTA does not require a certain standard, but does require tracking progress. |                   |                        |

Figure 9-3 Cost Efficiency Standards

| Performance Measure             | Definition  | Data Source                   | SETD Performance                    | Performance Standards <sup>1</sup> |                   |                        |
|---------------------------------|---|-------------------------------|-------------------------------------|------------------------------------|-------------------|------------------------|
|                                 |   |                               |                                     | Intercity Fixed-Route <sup>2</sup> | Local Fixed-Route | DAR or ADA Paratransit |
| Operating cost per revenue hour | This metric is reported at system level as it is influenced by fuel, labor, insurance, and other system-wide costs. | Rural NTD; SETD annual report | \$85.37 <sup>6</sup>                | \$80-\$130                         |                   |                        |
| Operating cost per trip         | Defined as the cost to provide a specific trip, allocating operating cost on a per-passenger basis.                 | Rural NTD; SETD annual report | Fixed-Route: \$4.74<br>DAR/ADA: N/A | < \$5                              | \$6-\$12          | <\$25                  |

Figure 9-4 Service Efficiency Standards

| Performance Measure         | Definition  | Data Source                       | SETD Performance  | Performance Standards <sup>1</sup> |                   |                        |
|-----------------------------|---|-----------------------------------|---|------------------------------------|-------------------|------------------------|
|                             |   |                                   |   | Intercity Fixed-Route <sup>2</sup> | Local Fixed-Route | DAR or ADA Paratransit |
| Passengers per revenue hour | The average number of passengers a bus carries for each hour in service.  | Rural NTD; SETD ridership reports | Intercity and Local Fixed Route: 17.39<br>DAR/ADA: 1.67 | 16-20                              | 6-12              | 2-4                    |
| Passengers per revenue mile | The average number of passengers a bus carries for each mile in service.  | Rural NTD; SETD ridership reports | Intercity and Local Fixed Route: 0.78<br>DAR/ADA: 0.12  | 1.2                                | 0.25-0.5          | 0.2                    |
| Stop spacing                | Close stops provide more access but increase travel times. Balance the need to ensure short walking distances to and from stops with efficient travel time. | SETD GIS data                     | No existing standard                                    | >1/8-1 mile                        | >1/8 mile         | NA                     |



Sunset Empire Transportation District

| Performance Measure                        | Definition   | Data Source  | SETD Performance  | Performance Standards <sup>1</sup>                           |                   |                        |
|--|--|--|---|--|-------------------|------------------------|
|  |  |  |   | Intercity Fixed-Route <sup>2</sup>                           | Local Fixed-Route | DAR or ADA Paratransit |
| Travel time ratio (bus to auto)            | Provide competitive travel times to attract transit riders. If the bus travel time far outweighs driving time, those with a choice will drive. | Schedules for bus times between major destinations; Google maps for auto times | Intercity Examples:<br>- Transit Center to Cinema: 1.6<br>- McDonald's Seaside to Cannon Beach: 2.3<br>Local Example:<br>- Emerald Heights to Fred Meyer: 3.1 | 1.3  | 3.0               | 2.0-4.0                |
| Total vehicle hours to revenue hours ratio | A high ratio of total hours to revenue hours reveals unproductive time, such as deadhead hours.  | Already collected by SETD  | Fixed route: 1.08 <sup>4</sup>  | 1.2  | 1.3               | NA                     |
| Farebox recovery ratio                     | This measures the percent of operating expenses covered by farebox revenue.  | Rural NTD  | System-Wide: 15.2%  | 9.9-12.3% (metric reported at system level for all agencies) |                   |                        |
| Transit mode share                         | The % of trips taken via transit shows transit's role in achieving Transportation Planning Rule goals of reduced VMT                           | American Community Survey ACS 5-Year Estimates (Table S0801)                   | Clatsop County: 1.6% (2010-14)  | Peer average: 1.26% <sup>5</sup>                             |                   |                        |




Figure 9-5 Passenger Comfort and Safety Standards

| Performance Measure      | Definition  | Data Source  | SETD Performance  | Performance Standards <sup>1</sup>                          |                   |                        |
|--------------------------|---|--------------|---|---|-------------------|------------------------|
|                          |   |              |   | Intercity Fixed-Route <sup>2</sup>                          | Local Fixed-Route | DAR or ADA Paratransit |
| On-Time Performance      | This measures service reliability by comparing how often a vehicle leaves early or late. Most agencies set a target stating that 1-3 minutes early or 5 minutes late counts as "on time." | Ridecheck    | NA  | 80-95%  |                   | 90-96%                 |
| Passenger complaints     | Track complaints to gauge customer satisfaction.  | SETD reports | 17 driver or system complaints per 100,000 boardings <sup>7</sup> | No more than 25 legitimate complaints per 100,000 boardings |                   |                        |
| Road calls / maintenance | Road calls are the number of times a vehicle must be taken out of service.  | SETD reports | NA  | No more than 10 per 100,000 revenue miles.                  |                   |                        |

Sunset Empire Transportation District

| Performance Measure              | Definition   | Data Source  | SETD Performance   | Performance Standards <sup>1</sup>   |                   |   |
|----------------------------------|--|--------------|--|--|-------------------|---|
|                                  |  |              |  | Intercity Fixed-Route <sup>2</sup>   | Local Fixed-Route | DAR or ADA Paratransit                        |
| Safety                           | Bus accidents disrupt service and indicate operator training needs or street design problems.  | SETD reports | 1.3 Safety Issues or Incident Reports per 100,000 revenue miles <sup>7</sup> | No more than: 1 preventable accident per 100,000 miles; 2 accidents per 100,000 revenue miles; 2 major accidents per 1,000,000 revenue miles |                   |   |
| No show / late cancellation rate | This tracks the percent of scheduled trips where the passenger is a no-show or failed to provide adequate notice to cancel a trip. It indicates unproductive vehicle time. | SETD reports | 27% no-show or cancellation for ADA, DAR, March 2015-Feb 2016 <sup>4</sup>   | NA   | NA                | No-Show / cancellations > 5%                  |
| Trip denials                     | Trip denials show capacity to provide requested rides within 1 hour of the time requested by the passenger. No ADA trips should be denied.                                 | SETD reports | Data Incomplete <sup>4</sup>   | NA   | NA                | No patterns of denied service allowed per ADA |

Figure 9-6 Amenity Standards and Benchmarks

|  | Tier 1: Basic Bus Stop  | Tier 2: Major Bus Stop with Shelter  | Tier 3: Enhanced Bus Stop  |
|--|---|--|--|
| Examples of Uses                           | <ul style="list-style-type: none"> <li>Typical stop with a concrete pad, route sign, map/schedule, and information in Braille</li> </ul>  | <ul style="list-style-type: none"> <li>High Use Stops, Transfer Point</li> </ul>   | <ul style="list-style-type: none"> <li>Transit Centers, Highest ridership location, Park-and-Ride</li> </ul>   |
| Example Location                           | <ul style="list-style-type: none"> <li>Geno's, Crest Motel</li> </ul>   | <ul style="list-style-type: none"> <li>Midtown Cannon Beach; Rainier; Sunset Beach; Emerald Heights; Tongue Point</li> </ul>   | <ul style="list-style-type: none"> <li>Transit Center in Astoria; Seaside Cinema; Fred Meyer hub; Clatsop Community College</li> </ul>   |
| Ridership                                  | <ul style="list-style-type: none"> <li>Low = &lt;10 Daily Boardings</li> </ul>  | <ul style="list-style-type: none"> <li>Medium = 10-25 Daily Boardings</li> </ul>   | <ul style="list-style-type: none"> <li>High = &gt;25 Daily Boardings</li> </ul>  |
| Required / Preferred Elements <sup>1</sup> | <ul style="list-style-type: none"> <li>Concrete landing pad</li> <li>Route sign</li> <li>Schedule</li> <li>Lighting</li> <li>Continuous pedestrian access</li> <li>Well-maintained pull-off location (if stop is a pull-off)</li> </ul> | <ul style="list-style-type: none"> <li>Concrete landing pad</li> <li>Route sign</li> <li>Schedule</li> <li>Lighting</li> <li>Continuous pedestrian access</li> <li>Well-maintained pull-off location (if stop is a pull-off)</li> <li>Shelter / seating</li> </ul> | <ul style="list-style-type: none"> <li>Concrete landing pad</li> <li>Route sign</li> <li>System map / Schedule</li> <li>Lighting</li> <li>Continuous pedestrian access</li> <li>Well-maintained pull-off location (if stop is a pull-off)</li> <li>High-capacity shelter(s)</li> <li>Trash can</li> <li>Designated park and ride spaces</li> </ul> |
| Optional Elements                          | <ul style="list-style-type: none"> <li>System map / schedules</li> <li>Bench</li> </ul>   | <ul style="list-style-type: none"> <li>System map / schedules</li> <li>Secure bicycle parking</li> <li>Trash can</li> </ul>  | <ul style="list-style-type: none"> <li>Real-time information</li> <li>Secure bicycle parking</li> <li>Placemaking / art</li> <li>Solar shelters</li> <li>Solar lighting</li> </ul>   |
| Photo Examples                             |    |   |    |

**Notes for all tables:**

<sup>1</sup> Standards are preliminary thresholds of acceptable performance based on peer systems and industry norms.

<sup>2</sup> Includes main intercity routes such as Connector routes or Route 101.

<sup>3</sup> Represents a Title VI required measure (system-wide service standard per FTA Circular 4702.1B). FTA does not prescribe the benchmark itself, but the tracking of such metrics.

<sup>4</sup> Data source: March 2015-February 2016, provided by SETD

<sup>5</sup> Peer ACS data: Redwood (Del Norte Co, CA): 0.8%; Columbia Co, WA: 0.9%; Lincoln Co, OR: 1.7%; Tillamook Co, OR: 0.9%; Grays Harbor Co, WA: 1.7%; Jefferson Co, WA: 1.9%; Pacific Co, WA: 0.6%

<sup>6</sup>Based on Rural National Transit Database Reporting, for all services (Fixed-route plus demand-response).

<sup>7</sup>Data source: March 2015-February 2016. SETD is currently correcting how this data was originally classified.



## 10 THE NEXT 20 YEARS

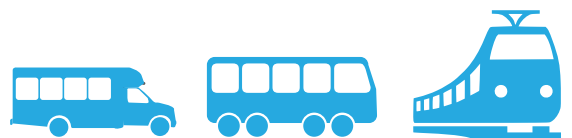
This plan lays out a vision with clear, implementable steps toward robust and convenient public transportation in Clatsop County. Improvements can start immediately; the first several years of plan phasing are fiscally constrained based upon actual projections of resources, and can demonstrate to the public SETD's commitment to high-quality service. The system has a well-established base of existing users who rely upon and appreciate service. During this time of growth locally as well as interest statewide and nationwide in a lifestyle inclusive of public transportation, SETD has the opportunity to capture a broader market as well as better serve its existing riders.

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# FINAL Oregon Public Transportation Plan

Volume 1







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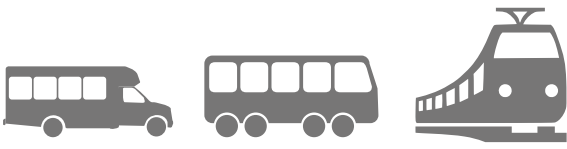
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Volume 2 – Interim Products Informing OPTP Development (published separately)

## Oregon Public Transportation Plan Vision:

In 2045, public transportation is an integral, interconnected component of Oregon's transportation system that makes Oregon's diverse cities, towns, and communities work. Because public transportation is convenient, affordable, and efficient, it helps further the state's quality of life and economic vitality and contributes to the health and safety of all residents, while reducing greenhouse gas emissions.



## Draft Chapter 1:

# A New Oregon Vision for Public Transportation

Public transportation in Oregon encompasses a diverse set of services and providers, including fixed route bus service, demand response service, and intercity transit to passenger rail, bus rapid transit, and light rail. Services respond to the needs of individual communities, considering unique constraints and characteristics, such as population, development patterns, prior investment decisions, and available funding. The result is a wide variety of public transportation services throughout the state and, in turn, a wide variety of needs, opportunities, and challenges.

This Oregon Public Transportation Plan (OPTP) establishes statewide policies and strategies relating to traditional public transportation modes. It also considers how these modes relate to services such as taxis, transportation network companies (TNCs), such as Uber and Lyft, carsharing, carpooling, and vanpooling. It addresses transportation services provided throughout Oregon by public agencies (including cities, counties, tribal governments, and transit or transportation districts) and private sector entities such as intercity bus contractors.

The plan supports decision making by the state, tribes, regional and local agencies, as well as public transportation providers. It will be used by all these agencies as they develop local policies, plans, and investment programs. Other public transportation stakeholders and all Oregonians can reference this plan to understand the agreed statewide vision and priorities for public transportation.

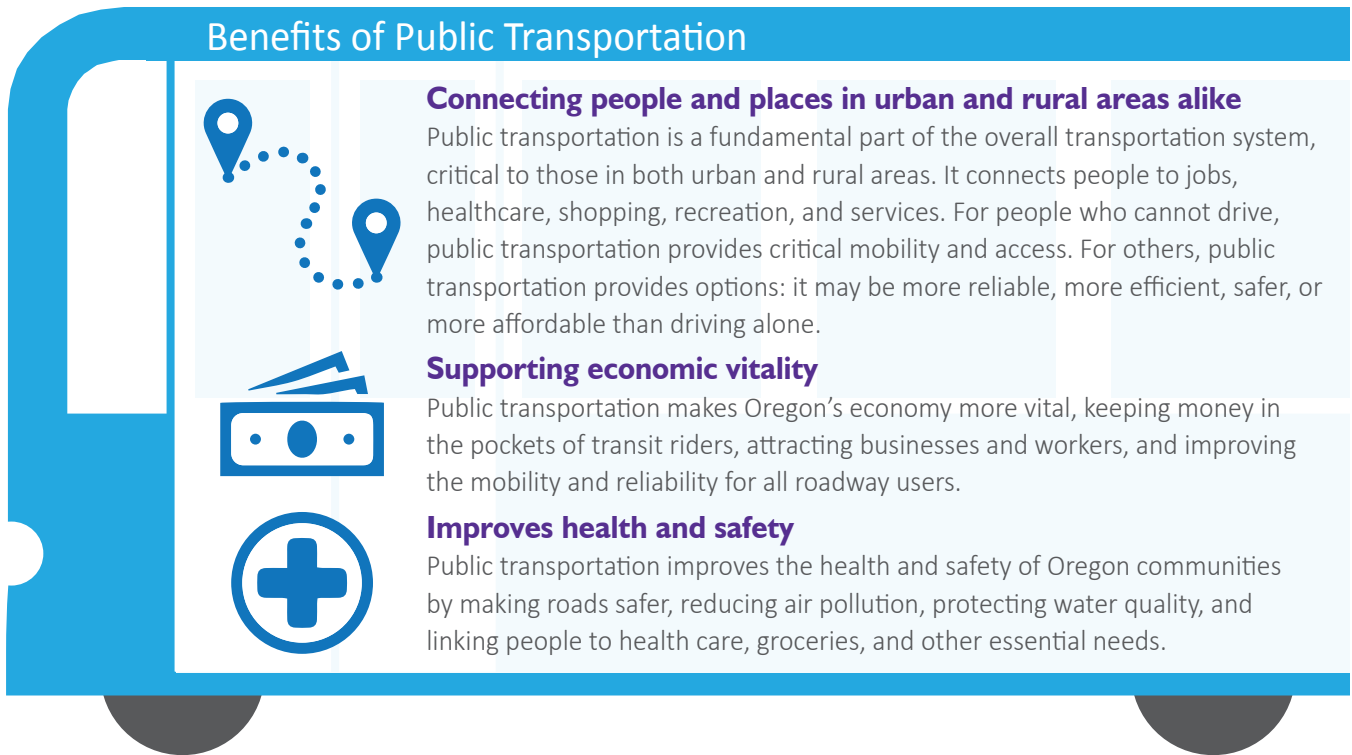
## Why is Public Transportation Important?

Every day, thousands of urban and rural Oregonians use public transportation to travel to work, go shopping, get to school, see the doctor, and visit friends. Downtowns in large cities like Portland would grind to a halt without public transportation. Public transportation connects people within and between Oregon communities in all corners of the state; Oregonians make more than 120 million trips on public transportation each year. Nearly 20 percent of Oregon households include individuals who use transit at least once a week.<sup>1</sup>



Investing in transportation improvements throughout Oregon's metropolitan regions, including expanding public transportation, is estimated to generate **8,300 jobs**, **\$1.1 billion** in benefits, and a **\$2.40 return** on every \$1 invested by 2040.<sup>2</sup>

Figure I-1



The OPTP articulates a vision for the future of public transportation, created with input from people throughout Oregon. This plan sets the stage for a future where public transportation is an essential piece of the state’s overall transportation system and improves Oregonians’ lives throughout the state. It promotes service improvement throughout the state, and is responsive to the different needs of communities and populations. Important considerations are services that provide travel choices and those that respond to the needs of populations for whom public transportation provides essential mobility. The OPTP promotes accommodating diverse people and diverse needs to allow all to use public transportation services for many trips.

Figure I-2



### Achieving State Goals

Public transportation advances many of Oregon’s statewide goals: supporting a robust state economy, increasing freight mobility, supporting emergency preparedness, discouraging sprawl, improving public health, reducing transportation-related greenhouse gas emissions, and promoting energy conservation. Importantly, public transportation advances equity across the state by providing transportation options for everyone, enabling essential mobility for those who cannot or choose not to drive. In all these ways, public transportation helps improve Oregon quality of life.



State commitments to reduce greenhouse gas emissions, such as the Oregon Statewide Transportation Strategy, make clear that expanding public transportation is critical to reducing emissions from the transportation sector.<sup>3</sup> Additionally, public transportation frequently requires users to walk or cycle to and from their station or stop, which can help bolster physical activity for users and, in turn, improve public health. Public transportation supports the state’s economy by connecting people to goods and services and increasing travel capacity in congested corridors. Finally, public transportation can reduce travel costs for riders and thereby improve affordability of communities served.

### Increasing Need for Public Transportation

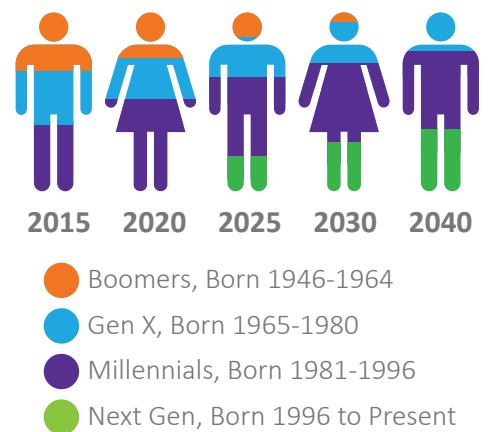
Several major trends contribute to a growing need for public transportation services today and into the future. Population growth and demographic changes alone will significantly increase the need for public transportation in Oregon for years to come. Following are some of these trends:

- Oregon is growing** — Over the past decade, Oregon’s population grew by 10.7 percent, faster than the national growth rate of 8.6 percent.<sup>5</sup> This growth is expected to continue and accelerate, increasing the need for all types of transportation. Public transportation will be critical to accommodating this growth in rapidly changing communities.
- Demographics are shifting and habits are changing** — The state is aging: 16 percent of Oregonians are now 65 and older, and that percentage is projected to increase over time.<sup>6</sup> Driving rates drop as people age as changing reflexes and vision can make it less safe and comfortable to drive, especially at night.<sup>7</sup>

At the other end of the spectrum, Millennials now represent 27 percent of all Oregonians.<sup>9</sup> This generation is the first in decades to drive less than their parents. They get driver’s licenses in lower numbers and tend to travel more multimodally.<sup>10</sup>

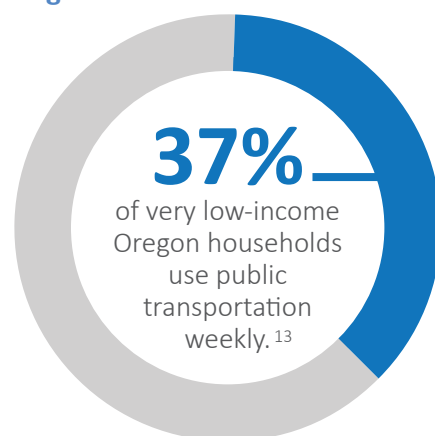
Low-income and minority Oregonians also use public transit more than the general population.<sup>11</sup> In the Portland Metropolitan area, the percentage of residents who are racial or ethnic minorities has grown from about 11 percent in 1990 to more than 22 percent in 2014.<sup>12</sup>

Figure I-3 Share of workforce by generation



As Millennials continue to comprise a greater and greater share of the adult population and work force, their transportation preferences will have an outsized influence on the need for public transportation service.<sup>8</sup>

Figure I-4





Public transportation is important for recreation in Oregon. The Mt. Hood Express serves employees, residents, and recreationalists in Clackamas County near Mt. Hood.  
(Photograph credit: Clackamas County)

● **Budgets are constrained** — Both government and households have limited budgets. Household budget constraints mean many seek public transportation as a lower cost travel option. According to the Center for Neighborhood Technology, only 26 percent of American communities meet the definition of affordability,<sup>14</sup> which includes both housing and transportation costs.

At the same time, governments at all levels lack adequate funding to meet growing public transportation needs. This is true in Oregon, even with additional funding from the Keep Oregon Moving Act, passed in 2017.

## A New Oregon Public Transportation Plan

The OPTP sets out a long-term vision describing how Oregonians expect public transportation to contribute to their communities and to the transportation system statewide. The plan provides a policy foundation and articulates strategies to guide transportation agency actions and investments to further the OPTP vision.

The OPTP is designed to respond to trends, opportunities, and challenges that exist today, while providing an adaptable foundation for the future. The policies and strategies advance public transportation as an important piece of the overall transportation system, linking people to destinations, services, opportunities, as well as to communities in neighboring states.

### Plan Development

Developing the OPTP relied on input from stakeholders and the public throughout Oregon. A Policy Advisory Committee (PAC) of diverse stakeholders guided content development for the plan, and a Technical Advisory Committee helped work through specific topics to inform PAC discussions. Online and in-person public outreach activities helped gather ideas and feedback from additional stakeholders and the public.

Prior to plan development, the Oregon Department of Transportation (ODOT) conducted initial interviews to identify issues to explore. Outreach continued with a survey of providers, two Oregon Public Transportation Conference workshops, focus groups, presentations, and discussions with many different agencies and other interested groups





throughout the state. Three online open houses included surveys to collect input at different stages of plan development. See Appendix B: Plan Development Process, for further information about these activities.

## Context for the Oregon Public Transportation Plan

The Oregon Transportation Commission (OTC) is required by state statute and federal regulation to develop and maintain a state transportation policy and comprehensive long-range plan for Oregon’s multimodal transportation system. The Oregon Transportation Plan (OTP) is the required state transportation system plan, together with its mode and topic plans including the OPTP. The OTP provides policy direction for ODOT and guides transportation activities throughout the state under Oregon Revised Statute (ORS) 184.617, which outlines the duties of the commission when preparing and implementing state transportation policy. Public and stakeholder participation, required at all levels of planning, enables agencies to shape plans and investments to reflect the needs and concerns of Oregon communities. Public participation for the OPTP is described in Appendix B: Plan Development Process.

Collectively, OTP, OPTP, and other mode and topic plans fulfill state and federal planning requirements, assume legal authority accordingly, and provide an overall policy foundation for the state transportation system. The goals, policies, and strategies in the plans guide the work of the ODOT and inform decisions of local jurisdictions through their transportation plans.

Most cities and counties are required by Oregon Administrative Rule (OAR) 660-012, known as the Transportation Planning Rule (TPR), to develop local Transportation System Plans (TSPs). Similarly, metropolitan areas are required by federal rule to have regional transportation plans. Oregon rules including the TPR require that these plans be consistent. For example, local TSPs must be consistent with applicable regional plans and both local and regional transportation plans must be consistent with the OTP. In addition, state and local transportation decisions are guided by other important federal and state laws and rules. For example, the State Agency Coordination (SAC) agreement assures that ODOT complies with statewide planning goals, including the TPR, in a way that is compatible with acknowledged city, county, and regional comprehensive plans.

Other agencies, such as tribal governments, transit and transportation districts, and nonprofit and for-profit businesses, are not required to develop plans by the TPR. However, all agencies receiving funds through ODOT will be affected by the OPTP, because ODOT programs will be shaped and influenced by the plan.

These and the other following plans are described in more detail:

- **The OTP** — The OTP provides a vision and policy for Oregon’s transportation future. This framework guides development of the mode and topic plans and provides a policy foundation that influences state and local decisions from planning through project development and selection. The OPTP is one of the mode plans developed under the OTP.

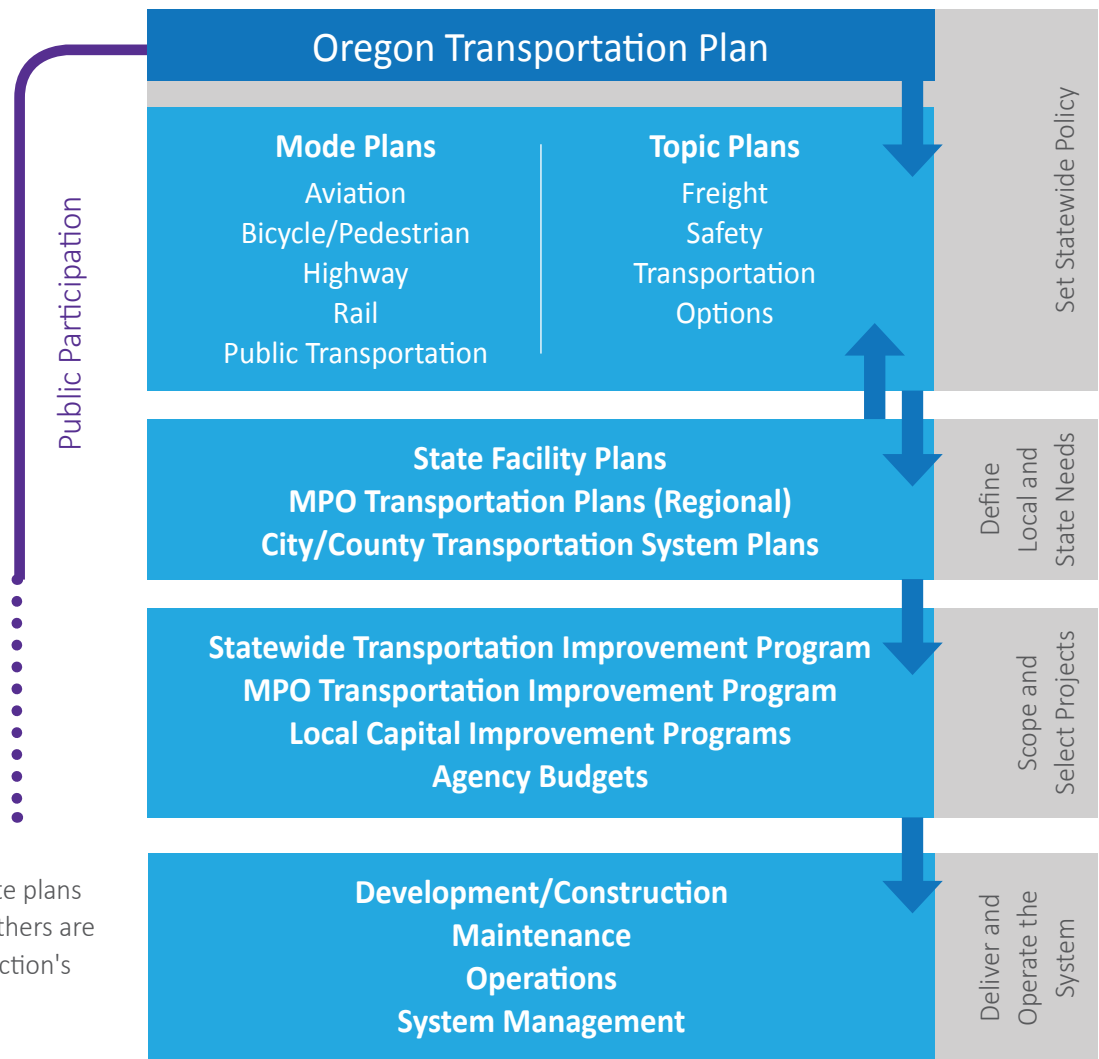
Local jurisdictions and public transportation providers may prepare **transit development plans** (TDPs) or other long- and short-range plans, which in turn inform local TSPs. The OPTP encourages public transportation providers to work with the local jurisdictions they serve to develop these plans. Also called transit master plans, TDPs show how public transportation will serve people’s travel needs and benefit streets and community development.

### **Coordinated Public Transit-Human Service Transportation Plans (Coordinated Plans)**

identify public transportation gaps and strategies to fill those gaps and meet human service needs. These plans can help inform TDPs and TSPs. In addition, communities or providers may have other plans that address public transportation.

The OPTP sets the stage for local transportation plans to reflect these human service needs, so they work in concert toward the same goals and fulfilling community needs.

Figure I-5



The OTC approves state plans and programs while others are adopted by the jurisdiction's board or commission.

- Mode and topic plans** — These plans analyze a topic or mode of travel and establish policies and implementation strategies that inform state facility plans and regional and local transportation system plans. Oregon periodically updates its mode and topic plans; these long-range plans set performance objectives and investment priorities for bicycle, pedestrian, freight, highway, public transportation, rail, safety, aviation, and other travel options. This plan supersedes the 1997 OPTP to become the public transportation modal element of the OTP.
- State facility plans** — These plans define improvement and management strategies for state facilities such as interchanges and corridors.
- Regional and local plans** — One function of the OTP and its mode and topic plans is to guide transportation planning and decision making at the local and regional level. Transportation plans for metropolitan areas, cities, and counties implement the OTP's vision for transportation in



Oregon in a manner consistent with state policy. TSPs are required to address public transportation, and they should incorporate or reflect any local public transportation plans and address services for the area.

- **Programs and budgets** — Facility, local, and regional plans prioritize and select projects and other specific investments. The projects and investments are listed in transportation or capital improvement programs and budgets when funding is assigned to them.

Legal relationships and requirements for the plans are further described in Appendix C, Legal Context of the OPTP.

## Achieving the Oregon Public Transportation Plan Together

Many participants are involved in Oregon’s public transportation, and it will take action by them all to achieve the vision and goals of the OPTP. The plan encourages transit agencies, local jurisdictions, and community stakeholders to create partnerships and work together, from simply participating in one another’s planning processes to developing shared strategies and investments. Participants include public transportation providers as well as state, local, and regional transportation and land use agencies that plan for these systems. Health and social service agencies are important partners, as are private entities. These range from social service groups to senior centers, hospitals, universities, and TNCs.

Participants in the public transportation system make decisions and invest where each has authority and experience. Working together, they can leverage their capabilities, interests, and resources to build an effective public transportation system that supports state and community goals.

## Public Transportation Vision

The OPTP vision provides guidance for developing public transportation services in Oregon and is supported through the plan goals, policies, strategies, and implementation framework. Developed and reviewed by stakeholders and the public, the vision articulates how Oregonians want public transportation to serve them and the overall transportation system in the future. The plan’s goals follow from the vision, expanding further on the future it describes. Chapter 3 describes policies and strategies that will help achieve both the goals and vision.

### Oregon Public Transportation Plan Vision

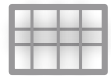
**In 2045, public transportation is an integral, interconnected component of Oregon’s transportation system that makes Oregon’s diverse cities, towns, and communities work. Because public transportation is convenient, affordable, and efficient, it helps further the state’s quality of life and economic vitality and contributes to the health and safety of all residents, while reducing greenhouse gas emissions.**

## Oregon Public Transportation Plan Goals



### **Goal 1: Mobility - Public Transportation User Experience**

People of all ages, abilities, and income levels move reliably and conveniently between destinations using an affordable, well-coordinated public transportation system. People in Oregon routinely use public transportation to meet their daily needs.



### **Goal 2: Accessibility and Connectivity - Getting from Here to There**

Riders experience user-friendly and convenient public transportation connections to and between services and travel modes in urban, suburban, rural, regional, and interstate areas.



### **Goal 3: Community Livability and Economic Vitality**

Public transportation promotes community livability and economic vitality by efficiently and effectively moving people of all ages to and from homes, jobs, businesses, schools and colleges, and other destinations in urban, suburban, and rural areas.



### **Goal 4: Equity**

Public transportation provides affordable, safe, efficient, and equitable transportation to jobs, services, and key destinations, improving quality of life for all Oregonians.



### **Goal 5: Health**

Public transportation fosters improved health of Oregonians by promoting clean air, enhancing connections between people, enabling access to services such as health care and goods such as groceries, and by giving people opportunities to integrate physical activity into everyday life through walking and bicycling to and from public transportation.



### **Goal 6: Safety and Security**

Public transportation trips are safe; riders feel safe and secure during their travel. Public transportation contributes to the resilience of Oregon communities.



### **Goal 7: Environmental Sustainability**

Public transportation contributes to a healthy environment and climate by moving more people with efficient, low-emission vehicles, reducing greenhouse gases and other pollutants.



### **Goal 8: Land Use**

Public transportation is a tool that supports Oregon's state and local land use goals and policies. Agencies collaborate to ensure public transportation helps shape great Oregon communities providing efficient and effective travel options in urban, suburban, and rural areas.



### **Goal 9: Funding and Strategic Investment**

Strategic investment in public transportation supports the overall transportation system, the economy, and Oregonians' quality of life. Sustainable and reliable funding enables public transportation services and infrastructure to meet public needs.



### **Goal 10: Communication, Collaboration, and Coordination**

Public and private transportation providers and all levels of government within the state and across state boundaries work collaboratively and foster partnerships that make public transportation seamless regardless of jurisdiction.



## Plan Organization

The remainder of the OPTP describes public transportation conditions in Oregon today, sets out the policies and strategies, and identifies investment scenarios and implementation concepts.

- **Chapter 2 Setting the Stage**, describes Oregon’s existing transportation system and explains the role of public transportation as an integral part of a unified multimodal system. This chapter also discusses funding, needs, challenges, opportunities, and trends, as well as their influence on the public transportation system now and into the future. This chapter also provides an overview of the public outreach efforts used during OPTP development.
- **Chapter 3 Goals, Policies, and Strategies**, is the plan’s policy framework. The goals, policies, and strategies in this chapter are intended to guide transportation decision making for transportation plans around the state, including modal, topic, and facility plans, as well as regional and local transportation system plans.
- **Chapter 4 Investment Considerations**, describes funding scenarios with examples of what potential futures may include, depending on the funding level available for public transportation.
- **Chapter 5 Moving Forward**, includes the implementation framework, key initiatives, roles and responsibilities, and performance measures. This section also identifies implementation issues and opportunities and describes the next steps following plan adoption.
- **OPTP Appendices**
  - A- Acronyms and Glossary
  - B- Plan Development Process
  - C- OPTP Legal Context
  - D- Findings of Compliance
  - Volume 2 – Interim Products Informing OPTP Development (published separately)



Oregon’s POINT intercity bus system  
*(Photograph credit: ODOT)*

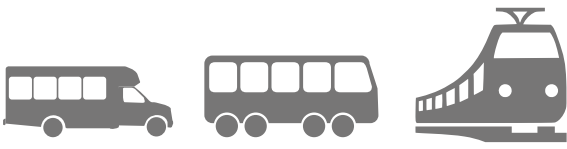


Albany Station  
*(Photograph credit: Amtrak Cascades)*

## Endnotes

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## Draft Chapter 2: Setting the Stage

Public transportation is an essential element of Oregon's transportation system, linking places and people throughout the state. Oregonians take over 100 million public transportation trips each year. In both urban and rural areas, these trips get people to jobs, reduce the environmental impacts of transportation, and save riders time and money. For some, public transportation is their only means of travel.

The number of Oregonians using public transportation continues to grow. Over the past 20 years, public transportation use in Oregon has grown by more than 90 percent.<sup>1</sup> During the same time period, Oregon's population grew by about 40 percent.

This chapter provides an overview of key benefits, public transportation funding and needs, trends, issues, and opportunities affecting public transportation today and into the future. This context sets the stage for the OPTP. The plan's policies, strategies, performance measures, and implementation actions are intended to support and improve public transportation statewide.

## Public Transportation Benefits Oregon Communities

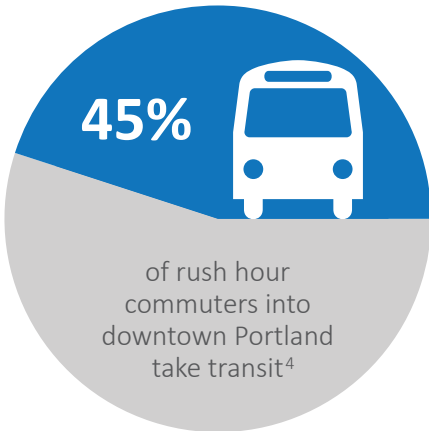
A critical component of Oregon's transportation system, public transportation underpins the state's economy and quality of life. The benefits of these services are realized not just by those who use them, but by all Oregonians who live, work, and recreate here.

### Supporting Economic Vitality

The economic and community benefits of public transportation are far-ranging and shared by all Oregonians. Public transportation contributes to the efficient movement of people, which is essential to keeping Oregon businesses economically competitive.

Public transportation supports tourism and economic development, providing access to rural and scenic areas. Workers in rural areas rely on public transportation to connect their communities to employment centers. Businesses and tourism offices in Oregon have developed partnerships with public transportation providers to leverage and accommodate recreational activity.

Figure 2-1



Public transportation can facilitate efficient use of land and provide people options to move through congested roadways. Buses and high capacity transit help optimize use of roadway capacity, benefiting drivers as well as freight movement. Less parking is needed in areas with robust public transportation systems, freeing up land for higher value uses. Public transportation is critical to an integrated transportation system, one where users have multiple modes and options that are all connected to form a single system.

Many employers make location decisions based on access to a skilled workforce.<sup>2</sup> Highly skilled workers are often attracted to places with transportation options and to companies that can offer transportation benefits, such as transit passes. Public transportation offers a win-win: employees save on their commute costs and companies pay less for parking acquisition, management, and maintenance.<sup>3</sup>

### Promoting Better Health

Most people walk or bike to reach public transportation, contributing to more physical activity and better individual and community health. Physical activity fights chronic diseases such as heart disease, cancer, depression, and diabetes.

Public transportation can improve the air we breathe. Poor air quality caused by vehicle emissions can aggravate asthma, chronic lung or other respiratory illnesses, and cardiovascular disease, particularly for children and older adults.<sup>5</sup> Compared with private vehicles, public transportation produces 95 percent less carbon monoxide, 90 percent fewer volatile organic compounds (VOCs),<sup>6</sup> and about half as much nitrogen oxide per passenger mile—meaning fewer emissions and less impact on community health.

Finally, public transportation connects many Oregonians who cannot drive to visit friends and families and connect with the broader community. Social isolation is increasingly a public health concern, especially for older adults and people with disabilities. Public transportation helps keep individuals connected and engaged in communities, combating social isolation and further improving public health.

Figure 2-2

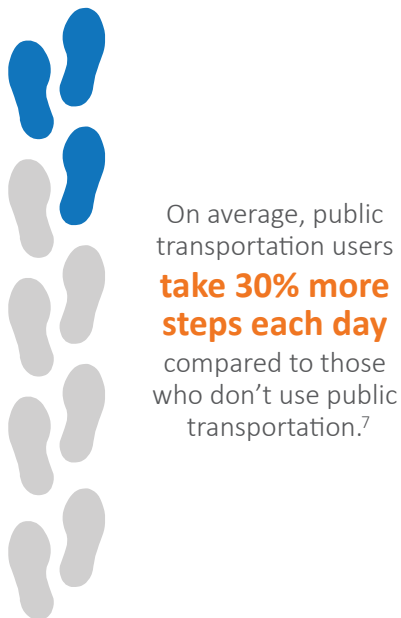
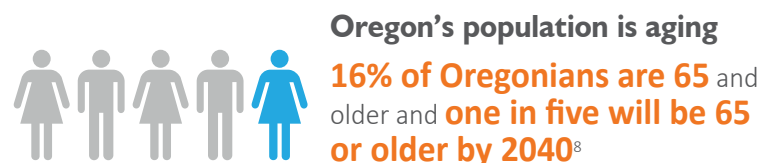


Figure 2-3



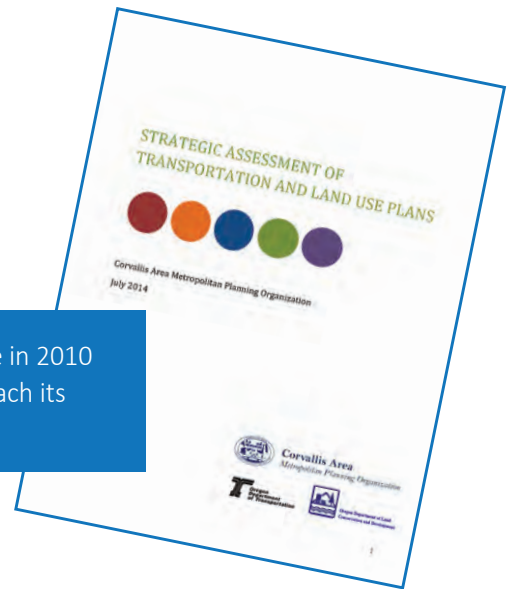


## Meeting Environmental Commitments

Public transportation minimizes air pollution by providing more fuel-efficient travel alternatives. Greenhouse gas (GHG) reduction planning throughout the state reveals that public transportation is critical to meeting climate change goals; communities are unlikely to meet these goals without it. The Statewide Transportation Strategy: A 2050 Vision for Greenhouse Gas Reduction<sup>9</sup> identifies public transportation as a key tool for helping the state meet its legislatively established goal of reducing transportation GHG emissions 75 percent below 1990 levels by 2050.

The Corvallis Area Strategic Assessment identifies a four-fold increase in 2010 transit service levels as a key strategy for the metropolitan area to reach its GHG emissions reduction target of 21 percent by 2035.<sup>10</sup>

Figure 2-4

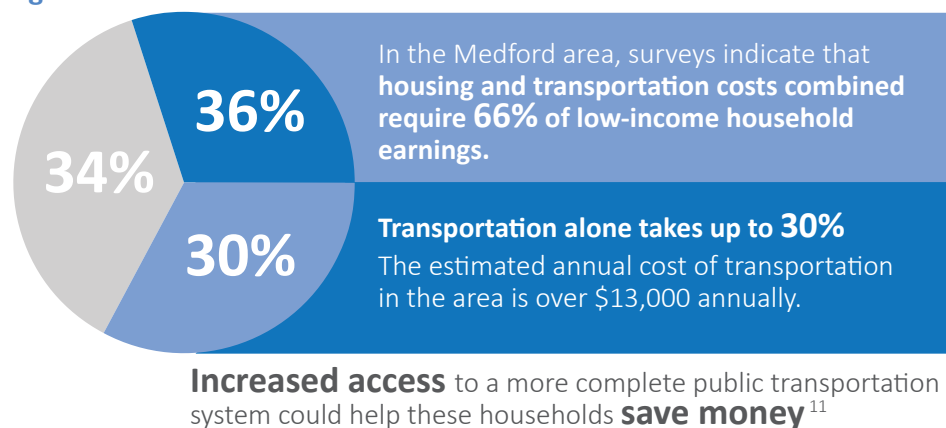


## Providing Equitable Access

Oregon values the livelihood and contributions of all its people, making equity vital to healthy and vibrant communities. Public transportation is an important tool for addressing equitable access to opportunity, including employment, affordable housing, education, and other community resources.

Public transportation also provides affordable access to opportunities for people with lower incomes, and other transportation disadvantaged people, making the community more livable and affordable for many. Public transportation is an alternative to private automobiles for youth, older adults, and people with disabilities who cannot drive.

Figure 2-5



### What is "transportation disadvantaged?"

People who are transportation disadvantaged have limited access to transportation options, often because they do not have access to a personal vehicle due to income or an inability to drive.

## Making Travel Safer and Communities More Secure

As one of the safest travel means available in its own right, public transportation also improves safety by reducing crashes. Both transit riders and other vehicle drivers benefit. Per passenger mile, light rail riders have 1/30th the fatality rate of automobiles, and bus passengers are 1/60th as likely to be fatally injured while traveling compared with automobile drivers.<sup>12</sup> When use of public transportation increases in a community, crash rates tend to decline for all users of the transportation system, including pedestrians, bicycle riders, motorists, and transit passengers.

Figure 2-6



Per passenger mile:

**urban rail riders have 1/30th the fatality rate of automobiles**

and

**bus passengers are 1/60th as likely to be fatally injured while traveling**

when compared to automobile drivers.<sup>14</sup>

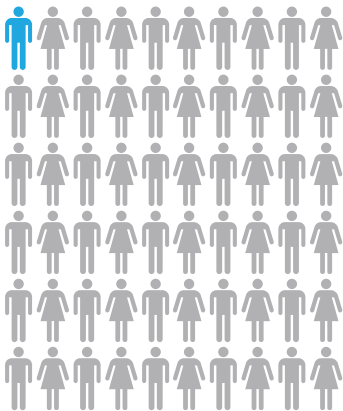
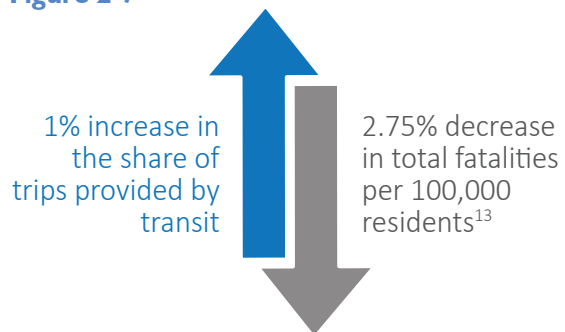


Figure 2-7



Research shows that policies to increase walking, cycling, and travel by public transportation typically reduce total crime in an area.<sup>15</sup> More activity and “eyes on the street” can make a community feel safer, and good design for transit stops and stations can enhance safety and security even further. Transit design best practices increasingly incorporate Community Protection through Environmental Design (CPTED) principles, which emphasize designing safety and security into the environment of a specific area, including elements such as clear sightlines, good lighting, and reducing isolated spaces.

## Contributing to Resilience

Public transportation can play an important role in planning for and managing emergencies and disasters, particularly for evacuations and recovery. Oregon is vulnerable to fires, flooding, and earthquakes. Public transportation agencies are important players at the table for emergency management and recovery planning.



## Public Transportation in Oregon Today

In light of these many benefits, communities throughout Oregon are working to expand public transportation as a way to support economic vitality, enhance environmental stewardship, and improve people’s lives. While conditions and resources vary around the state, policymakers in urban and rural communities alike recognize that public transportation is critical to helping the state thrive.

Oregon has a wide range of public transportation providers, from small nonprofit senior centers offering transit service for older adults, to larger public transportation districts serving both urban and rural residents, to private companies that operate intercity services. The diversity of providers presents both opportunities and challenges for public transportation. Some funding sources, such as dedicated taxes, are available only to certain providers. Other providers are faced with multiple, and sometimes competing, goals such as serving urban populations while also ensuring transit access for those living in more dispersed areas. The range and types of services offered across the state vary widely based on the needs of individual communities, funding, land use, population, and geography.

Urban providers offer the widest variety of services in the state, use a range of transit technologies, and must negotiate urban environments and congestion to deliver service. Providers in smaller communities and rural areas face very different circumstances; many have only demand response service, sometimes operated by volunteer drivers, and serve relatively few customers, traveling long distances to meet riders’ needs.

### Public Transportation Services

For the OPTP, public transportation providers are grouped based on the size of the community or area they serve. This general organization is useful to understand how different providers deliver their service and the challenges and opportunities they face. Not all providers fit precisely into one of these categories; some are partially reflected in multiple categories. Table 2-1 describes the different kinds of providers in Oregon.

Oregon has 14 public transportation districts in addition to various city, county, private nonprofit, private for-profit, and tribal public transportation service providers. Each district and service provider is organized and run differently, reflecting the organization’s history and the community’s characteristics and preferences. Numerous private companies and nonprofit entities provide transportation services to the public — including Greyhound and Bolt Buses, taxi companies and airport shuttles, and agencies such as senior centers, churches, and human service providers that offer special transportation services for their clients.

Table 2-1: Public Transportation Providers in Oregon

| Provider Type                       | Population Served                                     | Example  | Notes  |
|-------------------------------------|---|--|--|
| Large Urban Providers               | More than 200,000                                     | TriMet, Lane Transit District, Cherriots (Salem-Keizer area) | This provider type represent 95% of the public transportation trips in the state; served 115,000,000 trips in 2013. These providers offer the greatest variety of services in the state. |
| Medium Urban Providers              | 50,000 to 200,000                                     | City of Albany, City of Corvallis                            | This provider type served 2,900,000 trips in 2013. These providers typically offer some fixed route and demand response services.  |
| Small Urban Providers               | 10,000 to 50,000                                      | City of Canby, City of Sandy                                 | This provider type served 1,200,000 trips in 2013. These providers typically offer limited fixed route and demand response services.   |
| Large County and Regional Providers | Counties greater than 50,000                          | Yamhill County, Central Oregon Intergovernmental Council     | This provider type served 1,700,000 trips in 2013. Some providers offer fixed route and intercity services; others have more limited demand response systems.                            |
| Small County and Rural Providers    | Counties less than 50,000 and cities less than 10,000 | Harney County, City of Silverton                             | This provider type served 1,000,000 trips in 2013. These providers typically offer demand response and/or limited fixed route services.  |

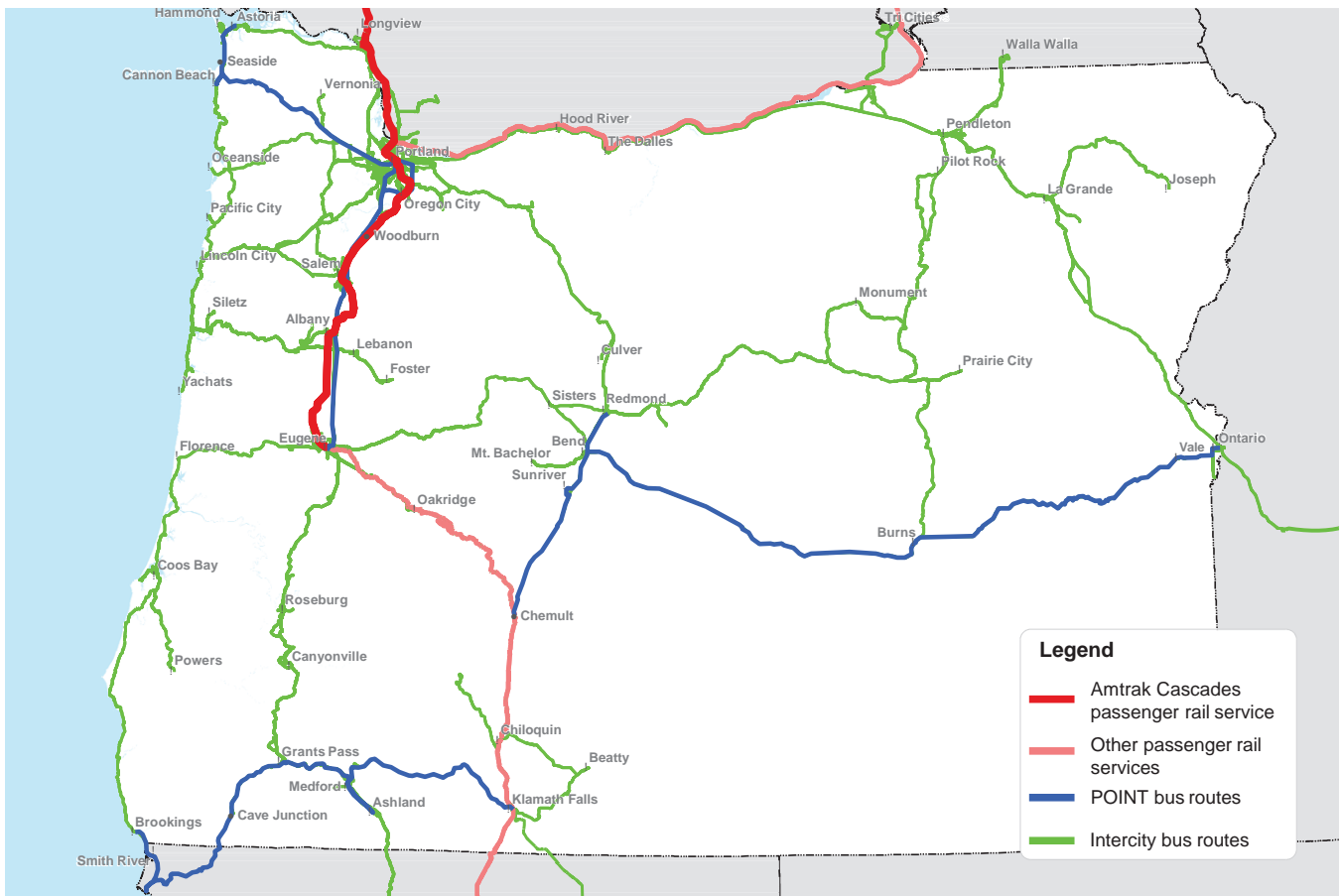
### Intercity Public Transportation System

Intercity public transportation includes bus and passenger rail systems that link towns, cities, metropolitan regions, and rural areas throughout the state, and to other states as well as national and international transportation services. For example, the Amtrak Cascades passenger rail service provides a critical link along the congested Interstate 5 (I-5) corridor between Eugene, Oregon and Vancouver, British Columbia.

Intercity bus providers include a mix of public and private entities working separately or in partnership to deliver transit services. Large, private national providers, including Greyhound and Bolt Bus, serve the larger communities along interstate highways; these tend to have more riders, and therefore, these routes are more profitable. Public providers often make critical connections between cities in an area or between specific destinations, for example, between coastal communities and the Willamette Valley. ODOT augments private intercity services through the Public Oregon Intercity Network (POINT) intercity bus network, which provides critical connections in rural areas and along the I-5 corridor between Portland and Eugene.



**Figure 2-8 Oregon's intercity public and private transportation routes as of 2017.<sup>16</sup>**



### Special Needs and Human Service Transportation Providers

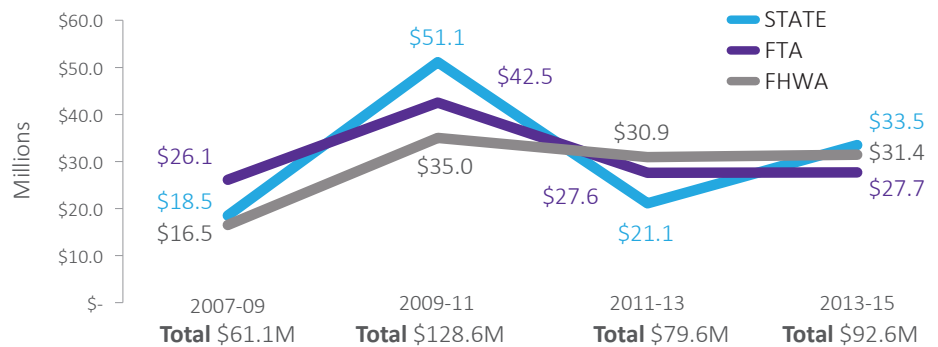
Throughout Oregon, special needs and human service transportation service providers offer transportation services organized around a specific mission or population. Examples include services operated by senior centers, assisted living, and retirement centers in both urban and rural areas, as well as medical transportation for veterans and access to Oregon Health Plan services. Many of these providers serve people who do not have access to or cannot use other forms of public transportation.

## Public Transportation Funding in Oregon

The many diverse elements of Oregon’s public transportation system are funded by a mix of local, state, and federal funding programs, in addition to transit system-generated revenues such as passenger fares, advertising revenue, and building leases. Funding sources vary for individual providers, depending on agency type, location, services offered, and other variables.

Figure 2-9 shows the changes in public transportation resources managed by the ODOT Rail and Public Transit Division between 2007 and 2015. The chart does not include local contributions or farebox revenue, funds directly distributed by the Federal Transit Administration (FTA) to local recipients, or intercity rail funds.

**Figure 2-9 ODOT Public Transit Revenue Sources<sup>17</sup>**



In general, state and federal funds for public transportation are distributed based on formulas. Other funds come in the form of discretionary or competitive grants, and periodically the Oregon Legislature makes a one-time direct appropriation to a specific project.

### Keep Oregon Moving Act

The Keep Oregon Moving Act,<sup>18</sup> passed by the Oregon legislature in 2017, provides ongoing funding for public transportation through a statewide employee payroll tax of 0.10 percent. This tax is anticipated to generate approximately \$100 million for public transportation after it fully takes effect, increasing to \$140 million annually by 2024. This fund is called the Statewide Transportation Improvement Fund (STIF); most of this funding is designated for local providers to develop and operate public transportation services. The Act represents a significant and



stable investment in the future of public transportation; however, even this level of funding will not meet all public transportation needs in the state—today or in the future.

While current funding supports millions of public transportation trips each year, funding amounts vary from year to year and do not meet all statewide needs, even with the additional funding. In local government budgets, as well as the state budget, public transportation services compete for funds with many other infrastructure and service needs. Not all funding sources are available to all providers, and some sources are one-time only. Increasing revenue from these sources is challenging, often requiring local, state, or legislative approvals or public votes. Funding realities mean that some public transportation needs go unfunded.

## Public Transportation Needs

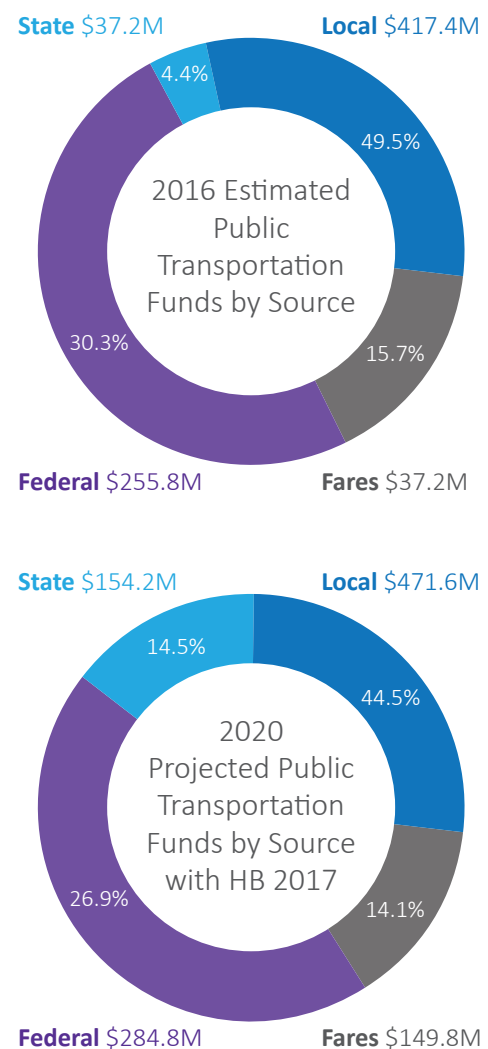
Public transportation needs (the estimated funding required to make needed improvements to the public transportation system) are important in planning for the future and understanding the “gap” between needs and available funding. The needs assessment answers the question, “What **resources** are required to meet estimated public transportation needs?” while the investment scenarios presented later in Chapter 4 answer a different question about outcomes: “What **types of investments** could be made if more funding was available?”

### The OTP Needs Assessment: Levels of Public Transportation Need

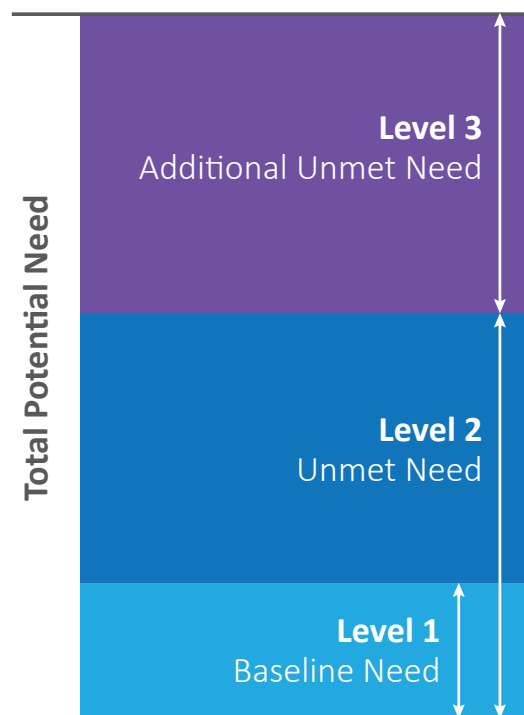
As of 2013, approximately \$750 million (Figure 2-10) in federal, state, and local funds was invested annually by Oregon providers in public transportation operations and capital. Figure 2-10 shows the sources and amounts of funding available in 2016 and 2020,<sup>20</sup> the latter including estimated funding from the Keep Oregon Moving Act (HB 2017). As the graphics show, the increase in estimated funding provided by the Act raises the percent of funds contributed from state level sources from 4.4 to 14.5 percent. While this is a substantial increase, the state remains one contributor of funds, and these estimates assume that other federal, state, and local contributions remain. Fares are also an important contributor to total transit funding in Oregon.

As part of OTP development, ODOT created the OTP Needs Assessment<sup>21</sup> as a high level assessment of both

**Figure 2-10 Sources of Public Transportation Funding in Oregon, 2016 and 2020<sup>19</sup>**



**Figure 2-11 The OTP Needs Assessment established three levels of public transportation need**



annual capital and operations dollars needed by public transportation providers statewide to operate services in the year 2045 under three potential service scenarios (Figure 2-11). The scenarios were not tailored to address specific needs in specific locations. Instead, they were intended to broadly describe a range of possible investment levels statewide. The future service scenarios represent estimates based on available data and conditions today. They describe a set of scenarios that depict the total resources needed to construct and operate the public transportation system in Oregon at each service level, regardless of available funding. Other public transportation needs studies have been conducted, such as the Governor’s Transportation Vision Panel Report, completed in 2017. More details about other needs studies can be found in the OTP Needs Assessment memorandum in Volume 2 of the OTP.

Following are the three levels of needs established by the Needs Assessment:

**Level 1: Baseline Need**

The estimated Baseline Need assumes that the level of service provided in communities (in terms of service miles per capita) would remain the same in 2045 as in 2015, prior to passage and implementation of the Keep Oregon Moving Act, passed in 2017. The total amount of service provided in communities would increase to account for population growth. An estimated \$1.1 billion (2013 dollars) annually would be needed to meet the Baseline Need in the year 2045 or about \$350 million more dollars each year.

**Level 2: Unmet Need (high and low)**

This level of need estimates the cost of providing additional service to meet unmet public transportation needs and is presented as a range. The high end of the range was determined by considering the level of public transportation service in communities with a higher level of per capita service as compared with peer communities of similar population in Oregon, then estimating the resources needed to provide that same level of service across all similarly sized communities. The low end of the range was estimated by considering the average amount





of service in each community type. An estimated \$1.7 to \$2.0 billion (2013 dollars) annually was projected to meet the Unmet Need in the year 2045, or about \$1 to \$1.3 billion more dollars each year than today. (This analysis was conducted prior to passage of new state funding provided by the Keep Oregon Moving Act.)

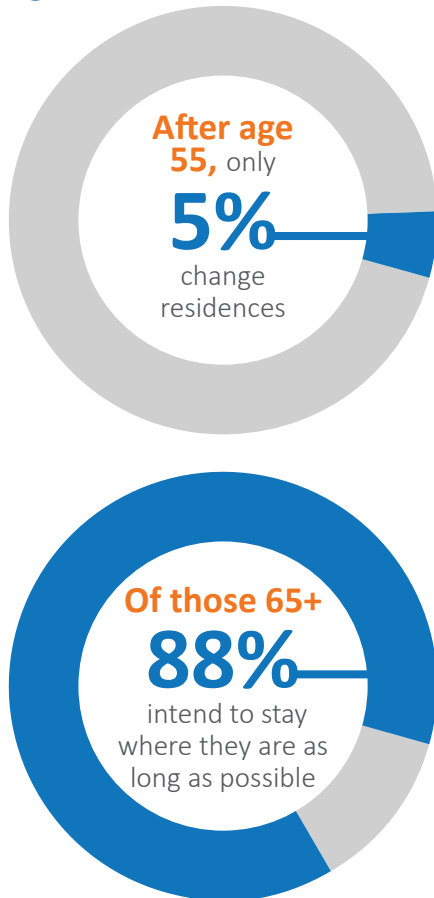
● **Level 3: Additional Unmet Need**

This level describes public transportation service that supplies most or all public transportation trips that individuals would likely make, if service were available. This level, described qualitatively, recognizes additional need beyond the Unmet Need. For example, today in Oregon, about 600,000 individuals do not have reasonable access to public transportation service near their residence.<sup>22</sup> The Additional Unmet Need estimates what it might take to serve these individuals and make other service improvements around the state. In addition, this level considers the high capacity transit needs of large, urban providers and included the typical capital and operations needs of smaller providers.

## Trends, Opportunities, and Challenges

Several trends, opportunities, and challenges affect public transportation services in Oregon. Understanding these trends is important, because they help shape public transportation today and will continue to influence public transportation development in the future.

Figure 2-12



Research by the American Association of Retired Persons (AARP) indicates that older adults are taking more trips on public transportation. This may be because many seniors prefer to stay in their homes as they age, with older adults today less likely to move after retirement, compared to 30 years ago.<sup>26</sup>

### Trends

#### Population Growth

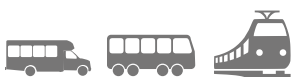
Oregon is growing rapidly. The state's population has increased by about a million new residents since the first OPTP was adopted about 20 years ago and another million are expected by 2045. Growth is expected to be greatest in urbanized areas, particularly in Portland and the Willamette Valley area, where about 70 percent of Oregon's population resides. Public transportation will become increasingly important as motor vehicle congestion worsens, especially in light of limited space and resources to build new roads. In rural areas, population changes will vary by location, with differing implications for public transportation in those areas.

#### Meeting the Needs and Desires of Older Adults

Older adults are important transit customers, with some preferring public transportation and others depending on it. As people age, their rates of driving drop as they become less comfortable driving or less able to do so.<sup>23</sup> Transitioning to a fixed income also prompts some people to give up personal vehicles. These trends will impact demand and interest in public transportation statewide and require providers to accommodate geographically dispersed riders.

#### Serving the Travel Preferences and Needs of Younger Oregonians

Nationwide, Millennials (those born between 1981 and 2000), have eclipsed the Baby Boomers as the largest generation; Millennials now represent 27 percent of all Oregonians.<sup>24</sup> This generation is the first in decades to drive less than their parents and obtain driver's licenses in lower numbers. Research shows that Millennials regularly use multiple transportation modes to meet their travel needs, depending on the specific circumstances of various trips.<sup>25</sup> Trends show that Millennials, particularly those who live in urban areas, are less inclined to own personal vehicles



and more likely to use public transportation than preceding generations. This will increase the demands on public transportation, as well as offer opportunities for expanded ridership.<sup>27</sup>

### Minority and Low-Income Populations

Throughout Oregon, people who are transportation disadvantaged—those that are low-income, minorities, people with disabilities, or have limited English proficiency (LEP)—are groups more likely to use public transportation.<sup>28</sup> The number of Oregonians who are racial or ethnic minorities is growing, suggesting a potential increase in the use of public transportation as these groups have used public transportation at a higher rate to date.<sup>29, 30</sup> Low-income households (approximately 25 percent of the state’s households) are more likely to use public transportation than other groups.<sup>31</sup> In addition, housing prices may increase quickly as cities grow, pushing lower income households to outer areas of communities. The result: more workers living farther from jobs and having less access to public transportation. Together, these trends are likely to place growing pressure on public transportation providers.

### Funding and Increasing Costs

In Oregon and across the country, maintaining existing transportation infrastructure and public transportation service levels is increasingly difficult in the face of funding challenges. Public transportation funding is different from other transportation investments because most of the day-to-day expenses are operational, including labor, fuel, vehicle operators, and administrative costs. In a 2015 study, ODOT estimated that public transportation operations costs are twice those of capital investments.<sup>33</sup>

Local communities contribute the largest share of funding for public transportation. Local funding varies from none to the majority of a provider’s budget, depending on the community. Local communities often have difficulty responding to increased demand for service, due to volatility in local funding sources such as payroll and property taxes, competing demands for public resources, and difficulties associated with increasing revenues from existing sources or implementing new ones.

Federal dollars can also be unpredictable due to uncertainties about future transportation funding allocations. State funds from dedicated sources have been

Figure 2-13



America’s rural population is declining, but ridership has increased<sup>32</sup> from 2007 to 2015:

**8.6%**

increase in per-capita rural ridership over these eight years

**7.8%**

increase in total rural ridership

fairly consistent at about 4% of total funding for public transportation in Oregon. The Keep Oregon Moving Act passed in 2017 establishes a new dedicated funding source for public transportation, raising state funds to about 14% as shown in Figure 2-10. The new funds will allow for improvements and increases in service, yet keeping up with a growing state may continue to be a challenge in the future.

Moreover, this graph and financial assumptions throughout the OPTP assume that federal, other state, and local contributions continue as approximately the same rates as prior to the 2017 state legislation. If those fund sources decrease or are removed due to other priorities, keeping up with growth and demand for transit service will be even more challenging.

In addition to challenges with the stability and availability of funds, public transportation operating costs continue to rise. Costs associated with labor have increased steadily over time while funding levels have not, meaning more money is required for operations and less is available for capital investments. In addition, the costs to operate and maintain vehicles have increased, and many vehicles are overdue for replacement. These challenges place pressures on the ability to sustain existing services, let alone expand services to meet the changing needs of the state.

## Opportunities and Challenges

Throughout Oregon, public transportation is faced with opportunities and challenges that shape the OPTP, as well as other state and local plans. During development of this plan, people from around the state shared insights at conference sessions, public meetings, focus groups, and online open houses about some of these challenges and opportunities to using and providing public transportation. A summary of outreach activities is available in Appendix B: Plan Development Process. This section outlines some of the opportunities identified to address various challenges. This is not a comprehensive list of either the opportunities or challenges; rather, it reflects major themes that emerged during OPTP development. Opportunities and challenges directly inform the policies, strategies, and implementation sections of the OPTP.

## Collaboration and Coordination

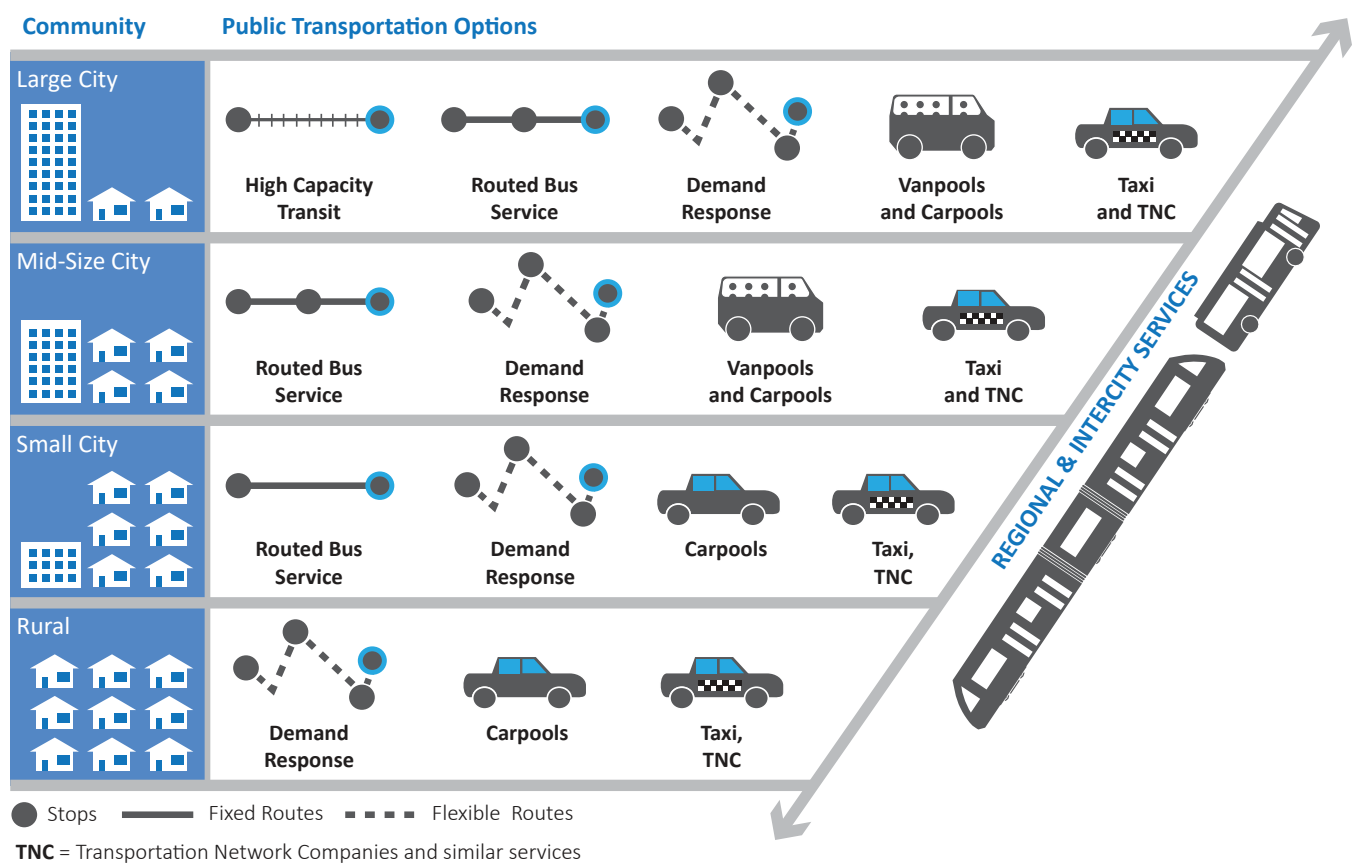
Residents, public transportation providers, and other agencies all identified a need for enhanced collaboration



and coordination throughout public transportation planning and delivery. This includes coordination at multiple levels: community to community, provider to provider, and among local, regional, state, federal agencies, and tribes. Collaboration can make systems more seamless and efficient by leveraging strengths and resources. Opportunities to increase collaboration include engaging in integrated planning efforts among agencies and pursuing partnerships.

Integrated planning, both short- and long-range, is an opportunity to bring stakeholders together to discuss public transportation topics and how stakeholders' interests can be reflected. Integrated planning already happens in many regions of the state, and the OPTP policies and strategies promote further plan integration.

**Figure 2-14**



This illustrative figure shows examples of the different kinds of services that may be found in various communities around our state. As communities grow, more public transportation services are typically available, depending on total population, population density, and other factors. Transit services may begin in smaller communities by filling specific needs with demand response services, carpools, or contracted taxis. As a community grows, often more service and more types of service are added. In each case, the services available reflect the unique characteristics of the community and its history, funding, and prior decisions about public transportation.

One opportunity is to further integrate public transportation planning with local TSPs and land use plans. TSPs should have a public transportation component, which can be made stronger with provider participation. Similarly, land use plans and developments affect public transportation service delivery, meaning close coordination can benefit providers, local government agencies, and new developments.

A second opportunity is to further integrate human service agencies' plans with those of public transportation providers. ODOT helps with the Coordinated Plans that identify needs and gaps and enable improvements in delivery of public transportation services. The Coordinated Plans can then inform other transportation and transit planning efforts.

Plan development, which usually involves many stakeholders, is an important opportunity to achieve frequent, consistent coordination between agencies at all levels, especially for addressing regional and intercity connectivity. Processes already in place could be improved further by developing best practices around coordination.

Similarly, partnerships are also critical to delivering coordinated services. The private sector, with services such as ridesharing and carsharing, is increasingly involved in providing transportation services. Partnerships present an opportunity to consider how public and private sector providers may complement one another, how they may be able to better serve specific needs, and how they can function together to expand Oregonians' travel choices. Working with the private sector could result in new, cost-effective ways of providing services traditionally offered by the public sector.

### **Connecting People to Public Transportation Services**

Coordination and collaboration are not only important to public transportation, but also for creating safe, convenient multimodal connections to public transportation. Increased coordination can help leverage constrained funds to make better improvements benefiting multiple modes. Most people get to and from buses or trains by walking, biking, or driving and parking. Connections for pedestrians and bicycle riders to public transportation are essential for public transportation to function. Sidewalks and safe crossings have been built throughout the state, but some locations still require more. Amenities such as lighting and shelters, both important for safety, also support greater use of public transportation. Likewise, emerging services such as bikeshare and carshare can help improve connections to public transportation. Mobility hubs and shared facilities accommodating multiple modes are two important opportunities for leveraging and improving connections between modes.

Travelers today show increased interest in “shared economy” solutions to meet travel needs that do not require the expense of owning a personal vehicle. Bikeshare and carshare services are becoming more common across the state and beyond Portland, including in communities such as



Eugene and Ashland. There is an opportunity to pair these services with public transportation, helping to create a more interconnected and integrated system.

### Regional and Intercity Connections

While public transportation often serves people within communities, links between communities are sometimes missing. Closing these gaps with regional and intercity connections would benefit Oregonians that travel to other places for their jobs, services, or other needs. Adding these links also would serve the growing share of older adults that need intercity connections to reach medical services.

Even when a given connection between communities makes sense, providers may be unable to serve logical connection points that fall outside their service area. Public transportation has an important role in providing links between communities to facilitate access to many daily activities, including employment, medical appointments, and social activities. Some federal and state funding sources already exist to address missing links, but other opportunities exist, such as increasing regional connections between adjacent providers' service areas. Other key opportunities include websites that share information about multiple systems, one-call centers to facilitate trips, mobility hubs where multiple services meet, and creative partnerships between providers and the private sector, such as businesses and institutions, to find efficiencies.

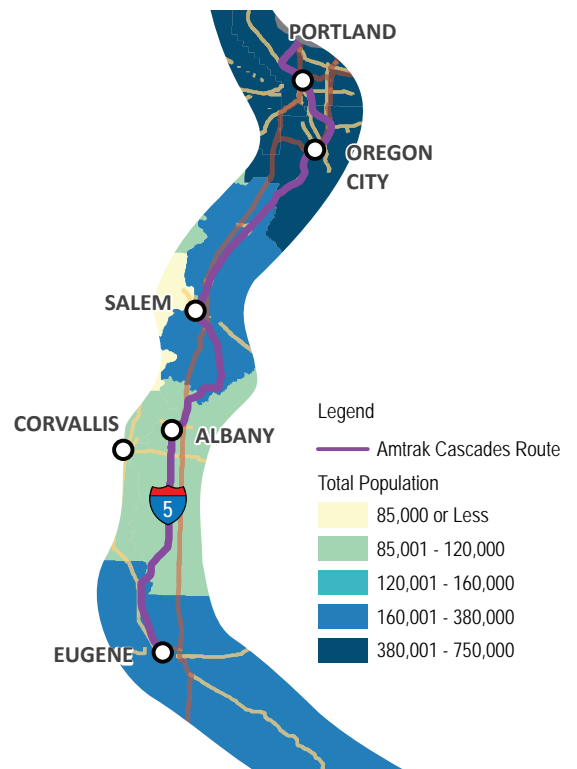
### Technology

Transportation technology is changing fast, including technologies that improve the user experience such as efare and real-time schedule information as well as vehicle technologies such as alternative fuels, safety features, automation, and communication with other vehicles and infrastructure. Public transportation will be strongly affected by providers continuing to develop and adopt these technologies.

Mobile applications that provide trip planning, real-time travel information, and alerts have made it easier and more convenient to use public transportation for those with mobile devices. New efare technologies allow riders to purchase fare cards before their trips or pay on their mobile device, speeding boarding times and increasing convenience for riders.

**Figure 2-15**

The Amtrak Cascades Corridor<sup>34</sup>  
**2.9 million people** reside within  
**25 miles** and **888,000 jobs** are  
 located within **10 miles** of the  
 Oregon portion of the PNWRC



The Willamette Valley's population is expected to **grow 35%** over the next **25 years**

### Passenger rail contributes to Oregon's transportation system, economy and quality of life

Transportation is important for Oregon's economy and way of life, and passenger rail is an important part of the state's intermodal system. Local and regional bus systems connect riders to passenger rail stops. Passenger rail provides an important transportation option for residents and visitors traveling the congested I-5 corridor and connecting to Oregon's communities and regional and out of state destinations.

## Factors Affecting Public Transportation Ridership

Ridership on public transportation fluctuates from month to month, year to year, and decade to decade depending on a wide variety of factors. Though the OPTP envisions a future with steadily increasing ridership, these factors can cause reductions in ridership in the short- and long-term. Some are in the control of public transportation providers, like service frequency changes, while others are outside their control, like fuel prices. Factors include:

- Economic recessions:** downturns in the economy cause declines in overall travel, and in turn, public transportation usage as well. Recessions also negatively impact agency revenues, resulting in service cuts that can further reduce ridership.
- Cost of Driving:** lower gas prices result in more people choosing to drive, meaning fewer riders on public transportation. The opposite is also true: when gas prices are high, ridership increases. Similarly, changes in other driving costs, such as tolls or congestion charges, can result in more or less driving.
- Service quality and frequency:** increasing service frequencies can make public transportation more convenient and easy to use for riders, while decreasing service makes public transportation less convenient and may discourage riders. Other service improvements, such as shelters at stations, can make it more comfortable for riders, helping to increase ridership.
- TNCs and other new transportation options:** TNCs, ridesharing, and carsharing are new transportation options that could complement and support public transportation. However, these new options can also compete and have the effect of reducing public transportation ridership.
- Congestion:** congestion on roads and highways also slows buses down, increasing route travel times, reducing route capacity and service reliability, making public transportation less reliable, and therefore less attractive to riders. Efforts to mitigate service impacts, for example by installing bus priority features, can help bus service maintain reliability and ridership. The chart below illustrates the decline in bus travel speeds on several of the most heavily-used bus routes in Portland from 2009 to 2017. Declining bus speeds due to traffic congestion make public transportation less competitive with other modes.

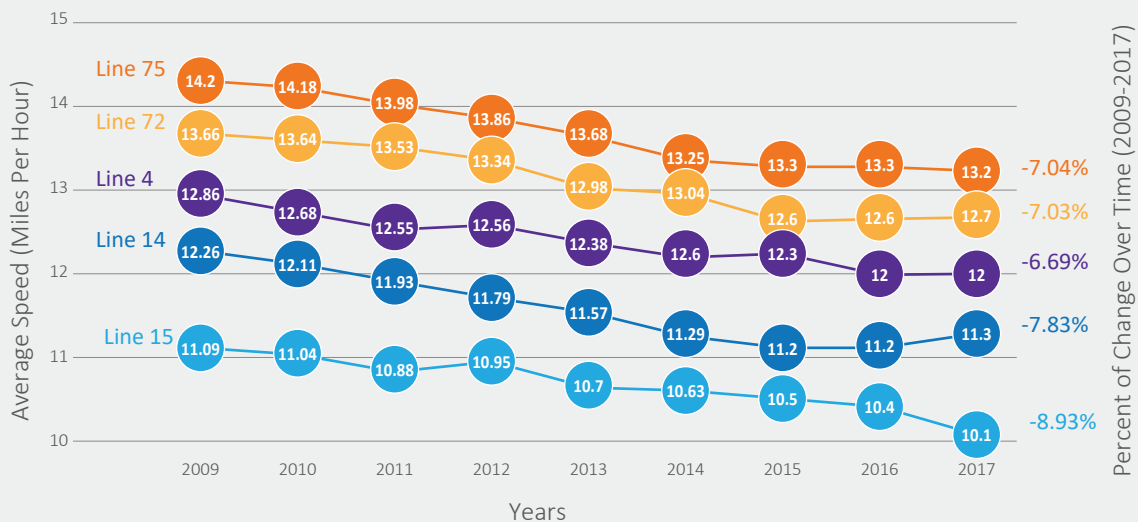


Chart illustrating the decline in bus travel speeds on several bus routes in Portland from 2009 to 2017.<sup>35</sup>





Connected and automated vehicles have major implications for system efficiency and reliability. Automated and connected cars, buses, and trains are being tested and operated and may be a future way of delivering transit in a safer, user-friendly, and cost-efficient way. These technology trends present major opportunities for making public transportation more efficient and easy to use. However, depending on how these new technologies become integrated into our communities, they could lead to either increases or decreases in ridership and revenue.

A central challenge to implementing new technologies of all kinds is a lack of sufficient staff and expertise, funding, and common system and data exchange standards. Although progress has been made on these challenges, further work is needed.

Fixed route providers now share route, stop, and schedule data using the General Transit Feed Specification (GTFS), a data standard that allows for easy trip planning. This information can help people plan multimodal trips using computers or mobile devices. In Oregon, trips can now be planned across more than 43 public transportation services using mobile devices. Future opportunities with GTFS include rolling out GTFS “real-time,” which is currently employed by a few agencies, that allows reporting of real-time transit arrival and departure information.

Vehicle safety technologies have been tested in Oregon, such as “talking” buses designed to warn pedestrians when a vehicle is turning or making other maneuvers. In addition, ODOT has developed a Statewide Intelligent Transportation System (ITS) Architecture and Operational Concept Plan that recommends work that needs to occur to support better use of ITS in public transportation in Oregon. ODOT is working with Metropolitan Planning Organizations (MPOs) and others throughout the state as they develop their individual ITS plans, presenting a significant opportunity to improve safety and system efficiency.

These are just a sample of the trends, challenges, and opportunities for public transportation identified in conversations with stakeholders and the public throughout OTP development. In the next chapter, policies and strategies are described that will help capitalize on these opportunities and challenges to advance public transportation across the state. Together with investment and implementation considerations described later, the policies and strategies provide a foundation for moving public transportation forward, addressing current and future opportunities and challenges, and progressing towards the OTP vision.

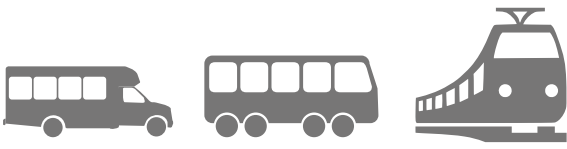
## Endnotes

1. This figure is an estimate only. The National Transit Database is one of the most comprehensive available sources for information related to transit statistics, but rural NTD data are incomplete for the years 1990 and 2000 due to data gathering changes. Additionally, only those public transportation providers that receive federal funds are required to submit data to the NTD, meaning some services' statistics are not included in the database.
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## Draft Chapter 3:

# Goals, Policies, and Strategies

The policies and strategies in this chapter build upon the OTP vision and goals to further explain what to pursue and actions to take to enable public transportation to fulfill its roles and purposes described throughout this plan. They support public transportation as a viable option for residents and tourists for many trips, help ensure it is routinely considered in planning and development decisions, and support healthy and active Oregon residents, communities, and economies.

The policies and strategies inform and guide the state, local jurisdictions, public transportation providers, and stakeholders as they make decisions affecting the public transportation system. These policies and strategies support the vision described in this plan and the future system needed by Oregonians. They respond to today's opportunities and challenges and look to the future to consider emerging and anticipated trends that affect public transportation. They are designed to be adaptable to local conditions throughout the state, and are intended to provide relevant guidance as the transportation system changes into the future.

The policies and strategies are consistent with and support the OTP, applying the policies of the OTP to the public transportation system. They are also consistent with state and federal laws and regulations. The OTP sets the overall direction and investment priorities for Oregon's public transportation system. The policies and strategies are designed to encourage working together to develop a seamless transportation system through comprehensive planning. They particularly inform state and local jurisdictions as they develop facility plans and local transportation plans to be consistent with the OTP and its mode and topic plans.

The OTP policies and strategies work hand in hand with those of other OTP mode and topic plans such as the Transportation Options Plan<sup>1</sup> and the Bicycle and Pedestrian Plan.<sup>2</sup> The Transportation Options Plan focuses on programs, strategies, and investments supporting the efficient use of transportation infrastructure through transportation demand management. The Bicycle and Pedestrian Plan focuses on strategies to provide an effective network of bikeways and pedestrian facilities to connect to destinations and other modes of travel including public transportation. Transportation options and bicycle and pedestrian programs support the OTP, coordinating public transportation with a broader set of travel options and connections.

At the same time, strengthening the public transportation system supports and leverages the multimodal policies and actions set out in these related plans.

The OPTP policies and strategies are broad and apply to multiple state, regional, and local transportation agencies unless otherwise identified. They set the future direction for the state, while providing a policy framework for further development of the public transportation system. They encourage local jurisdictions, public transportation agencies, local providers, and other partners to routinely work together to plan for the system, thereby helping to make public transportation a basic consideration for public agencies, and a routine and reliable travel option for Oregonians.

Figure 3-1



# Goal 1: Mobility - Public Transportation User Experience

Public transportation provides essential mobility for people who live, work, and visit Oregon. For some, public transportation is an option for lower stress travel through congested areas. For young people, it can provide the ability to participate in more activities. For others, public transportation is their only means of travel. Older adults and people with disabilities throughout the state rely on public transportation to meet basic daily needs, and many low-income Oregonians depend on public transportation to reach jobs and services.

Today, the demand for public transportation throughout Oregon exceeds available services. As the state’s population increases, these services will become ever more important to meet the basic transportation needs of the people who live and work in or visit Oregon. If each new person drives alone for most of their trips, then traffic congestion becomes far worse. Providing public transportation keeps our state and its cities functioning with efficient travel options.

At a time when resources are strained and demand for service is increasing, many local jurisdictions and public transportation providers are faced with choices about how to best serve the greatest number of people. Decisions about what types of service to invest in require considering complex effects and interactions to find what service best meets the intended purpose. The Mobility policies and strategies are intended to guide local jurisdictions and providers as they work together and make decisions about how to best serve their communities—so that more riders have access to service that is a viable travel option for many trips. To be a viable option, public transportation must be accessible, reliable, and consistent; available when people need to travel; and go where riders need to go. The Mobility policies and strategies address these attributes, aiming to provide more riders with the service they need to meet everyday needs.

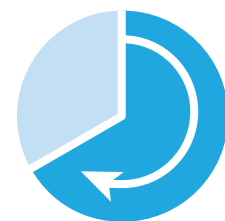


Figure 3-2



### Frequency

Often known as ‘headway,’ frequency refers to how often a bus, train or other public transportation service arrives based on the amount of time until the next bus, train, or service arrives.



### Hours of Service (or Span of Service)

The span of hours in the day over which service is operated (for example, 6 a.m. to 10 p.m.).



LTD’s EmX bus rapid transit service at night (Photograph credit: LTD)

## Goal #1 Mobility: Public Transportation User Experience

People of all ages, abilities, and income levels move reliably and conveniently between destinations using an affordable, well-coordinated public transportation system. People in Oregon routinely use public transportation to meet their daily needs.

### Policies and Strategies

**Policy 1.1:** Provide consistent and reliable public transportation services that people can count on to meet their travel needs.

**Strategy 1.1A:** Enhance public transportation service so that vehicle frequency and hours of service maximize ridership on the route.

**Strategy 1.1B:** Maximize transit effectiveness by making location-appropriate choices about whether a route or system is designed to maximize ridership or provide geographic coverage. Measure performance against the service objective.

**Strategy 1.1C:** Identify and implement strategies to help public transportation modes and services function as one seamless system for travelers (for example, fares are clear, transfers are easy, there is one place to gather information about the whole trip).

**Policy 1.2:** Provide customers access to clear, accurate information about public transportation services through multiple sources and media.

**Strategy 1.2A:** Identify resources to support communication and marketing strategies to share transit system information with community members and attract and retain riders.

**Strategy 1.2B:** Provide customer information via multiple methods, such as mobile applications, reader boards at stops and stations, websites, social media, and by telephone. Take advantage of emerging technologies to improve information sharing.

**Strategy 1.2C:** Work with riders to identify barriers to public transportation use. Utilize a variety of communication technologies and implement strategies to address those barriers.

**Strategy 1.2D:** Create clear expectations by communicating route purpose and goals in transit plans; communicate route performance in regular public reports.

**Strategy 1.2E:** Create and support a single source of trip planning information for state, local and regional public transportation options. Include information about other services such as TNCs, carsharing, and bikesharing.

**Strategy 1.2F:** Incorporate bi- or multi-lingual information materials on vehicles, at stations and stops, and in other locations as appropriate.





**Policy I.3:** Enact fare policies that reflect the needs of the community served; ensure that public transportation fares are understandable and easy to pay.

**Strategy 1.3A:** Develop opportunities to share efare payment systems between public transportation providers with overlapping or neighboring service areas. Work towards a statewide shared efare payment system.

**Strategy 1.3B:** Enable single payment and affordable transfers among routes within a public transportation provider's system.

**Strategy 1.3C:** Provide multiple fare options as appropriate, such as one-trip fares, day passes, monthly passes, and multi-ride fares, to meet varying rider needs.

**Strategy 1.3D:** Provide affordable public transportation fares for lower income people, youth, and other transportation disadvantaged riders, such as enabling use of discounted passes.

**Policy I.4:** Coordinate and enhance mobility management services and strategies to better coordinate services to enable riders and potential riders to use public transportation.

**Strategy 1.4A:** Partner with transportation options organizations to provide coordinated mobility management and transportation options services.

**Strategy 1.4B:** Identify and implement opportunities to provide services such as travel planning and travel training. These services benefit people who may need assistance to feel comfortable using public transportation, including people with disabilities.

## Mobility Management

Mobility management and transportation options opportunities can help to address transportation coordination and access needs. These are strategic, demand-oriented approaches to integrating transportation services that emphasizes moving people instead of vehicles and affords an opportunity to provide more personalized service to meet individual needs.

Examples of mobility management strategies:

- Collaboration between transportation providers and human service agencies to better plan and utilize existing services
- Mobility education and travel training targeted to users who need support to use public transportation, such as people with disabilities and older adults
- Public information and marketing targeted to customers and other community members
- Regional one-stop information and referral for people wanting to use public transportation
- Human service agencies develop mobility support programs for clients

**Strategy 1.4C:** Utilize promotions to introduce new riders to public transportation. These could include offering dedicated service for community events or holding “transit week” or similar “try transit” events.

**Strategy 1.4D:** Identify opportunities to share mobility management services among public transportation providers and with health and human service agencies in regions throughout the state.

**Policy I.5:** Advance efficient mobility and reduce traffic congestion by enabling and promoting reliable, efficient service on corridors identified as public transportation priority corridors.

**Strategy 1.5A:** Coordinate with road authorities to implement techniques to give public transportation vehicles priority such as signal priority, dedicated lanes or transit ways, queue jump lanes, high occupancy vehicle lanes, and bus on shoulder opportunities where appropriate.

**Strategy 1.5B:** Implement techniques to increase the capacity and reliability of public transportation service on urban corridors with high demand for transit service, such as increased vehicle frequency or other enhanced bus service characteristics, or implementing bus rapid transit or light rail.

**Strategy 1.5C:** Identify and implement opportunities to enhance public transportation ridership and efficiency through low-cost improvements, such as implementing new technologies or minor enhancements to services or facilities.

**Strategy 1.5D:** Enhance roadway design procedures, rules, and guidance to better accommodate transit vehicles on key corridors and support safe access to transit, with roadway design addressing all modes.

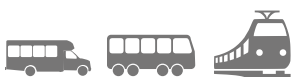
**Strategy 1.5E:** Partner with local agencies and providers to identify state highways that serve as both transit and freight corridors, and identify solutions to any conflicting needs.

**Policy I.6:** Work proactively with state and local planning bodies to support local and regional public transportation plans and goals throughout the state.

**Strategy 1.6A:** Identify current and future public transportation priority corridors in plans prepared by public transportation providers, local agencies, and metropolitan planning organizations. Ensure that subsequent state, regional, and local plans provide for the facilities to meet public transportation service goals.

**Strategy 1.6B:** Plan for improving public transportation service to meet current and future demand, including more frequent service and higher capacity transit services.

**Strategy 1.6C:** Design new major roadways and highways and significant transportation improvements to accommodate current and future public transportation vehicles and services.



## Goal 2: Accessibility and Connectivity - Getting from Here to There

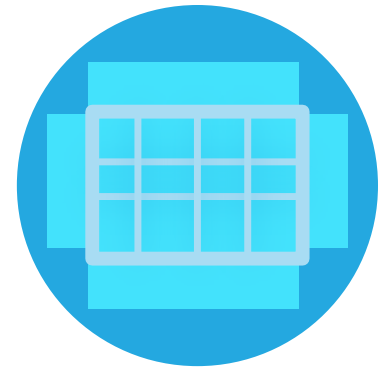
Businesses and households alike rely on a well-connected public transportation system that is dependable and easy to use. Businesses rely on employees and customers being able to reach their locations, and households rely on public transportation to access jobs, education, services, health care facilities, shopping, recreation, and other destinations.

Surrounding land uses, connections available to other services and modes, and the condition of surrounding streets, bikeways, and sidewalks all affect how easy it is to access and use public transportation. A well-connected, accessible transportation system allows Oregonians and visitors of all ages, incomes, and abilities to travel more easily to their destinations.

By providing access to education and employment, public transportation enables access to economic opportunities, vital throughout the state and especially important for transportation disadvantaged populations. Intercity bus and rail services link towns, cities, regions, and other states to one another, providing critical connections between rural and urban areas and between urban areas.

Access to public transportation is not just about whether the service itself is available. Safe, easy, and direct access to stops and stations is also essential for public transportation service. These factors are inextricable from decisions about the location, type, orientation, and size of development. These development characteristics, in turn, affect land value and economic activity—and ultimately, access to public transportation.

Overall, the policies and strategies supporting the OPTP’s Accessibility and Connectivity goal are intended to help eliminate barriers to access within and among public transportation systems.



TriMet “Bike and Ride” facility at the Beaverton Transit Center (Photograph credit: TriMet)

## Goal 2: Accessibility and Connectivity

### Getting from Here to There

Riders experience user-friendly and convenient public transportation connections to and between services and travel modes in urban, suburban, rural, regional, and interstate areas.

### Policies and Strategies

**Policy 2.1:** Enhance existing and identify new public transportation connections and services.

**Strategy 2.1A:** Assess feasibility of providing frequent and/or high capacity public transportation connecting key destinations where population and land use characteristics support such services.

**Strategy 2.1B:** Provide new or more frequent regional and intercity connections. Work with ODOT to identify possible strategies to provide the new connections.

**Policy 2.2:** Improve access to and ease of use for public transportation by connecting routes and services, including linking stops and stations to bicycle and pedestrian facilities.

**Strategy 2.2A:** Seek to eliminate first and last mile barriers by improving public transportation links to other facilities and services. These may include accessible facilities, sidewalks, trails, bicycle parking, bikeways, carshare, TNCs and taxis, rideshare, and bikeshare services.

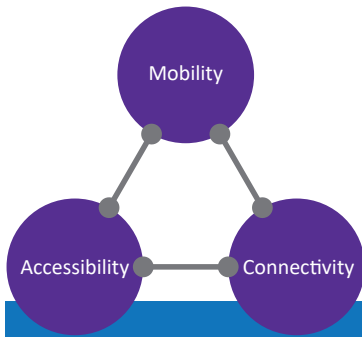
**Strategy 2.2B:** Provide public transportation services for persons with disabilities that enable convenient access to work, school, shopping, recreational, and medical destinations in the community.

**Strategy 2.2C:** Coordinate between public transportation providers, developers, private property owners, and road or rail authorities to prioritize pedestrian facility investments at existing or planned transit stops and stations. These may include crosswalks, sidewalks, curb ramps, and other pedestrian improvements.

**Strategy 2.2D:** Coordinate among public transportation providers, developers, private property owners, and road and rail authorities to develop bicycling facilities, including bike lanes or paths and secure bike parking.

**Strategy 2.2E:** Ensure that public transportation vehicles can carry multiple bicycles.

**Strategy 2.2F:** Provide park and ride and bike and ride facilities where appropriate, or seek partnerships to allow riders' use of existing lots where space is available. Seek to link park and rides to related services such as carshare or bikeshare facilities.



### What are mobility, accessibility and connectivity?

- **MOBILITY** The ability or ease with which people can use the transportation system to travel between destinations.
- **ACCESSIBILITY** The ability or ease with which people can reach or access destinations including employment, education, activities, and services and return to their origin.
- **CONNECTIVITY** Presence of useful, integrated links people can use to move between places, transportation system modes, or segments of the same mode. For example, do transit routes intersect usefully in both place and time, are fares interchangeable, and is information about the trip readily available?



**Policy 2.3:** Provide coordinated, seamless regional and intercity bus and rail public transportation services to enable trips for commuting and recreation, and assist rural residents to access services in larger communities.

**Strategy 2.3A:** Coordinate efficient and easy to use regional, long distance and urban connections between neighboring public transportation systems and services with reasonable wait times and comfortable waiting locations.

**Strategy 2.3B:** Continue to support regional and intercity public transportation by connecting and coordinating intercity services among providers, and helping regional and intercity services efficiently connect with one another and to urban systems.

**Strategy 2.3C:** Link public transportation routes at mobility hubs where there are easy transfers between routes, modes, and neighboring systems. Such facilities include transit stations or centers where multiple routes meet, bus and rail modes meet, or there are park and ride facilities. Expand existing mobility hubs, as needed, to accommodate better connections.

**Strategy 2.3D:** Coordinate among state agencies, jurisdictions, railroads, and other partners to enhance passenger rail's role in providing regional, intercity, and interstate service.

**Policy 2.4:** Encourage employers, educational institutions, and others to provide opportunities for employees' and clients' use of public transportation, carpool, vanpool, shuttles, and other shared rides.

**Strategy 2.4A:** Encourage employers to provide a comprehensive package of incentives to use public transportation or other transportation options. These include pre-tax benefits, discounted passes, group passes, priority parking for shared vehicles, etc. Provide assistance and incentives for employers to implement such programs.

**Strategy 2.4B:** Encourage major employers, medical and educational institutions, and other regional destinations to provide shuttle service between their campuses and nearby public transportation facilities when necessary to enable access by transit.

**Strategy 2.4C:** Encourage employers and major institutions to avoid policies that discourage public transportation use, such as providing free parking.



Gilliam County Transportation operates a general demand response service for older adults, people with disabilities, and the general public. The service is provided by volunteer drivers who often drive hundreds of miles in a given day to serve the diverse needs of the rural community in Gilliam County. *(Photograph credit: City of Condon)*

## Public Transportation Incentives and Disincentives

Employers and major institutions often provide perks that are deliberate or unintended incentives for employees, students, or visitors to use particular travel means. Incentives that support public transportation include allowing for flexible work schedules, providing free or discounted transit passes, developing “guaranteed ride home” policies that provide for a taxi ride home in case of an emergency, as well as many others.

Other perks can act as a disincentive to use public transportation, even though that may not be the intended purpose. A common example of such a policy is to provide free parking.

Through a thoughtful combination of policies, employers and major institutions can increase the use of public transportation significantly, while helping to manage parking and traffic, support commute trip reduction and sustainability goals, and attract and retain employees.



## Goal 3: Community Livability and Economic Vitality

A reliable transportation system that moves people and goods efficiently and effectively is vital to the livability and economic vitality of Oregon communities. Public transportation is a critical element of the multimodal system that helps meet business needs. It not only gets people to work and customers to businesses, it plays a role in the more efficient movement of goods in congested corridors by giving people a more efficient option for travel. Public transportation gives visitors an easy option too, transporting them to attractions and world-class tourist destinations throughout Oregon.

Public transportation plays a key role in community livability by making it possible for people to participate in active downtowns and communities and enabling those who cannot, or who choose not to, drive to engage socially and economically in the community. Throughout the state, public transportation offers an affordable transportation option for Oregonians. By reducing the costs necessary to live and work in a community, public transportation better enables people of all income levels to stay and be active participants in their neighborhoods and cities.

This goal contains a range of policies and strategies designed to maximize public transportation's role in and support for vibrant communities and economies.



Cherriots regional service (Photograph credit: Cherriots)



## Goal 3: Community Livability and Economic Vitality

Public transportation promotes community livability and economic vitality by efficiently and effectively moving people of all ages to and from homes, jobs, businesses, schools and colleges, and other destinations in urban, suburban, and rural areas.

### Policies and Strategies

**Policy 3.1:** Enhance access to education and employment via public transportation.

**Strategy 3.1A:** Promote adequate public transportation service to employers, schools, and educational institutions.

**Strategy 3.1B:** Improve public transportation services' ability to accommodate workers with non-traditional work schedules.

**Strategy 3.1C:** Establish incentives that encourage employers to allow flexible work schedules to enable employees' use of public transportation.

**Strategy 3.1D:** Establish incentives, such as providing transit passes, that encourage employee and student use of public transportation.

**Strategy 3.1E:** Collaborate with employers and business organizations to promote public transportation and transportation options programs to employees, including using transit during the workday.

**Policy 3.2:** Promote and support use of public transportation for tourism and special events in Oregon.

**Strategy 3.2A:** Support tourists' use of public transportation by making it easy to use. Provide clear and readily available information and make transit passes easy to purchase. Encourage public transportation and tourism agencies to provide traveler information in a variety of formats targeted to the needs of tourists.

**Strategy 3.2B:** Coordinate with convention centers, athletic and other large event organizers to support the use of public transportation for special events.

**Strategy 3.2C:** Collaborate with tourism agencies to identify places in Oregon where public transportation can better serve tourist destinations. Seek creative partnerships to provide such services.

**Strategy 3.2D:** Improve existing public transportation services available to tourists, such as intercity bus and rail services, and encourage development of new services and programs to enhance access to tourist destinations.

**Policy 3.3:** Promote the use of public transportation to foster greater community livability.

**Strategy 3.3A:** Develop a culture of public transportation, supporting its regular use and acknowledging public transportation’s key role in community livability. Provide travel training and orientation programs designed to meet the needs of all riders.

**Strategy 3.3B:** Provide flexible public transportation services to meet daily needs for older adults and people with disabilities, recognizing the importance of public transportation to social engagement and the ability to live independently.

**Strategy 3.3C:** Improve public transportation services and ease of use for youth, by providing service to schools and after-school programs, and providing travel education programs for youth and educators. Identify incentives such as discounted fares for youth.

**Strategy 3.3D:** Support the ability of public transportation to contribute to affordable communities. Recognize that affordable fares enable people with low incomes to use public transportation on a regular basis. Consider service design that enables households to own fewer or no vehicles.

**Strategy 3.3E:** Integrate public transportation stops and stations into existing and new public spaces by incorporating art, sidewalk furniture, trees, and greenery, as appropriate, in order to make them more comfortable and inviting.

**Strategy 3.3F:** Incorporate viable public transportation in congested corridors to enhance economic vitality and community livability.

### Encouraging employees to use public transportation

The Lloyd District Transportation Management Association (TMA)—now called Go Lloyd—provides commute assistance, education, and encouragement programs for employees and visitors to the Lloyd Center area of northeast Portland. TMAs are established, often by employers, within limited geographic areas to address the specific transportation needs of their members.

Go Lloyd offers emergency rides home for public transportation riders, event planning, commute planning, and commuter rewards programs to encourage Lloyd Center employees to leave their cars at home and travel by transit, bike, or foot.





## Goal 4: Equity

In the context of the OPTP, “equity” refers to the measure or distribution of public transportation impacts—both positive and negative—throughout a community and the state. Equity is a fundamental consideration for transportation agencies, especially for public transportation providers.

Achieving equitable distribution of public transportation services is complex. Needs and trade-offs vary widely among communities of different size, location, and demographics.

There are many dimensions of equity to consider including these:

- Does resource distribution reflect the distribution of populations?
- If groups are similar, do they share equally in resources and costs?
- Should resources be distributed according to differences in ability and need?
- What are unique needs of a group or community?<sup>3</sup>
- For public transportation services, it is also important to consider how to balance the needs of busy corridors that require substantial service to move many riders efficiently with the needs of areas that require more basic services.

Public transportation services are an integral part of a community’s characteristics. Public transportation may help ameliorate some inequities but will not make major changes by itself. Agencies often consider how to improve equitable outcomes and definitely not worsen any inequities in a community.

There are no precise answers or any technical way to answer these questions and concerns. What is equitable must be answered in the community considering its unique characteristics.

For communities in Oregon, and particularly transportation disadvantaged communities, public transportation provides a basic, affordable travel option and vital access to opportunities such as employment, services, groceries, and education.

The policies and strategies supporting this goal address a broad range of equity concepts and strategies. They aim to support equitable access to opportunities for Oregonians, and support community involvement in decision making processes.



### Equitable or Equal?

“**Equity**” refers to fairness in the distribution of impacts—positive and negative—between groups. The term often compares impacts among groups that differ in income, ethnicity, ability, or need.

“**Equitable**” generally means impacts have been considered and steps taken to ameliorate any disparate impacts and to promote a “fair” outcome.

“**Equal,**” however, is very different. It is usually understood to mean that impacts and distribution of services are measurably the same.

The OPTP seeks to support equitable public transportation services. Given the very different communities and regions throughout the state and their varied interests and needs, the OPTP does not anticipate equal services around the state. For example, urban areas have much greater concentrations of residents, employers, and services and, therefore, tend to need very different public transportation services than rural communities.

## Goal 4: Equity

Public transportation provides affordable, safe, efficient, and equitable transportation to jobs, services, and key destinations, improving quality of life for all Oregonians.

### Policies and Strategies

**Policy 4.1:** Engage populations recognized as transportation disadvantaged in public transportation service decision making.

**Strategy 4.1A:** Include transportation disadvantaged populations early and often in public transportation planning and investment decisions, such as via outreach, inclusion in project committees, and other roles. Ensure that public meetings are held in locations that are accessible and scheduled at times that increase opportunities for community members to participate.

**Strategy 4.1B:** Provide public transportation information by methods accessible to people with low incomes, disabilities, or limited English proficiency (LEP).

**Strategy 4.1C:** Identify and address technological barriers that inhibit or prevent people, especially the transportation disadvantaged, from accessing information regarding public transportation services or providers.

**Strategy 4.1D:** Develop and implement culturally appropriate public outreach plans designed to address the needs of demographically and economically diverse groups.

**Policy 4.2:** Understand and communicate how disparities, barriers, and needs affect the ability of people to access and use public transportation, especially those who are transportation disadvantaged.

**Strategy 4.2A:** Incorporate a broad range of equity concepts in decisions affecting policies, programs, and proposed major service changes impacting access to and use of public transportation.

**Strategy 4.2B:** Develop informational materials on economic, cultural, and social barriers associated with different demographic groups and communities to access and use public transportation.

**Strategy 4.2C:** Develop tools and resources for transportation decision makers on equity and offer educational opportunities for staff and decision makers.

**Strategy 4.2D:** Continue to meet obligations under state and federal law regarding equity, while advancing policies and programs that exceed these obligations.



**Policy 4.3:** Identify disparities, barriers, and needs that impact people’s ability to access and use public transportation.

**Strategy 4.3A:** Incorporate information about transportation disadvantaged communities’ characteristics and needs, including public health, when developing or updating transportation plans including transportation system plans, corridor plans, and transit development plans.

**Strategy 4.3B:** Use available technologies and data collection best practices to develop comprehensive data sets on public transportation services, routes, and riders to increase understanding and awareness of barriers to public transportation use.

**Strategy 4.3C:** Use mapping tools, census data, travel demand models, health indicators, or other analytical tools and information sources to identify underserved areas. Consider characteristics, such as demographics, income, housing affordability, languages spoken, ability, geographic location, mode, industry, and trip types to assess needs associated with transportation disadvantaged communities.

**Strategy 4.3D:** Use transit inventories to identify gaps or deficiencies in the public transportation system that affect transportation disadvantaged communities and people, including such impacts as:

- Public facility planning, design, and location
- User costs and benefits
- Service quality of various modes
- External impacts
- Economic impacts
- Regulation and enforcement
- Maintenance practices

**Policy 4.4:** Address the disparities, barriers, and needs that impact people’s ability to access and use public transportation.

**Strategy 4.4A:** Foster a respectful environment that welcomes people of all ages, cultural backgrounds, and abilities on public transportation vehicles and facilities.

**Strategy 4.4B:** Reduce barriers to accessing public transportation by improving service in underserved areas and transportation disadvantaged communities.

**Strategy 4.4C:** Address temporary barriers to use of public transportation, for example by using maintenance and construction best practices that maintain access.

## Transportation Disadvantaged

Those persons who are unable to provide their own transportation or have difficulty accessing public transportation due to age, disability, language barriers, or income.

**Strategy 4.4D:** Integrate equity analysis into service planning and decision making so that increases in service benefit transportation disadvantaged and underserved areas.

**Policy 4.5:** Integrate equity criteria into funding decisions.

**Strategy 4.5A:** Incorporate federal and state policy and regulations on serving the transportation disadvantaged into funding policies and procedures. Disseminate guidance to local jurisdictions to assist local funding decisions and grant applications.

**Strategy 4.5B:** Use system inventory data and research to support evaluation of equity issues when modifying or adding new public transportation services.

**Strategy 4.5C:** Use analysis tools to evaluate implications of funding policies, programs, and projects on underserved areas and transportation disadvantaged populations.

**Strategy 4.5D:** Incorporate relevant state, regional, and local Americans with Disabilities Act (ADA) implementation plans and policies in funding decisions to enhance ADA compliance for public transportation facilities.



## Goal 5: Health

Public transportation supports healthy communities as an essential part of active transportation (modes of transportation that involve physical activity). Most public transportation riders are more active because they start and end their trips by walking or biking. Twenty-nine percent of public transportation riders get 30 minutes or more of exercise each day just from walking to and from transit.<sup>4</sup>

Public transportation fosters healthy communities by allowing people to engage in their communities, which is critical to mental and physical health. It provides access to medical services, groceries, and recreation, all of which are essential to the health of individuals and communities. By moving many people efficiently, public transportation also reduces air pollutant emissions that contribute directly to individual health; it directly contributes to the health of our communities as well.

The policies and strategies supporting this goal aim to improve the health of individuals and communities in Oregon by bringing together community planning, public transportation agencies, and health organizations to support and improve public transportation services around the state.

### Goal 5: Health

Public transportation fosters improved health of Oregonians by promoting clean air, enhancing connections between people, enabling access to services such as health care and goods such as groceries, and by giving people opportunities to integrate physical activity into everyday life through walking and bicycling to and from public transportation.

### Policies and Strategies

**Policy 5.1:** Provide access to healthy lifestyle options by supporting the ability of people to reach goods and services such as groceries, recreation, parks and natural areas, health care, and social opportunities via public transportation.

**Strategy 5.1A:** Articulate and strengthen the role of public transportation in preventing isolation and improving mental health for Oregonians.

**Strategy 5.1B:** Promote physical activity by increasing public transportation service and improving multimodal connections linking service to key destinations.

**Strategy 5.1C:** Design transportation facilities to enable multimodal connections to public transportation.



### What does health mean in the OPTP?

“Health” in the context of these policies and strategies refers to the physical and mental health of individuals; it also refers to public health, which is the broader health of the population and communities as a whole.

**Policy 5.2:** Integrate health considerations into public transportation planning and decision making at the local, regional, and state level.

**Strategy 5.2A:** Include people with health expertise and perspectives in local public transportation planning and decision making bodies.

**Strategy 5.2B:** Use health criteria or analysis processes in public transportation planning and decisions, including transit oriented development (TOD), public transportation facility siting, and vehicle technologies.

**Policy 5.3:** Connect public transportation riders to health and social services.

**Strategy 5.3A:** Identify gaps in public and private transportation access to health and social services.

**Strategy 5.3B:** Address gaps in access to health and social services by forming collaborative partnerships between public transportation, health, and social service organizations such as health departments, non-profits, coordinated care organizations, and veterans' agencies.



Bus stop on the Northwest Connector regional bus system (Photograph credit: CH2M)



## Goal 6: Safety and Security

Effective public transportation systems must be and feel both safe and secure. In this context, safety and security extend beyond vehicles and stations to include transit personnel, riders, and the surrounding community. Safety is a basic expectation of all public transportation users and providers. It refers to both real and perceived safety, including vehicle safety while onboard transit vehicles, or getting to and waiting at the bus stop. Security formally refers to securing vehicles and systems from incidents and accidents, but for this OPTP and for public transportation riders, it also includes personal security (for example, feeling safe waiting for the bus and on the transit vehicle). Public transportation is one of the safest modes of travel available today. A sense of personal security, however, varies from person to person. For public transportation to be an everyday choice for Oregonians, it must also be perceived as safe and secure.

Public transportation contributes to the safety, security, and resilience of communities by providing essential services during and after emergencies. In addition, public transportation service typically means more people and activity on the street, which can aid in feeling secure.

These OPTP policies and strategies encourage greater safety and security of the public transportation system through a range of strategies that address design factors, personnel training, use of safety technologies, emergency management planning, and more. Part of feeling safe and secure is also feeling welcome, that this is a system meant for all to use, and the system is designed, implemented, and operated in a way that makes all members of the community feel welcome. Implementing these policies and strategies will promote safety and security at stops and on vehicles and help promote a welcoming environment for members of the community of different ages, ethnicities, incomes, and abilities.



## Goal 6: Safety and Security

Public transportation trips are safe; riders feel safe and secure during their travel. Public transportation contributes to the resilience of Oregon communities.

### Policies and Strategies

**Policy 6.1:** Plan for, design, and locate transit stops and stations to support safe and user-friendly facilities, including providing safe street crossings.

**Strategy 6.1A:** Design and locate public transportation facilities so that a wide range of users, including pedestrians, cyclists, and people with disabilities can safely access them.

- Consider road, guideway, and track geometry in designing public transportation facilities.
- Coordinate with state, regional, and local governments to provide safe crossings and access to the public transportation facility by pedestrians, bicyclists, and people with disabilities.

**Strategy 6.1B:** Develop and apply guidelines for designing and locating safe public transportation facilities and amenities on roadways suitable for different contexts. Consider vehicle speed, roadway characteristics and constraints, planned land uses, users and uses, and areas of pedestrian, cyclists, or transit priority.

**Policy 6.2:** Provide for passenger and operator security on public transportation vehicles and at stops and stations through investments in facility design, amenities, appropriate security systems and personnel, and coordination with law enforcement staff.

**Strategy 6.2A:** Design transit stops and stations using principles such as Crime Prevention through Environmental Design (CPTED) to deter criminal behavior and help people feel safe.

**Strategy 6.2B:** Use risk assessment to identify appropriate use of lighting, call boxes, security systems and security personnel at stops and stations to support riders' safety and security.

**Strategy 6.2C:** Work with law enforcement to incorporate techniques for enforcing regulations related to illegal and disruptive activities.

**Policy 6.3:** Enhance the safety of public transportation through personnel training and education programs.

**Strategy 6.3A:** Promote a culture of safety in which public transportation personnel and contracted employees throughout the state attend regular trainings and have access to tools and skills that enhance safety and a transit environment that is welcoming to all. Conduct regular safety audits.





**Strategy 6.3B:** Provide training in conflict management to teach public transportation personnel the tools and skills to manage disruptions and make them aware of available resources.

**Strategy 6.3C:** Coordinate among agencies to deliver training and licensing programs. For example, several rural transit agencies could conduct joint public transportation personnel training.

**Strategy 6.3D:** Comply with safety management systems, and other federal, state, and local safety requirements.

**Policy 6.4:** Promote public transportation as a safe travel option through public outreach campaigns and rider education programs.

**Strategy 6.4A:** Implement public outreach campaigns that highlight public transportation as a safe travel option and show public transportation's contribution to safe travel.

**Strategy 6.4B:** Develop educational programs and materials (e.g. See and Be Seen campaigns, rider orientations) that demonstrate how to use public transportation safely and encourages drivers, bicyclists, and pedestrians to safely interact with public transportation vehicles on roadways.

**Policy 6.5:** Incorporate innovations, such as new technologies and strategies, to increase public transportation safety and security.

**Strategy 6.5A:** Deploy cost-effective technologies and strategies to reduce transit vehicle crashes with pedestrians, bicyclists, and other vehicles.

**Strategy 6.5B:** Investigate and deploy cost-effective technologies and strategies on public transportation vehicles and at stops and stations that improve the safety of transit operators and riders.

**Policy 6.6:** Integrate public transportation agencies and personnel into emergency response and recovery planning and training activities to support resilience during and after natural disasters and other emergencies.

**Strategy 6.6A:** Identify available resources for potential use in emergencies, such as number of vehicles, available operators, vehicle capacity, and fuel storage capacity and availability among others.

**Strategy 6.6B:** Utilize public transportation as a resource during disasters or emergencies, especially for the evacuation of people with disabilities and people without access to personal vehicles.

**Strategy 6.6C:** Coordinate with law enforcement, emergency responders, and incident management staff to identify opportunities for public transportation to support recovery after disasters and emergencies.

**Strategy 6.6D:** Integrate and connect public transportation communications with incident management response systems.



## Goal 7: Environmental Sustainability

The transportation sector is the source of nearly one-third of Oregon’s greenhouse gas (GHG) emissions.<sup>5</sup> Public transportation helps reduce transportation emissions of all kinds, including GHG emissions, by providing an efficient way for many to travel, especially as compared with single occupant vehicle driving. Increased use of public transportation is one of the central strategies in Oregon’s statewide strategy to reduce GHG emissions.

Low- or zero-emission transit vehicles are coming on line that will further reduce transportation sector emissions. While low- or zero-emission vehicles may cost more at the outset, over time they may save money through increased efficiency and emissions reductions benefits. At the same time, these technologies further increase the efficiency of travel and help reduce community exposure to particulate emissions and other pollutants that harm public health. Additional practices, such as minimizing “dead head” travel, which is transit vehicle travel that occurs without moving passengers (for example, the beginning and end of the service route or day), and reducing vehicle idling time can reduce the environmental impact of public transportation.

The policies and strategies below encourage using public transportation fleets, fuels, facilities, and services to better safeguard and enhance Oregon’s natural resources and environment.

### Goal 7: Environmental Sustainability

Public transportation contributes to a healthy environment and climate by moving more people with efficient, low-emission vehicles, reducing greenhouse gases and other pollutants.

#### Policies and Strategies

**Policy 7.1:** Support public transportation investments as a key approach to reducing greenhouse gas (GHG) emissions, as emphasized in state policy.

**Strategy 7.1A:** Identify funding to implement GHG strategic assessment findings and priorities related to public transportation.

**Strategy 7.1B:** Communicate that public transportation is critical to Oregon’s strategy to reduce GHG emissions.

**Strategy 7.1C:** Advance work by MPOs and metropolitan area jurisdictions to evaluate expansion of public transportation service to levels set forth in the Statewide Transportation Strategy.



**Policy 7.2:** Transition to low- or zero-emission vehicle technologies, including all electric, hybrid, biofuels, compressed natural gas, and other fuel and propulsion technologies.

**Strategy 7.2A:** Invest in low- and zero-emission vehicle infrastructure, such as maintenance, fueling and charging stations, and technical training for vehicle maintenance staff.

**Strategy 7.2B:** Increase the percentage of low- and zero-emission vehicles used in the public transportation fleet.

**Strategy 7.2C:** Support pilot projects that demonstrate the viability of zero-emission transit vehicles, such as hydrogen fuel.

**Strategy 7.2D:** Partner with agencies, such as the Department of Energy or Department of Environmental Quality, to incentivize transit vehicle fleet turnover or retrofit of vehicles.

**Strategy 7.2E:** Support research and development of emerging fuels (e.g. recycled natural gas and electric), alternative fuel networks, and other technologies to support use of low- and zero-emission fuels for transit vehicles.

**Policy 7.3:** Identify and implement sustainable transit system operations policies and practices

**Strategy 7.3A:** Design, construct, locate, and operate public transportation facilities in accordance with environmentally sustainable best practices.

**Strategy 7.3B:** Reduce transit vehicle idling when possible through vehicle technologies, transit signal priority, intelligent transportation technologies, or dedicated public transportation facilities (e.g. transit only lanes) to promote free flow.

**Strategy 7.3C:** Educate transit vehicle operators on use of fuel-efficient driving techniques.



## Goal 8: Land Use

Public transportation supports land use planning in Oregon’s diverse communities. Conversely, land use directly influences public transportation and the types of services that can be effective in the area. Compact communities with mixed land uses and busy corridors tend to support frequent public transportation services, while places with dispersed population and land uses may be harder to serve and have basic access service only. While land use is under the authority of local jurisdictions, partnerships with public transportation providers create mutual benefit: appropriate land use supports public transportation and public transportation supports efficient land use.

Engaging public transportation providers early in planning and development processes helps ensure that new growth and development can be adequately served. For utilities like electricity, water, and sewer, the service plan is prepared and implemented along with the new development. This OPTP encourages land use and public transportation agencies to plan public transportation services in a similar way. Land use plans should consider the public transportation needs of new developments and involve the public transportation provider as early as possible. This better enables land use patterns that will support public transportation service to be coordinated with the service plans of the provider.

Similarly, service plans by the public transportation provider must reflect both the current and future service needs for the community. Involving the affected land use agencies in public transportation service planning will increase coordination and allow for anticipated changes in service needs.

Land use and public transportation planning must be coordinated, for the benefit of both. The policies and strategies for this goal are intended to promote and support greater coordination between land use and public transportation planning at all levels of government.



## Goal 8: Land Use

Public transportation is a tool that supports Oregon’s state and local land use goals and policies. Agencies collaborate to ensure public transportation helps shape great Oregon communities providing efficient and effective travel options in urban, suburban, and rural areas.

### Policies and Strategies

**Policy 8.1:** Increase the use of public transportation by fully integrating public transportation with other community plans including transportation, land use, and economic development plans.

**Strategy 8.1A:** Integrate transportation, economic development, housing, and land use strategies that support public transportation in a wide range of community plans, including comprehensive plans, transportation system plans (TSPs), coordinated public transportation human service plans, and others.

**Strategy 8.1B:** Develop, adopt, and maintain transit development plans (TDPs) that describe how the agencies will operate and develop the public transportation system services and facilities over a 20-year period. TDPs should consider community plans such as those for land use and transportation overall.

**Strategy 8.1C:** Use program and funding criteria and guidance to help ensure TSPs, TDPs, and the transit elements of comprehensive plans are aligned and consistent.

**Strategy 8.1D:** Include local and regional public transportation providers in the development of local land use plans and TSPs; include affected land use and transportation agencies, as well as employers and housing agencies, in public transportation providers’ service planning.

**Strategy 8.1E:** Identify and plan for corridors important to current and future public transportation service, and reflect these in transportation and land use plans and ordinances.

**Strategy 8.1F:** Integrate public transportation and urban growth boundary planning to ensure the needs and benefits of public transportation are considered in planning for community growth.



In Eugene-Springfield, areas near bus rapid transit stations flourished despite the recent economic recession; while the metropolitan area lost jobs between 2004 and 2010, jobs across several economic sectors grew within a 1/4 mile of bus rapid transit stations.<sup>6</sup> (Photograph credit: LTD)

**Policy 8.2:** Elevate public transportation in developer, employer, community service provider, and public agency decision making, such as siting and development decisions. Recognize the impact land use has on people’s ability to use public transportation and other transportation options.

**Strategy 8.2A:** Foster opportunities and create incentives for employers, educational centers, health care facilities, and other regional services to locate where public transportation service is available for use by both employees and clients.

**Strategy 8.2B:** Where appropriate, develop incentives or partnerships to provide park and ride spaces at destinations located near transit services.

**Strategy 8.2C:** Identify and promote local agency and developer actions to integrate public transportation early in the development process to best address access to public transportation.

**Strategy 8.2D:** Encourage local jurisdictions to adopt ordinances that support public transportation.

**Strategy 8.2E:** Create model development code to better integrate public transportation with land uses and transportation systems.

**Strategy 8.2F:** Work with local jurisdictions to identify locations for public transportation facilities, including maintenance facilities, layover locations, stations, stops, and others.

**Strategy 8.2G:** Include public transportation considerations in permitting and development design review to ensure new development supports existing and future public transportation service where appropriate.

**Strategy 8.2H:** Develop criteria and considerations for designing and locating various types of public transportation facilities.

**Policy 8.3:** Foster the development of housing near public transportation routes and services.

**Strategy 8.3A:** Collaborate with public housing agencies and developers to locate affordable housing units in new developments near public transportation services stations, lines, and stops.

**Strategy 8.3B:** Promote TOD, mixed use, and multi-unit housing on transit corridors and near public transportation services. Consider the use of incentives, fees, and public-private partnerships to accomplish such development.



## Goal 9: Funding and Strategic Investment

Strategic investment for public transportation means different things in different communities based on size, local priorities, history of decisions made, public transportation services present, and other characteristics. The strategic investment policies support data-driven, performance based, and participatory planning processes to identify needs, as well as measure and monitor the results of actions taken to address those needs. The policies and strategies provide guidance to help local jurisdictions and providers make decisions for further developing their public transportation systems in the context of the full transportation system and their own communities.

The strategic investment policies emphasize creative partnerships and working together because different jurisdictions, agencies, and providers may have different strengths and experience with varying types of services. In addition, different agencies and providers have a variety of roles in developing the public transportation system. Local providers make decisions about how to maintain, enhance, or change services based on the needs of their communities. ODOT is typically a funding agency to local providers, but the agency also funds and manages some services such as Amtrak Cascades and the POINT intercity bus system. See Chapter 5: Moving Forward for more information about the different roles and responsibilities of agencies involved in planning for and providing public transportation services.

State agencies, regional and local jurisdictions, and public transportation providers should use these OTP policies and strategies to inform the maintenance and development of their unique systems. While some may apply better to state agencies, local jurisdictions, or providers, these policies and strategies are intended to guide and inform all agencies that make decisions about public transportation funds and investments.

Overall, the policies and strategies for this goal emphasize maintaining existing public transportation service levels, while searching for efficiencies and adding service to meet changing community needs.



“Bus-only” lanes on LTD’s EmX bus rapid transit system (Photograph credit: CH2M)

## Goal 9: Funding and Strategic Investment

Strategic investment in public transportation supports the overall transportation system, the economy, and Oregonians' quality of life.

Sustainable and reliable funding enables public transportation services and infrastructure to meet public needs.

### Policies and Strategies

**Policy 9.1:** Invest strategically in maintenance, planning, transit service, and capital improvements to preserve and enhance public transportation.

**Strategy 9.1A:** Use the following priorities for identifying public transportation operations and capital investments to preserve and enhance the public transportation system. (Providers may address these in any order depending on the current status of their system and identified needs.)

- Preserve current service levels and maintain a state of good repair for vehicles and facilities.
- Improve the efficiency of public transportation services and increase the number of riders.
- Improve public transportation service frequency and reliability such that it provides a viable transportation option for people to meet their daily needs.
- Provide additional connections and services to address public transportation needs, especially in underserved or disadvantaged communities and growing or populous areas that may need additional or enhanced service.

**Strategy 9.1B:** Identify and communicate specific priorities through public transportation planning, including defining adequate service levels for specific areas or conditions.

**Strategy 9.1C:** Develop program and funding criteria to address community public transportation service needs in alignment with state, regional, and local plans.

**Strategy 9.1D:** Comply with federal and state requirements and use these as tools to protect the existing public transportation system and identify investment priorities. Examples include requirements for environmental justice, state of good repair, transportation asset management, and performance based planning.

**Strategy 9.1E:** Monitor the implementation and results of service plans and changes and adjust accordingly to continually improve public transportation services.



### Partnerships

Partnerships are essential to expand public transportation services and improve connections between existing services. Partnerships are created with and between agencies, providers, local jurisdictions, and the private sector to coordinate planning, fund services, and ensure community needs are met.

Partnerships can be mutually beneficial for both public and private entities by supporting innovative ideas, service coordination, and solutions to barriers.





**Policy 9.2:** Foster creative investments and partnerships among public agencies and private organizations to improve the efficiency and effectiveness of public transportation services.

**Strategy 9.2A:** Leverage public and private partnerships to address first and last mile connections, co-locate related facilities, provide service to tourist destinations, and collaborate with universities to advance research and technologies.

**Strategy 9.2B:** Maximize and leverage public transportation investments through available state and federal multimodal funding programs.

**Strategy 9.2C:** Invest in technology solutions designed to support essential functions including operations, maintenance, communication, and safety and that can help improve efficiency and effectiveness of public transportation services. Examples may include technology for service planning, fare payment, or fleet management.

**Strategy 9.2D:** Provide technical services to public transportation agencies to improve the ability of the agency to understand state and federal requirements, improve managerial and financial management skills, coordinate services with partners, and improve services over time.

**Strategy 9.2E:** Identify barriers that discourage creative partnerships. Consider whether any changes in authorities or rules may be needed to enable such partnerships.

**Strategy 9.2F:** Coordinate among providers to enhance regional public transportation decision making and enhance service efficiency and integration, including consolidation of services.

**Strategy 9.2G:** Foster partnerships between public and private services to leverage private investment, including public transportation agencies, health service providers, and TNCs.

**Policy 9.3:** Pursue stable and consistent funding for public transportation operations and capital investments that maintain services and address identified needs.

**Strategy 9.3A:** Leverage existing state funding to achieve more cooperative and coordinated services, such as by partnering with human service agencies or other organizations that operate services related to public transportation.

**Strategy 9.3B:** Provide flexibility in the use of existing and new funding sources, for example the ability to use the funds for either capital or operations.

**Strategy 9.3C:** Pursue additional state funding for public transportation through new dedicated funding sources.

**Strategy 9.3D:** Enable local jurisdictions and public transportation providers to seek new dedicated funding sources or partnerships.

**Strategy 9.3E:** Pursue funding programs for new technologies, service models, and low-emission vehicles.

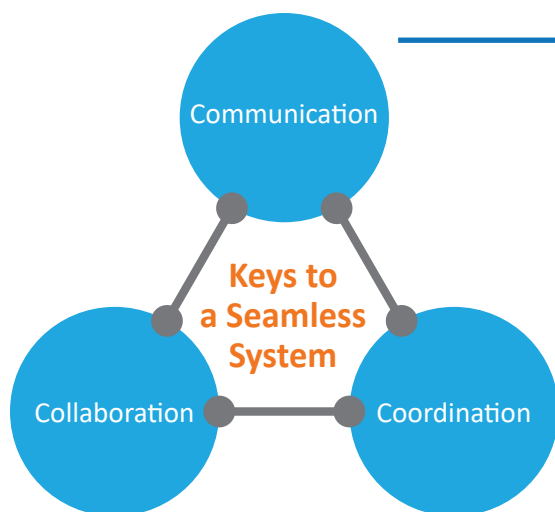


## Goal 10: Communication, Collaboration, and Coordination

Public transportation riders are not concerned with who operates the system they use to get to their destination; they typically just want to arrive at their destination easily, safely, and on time. System integration is necessary at many levels, and partnerships are needed to move toward a seamless transportation experience. Critical to delivering an integrated public transportation system is effective communication, collaboration, and coordination—this is essential for planning successfully, improving relationships among agencies, and resolving any institutional impediments to the delivery of a seamless system.

Collaboration, communication, and coordination allow different partners and agencies to contribute their strengths and leverage their capabilities, improving the system for everyone. Collaboration also provides a framework to identify and address opportunities and barriers to greater interregional coordination. Creative solutions developed in partnerships among federal and state agencies, local jurisdictions, tribal governments, and public transportation providers can lead to more effective uses of resources and a more efficient multimodal transportation system.

Some providers, agencies, or jurisdictions may lack the capacity to engage in effective coordination with their partner agencies due to lack of staff, technology, experience, or funding to support coordination efforts. These policies and strategies recognize this and are intended help provide ways to enhance communication, coordination, and collaboration among providers, agencies, and others to build a more seamless system and support increasing public transportation use in Oregon. They point the way toward assisting one another via partnerships and technical assistance and from innovative providers or jurisdictions trying new ideas and learning what benefits the agencies and the public transportation system.



**Figure 3-3**

A seamless transportation experience is a desired outcome of the OPTP. Communication, collaboration, and coordination are fundamental to achieving such a system, by allowing resources, risks, technologies, facilities, and practices to be shared. This, in turn, results in shared benefits for both providers and riders. For example, coordinated transfers between systems results in quicker and easier trips for riders, potentially increasing ridership on both systems. Similarly, shared informational materials and websites enable riders to find information in one place and experience one consistent system.



## Goal 10: Communication, Collaboration, and Coordination

Public and private transportation providers and all levels of government within the state and across state boundaries work collaboratively and foster partnerships that make public transportation seamless regardless of jurisdiction.

### Policies and Strategies

**Policy 10.1:** Coordinate communication and marketing to promote knowledge and understanding of available public transportation services.

**Strategy 10.1A:** Provide coordinated outreach by public transportation providers that connect or serve the same area, including online, social media, and other campaigns.

**Strategy 10.1B:** Work towards a statewide information source for transit and transportation information and integrated trip planning. Provide information in multiple formats, such as by telephone, online, and in appropriate locations.

**Strategy 10.1C:** Provide outreach material in multiple languages and multiple formats; use culturally-appropriate materials as needed.

**Strategy 10.1D:** Provide ongoing information to government agencies and the public about the goals and purpose of public transportation, and the policies and implementation of the OPTP.

**Strategy 10.1E:** Foster partnerships with businesses, employers, schools, local and statewide tourism agencies, and others to provide public transportation information.

**Strategy 10.1F:** Foster partnerships among agencies for shared marketing materials and outreach opportunities. Partners may include social service agencies and other transportation providers.

**Policy 10.2:** Collaborate and share costs for resources, supplies, and services that can be used by multiple agencies.

**Strategy 10.2A:** Provide opportunities for group purchases where feasible, such as using statewide or regional contracts for vehicles, technology, software purchases, and shared outreach and marketing materials.

**Strategy 10.2B:** Implement ways to share staff and technology to enable broad provider access to technology and resources.

**Strategy 10.2C:** Implement opportunities for regional or statewide shared services among related public transportation agencies such as ride reservation services, driver and staff training, and commercial driver licensing services.

New technology developments, such as real-time tracking of vehicles and electronic fare (efare) payment card systems, can reduce wait time and boarding delays. Efare refers to newer technologies that allow electronic payment of transit fares; smart phone apps that allow payment are one example. (Photographic credit: TriMet)



**Policy 10.3:** Identify and advance opportunities to share data resources and collection methods.

**Strategy 10.3A:** Promote the use of open source software or similar solutions and standardized data formats, such as General Transit Feed Specification, that allow for use by multiple agencies and for adaptation to meet state or regional need.

**Strategy 10.3B:** Implement shared rider survey techniques among agencies with similar services or in the same region.

**Strategy 10.3C:** Use data collected to better understand customer needs and preferences to improve public transportation services.

**Policy 10.4:** Collaborate with various agencies, jurisdictions, and transportation providers in support of effective public transportation that is reliable and easy to use and helps meet state, regional, and community goals.

**Strategy 10.4A:** Work with private providers of transportation to leverage public and private providers' strengths and resources and provide public transportation services in the most cost-efficient ways available.

**Strategy 10.4B:** Advance coordination between public transportation providers, and social service agencies that provide or use public transportation for their clients, to promote seamless, effective service for clients including non-emergency medical transportation.

**Strategy 10.4C:** Coordinate efforts among agencies including ODOT, local agencies, and public transportation providers to implement the Oregon Public Transportation Plan. ODOT regions, area commissions on transportation, metropolitan planning organizations, tribal governments, non-metropolitan officials, and other stakeholder groups will be consulted in the development and implementation of the OPTP.



**Policy 10.5:** Collaborate among agencies, jurisdictions, and providers to ensure the public transportation system is integrated as a component of the broader multimodal transportation system in Oregon. Provide leadership for public transportation activities and build upon efforts to coordinate public transportation services, especially statewide services.

**Strategy 10.5A:** Promote development of solutions to shared public transportation issues and provide technical assistance to public transportation agencies, especially to small or rural agencies and non-profit private providers.

**Strategy 10.5B:** Continue to coordinate long distance intercity bus and rail public transportation services throughout the state and linking to interstate travel, by providing funding and marketing, and ensuring gaps in the intercity network are filled.

**Strategy 10.5C:** Identify opportunities for greater interregional coordination. Determine where assistance from ODOT can best support this coordination.

**Strategy 10.5D:** Work with federal, state, regional, and local agencies to collaborate and coordinate their public transportation services, such as coordinating planning activities and partnerships for regional projects or statewide or other shared goals.

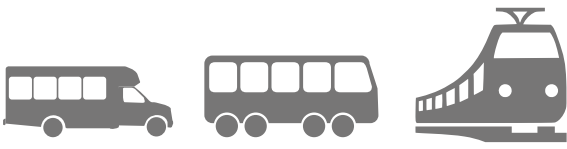
**Strategy 10.5E:** Continue efforts to find and use common interests among state agencies to better coordinate public transportation services.

**Strategy 10.5F:** Support, sponsor, or conduct research activities to assist Oregon public transportation providers to enhance their services. Research topics may include the advantages and disadvantages of different public transportation provider organizational structures, and how state laws and rules promote or inhibit efficient regional services and connections with urban public transportation systems.

## Endnotes

1. Oregon Department of Transportation. 2015. Oregon 2015 Transportation Options Plan. Retrieved from <https://www.oregon.gov/ODOT/TD/TP/Plans/TransportationOptionsPlan.pdf>.
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5. Oregon Global Warming Commission. 2017. Oregon Global Warming Commission Biennial Report to the Legislature. Retrieved from [http://www.keeporegoncool.org/sites/default/files/ogwc-standard-documents/OGWC%202017%20Biennial%20Report%20to%20the%20Legislature\\_final.pdf](http://www.keeporegoncool.org/sites/default/files/ogwc-standard-documents/OGWC%202017%20Biennial%20Report%20to%20the%20Legislature_final.pdf).
6. Dejan, et. al. 2013. "Bus Rapid Transit and Economic Development: Case Study of the Eugene-Springfield BRT System." *Journal of Public Transportation*, Vol. 17, No. 3.





## Draft Chapter 4:

# Investment Considerations

The OPTP provides policy guidance for developing the public transportation system statewide, supporting local decision making. This chapter describes several investment scenarios that illustrate a range of possible outcomes based on public transportation investment levels.

The OPTP does not direct investments. Instead, it serves as a framework to support decision making by local providers, who are in the best position to make investment decisions that reflect community characteristics and system needs. The state and federal governments assist local providers with funding and work to ensure that policy objectives are supported and regulatory requirements are met.

Informed by the OPTP's goals and policies, the investment scenarios articulate potential public transportation outcomes based on different levels of funding. They describe how the public transportation system might look and function under three different funding scenarios. One scenario considers the future under current levels of investment (including both the Keep Oregon Moving Act funding and continuing prior rates of federal, state, and local contributions), and two additional scenarios envision the system with increased levels of funding. All scenarios are rooted in OPTP vision, goals, policies, and strategies. They depict a range of public transportation futures, illustrating the connection between the level of available funding and the extent to which OPTP goals are met.

The OPTP's investment scenarios apply globally to urban and rural communities across Oregon. They describe what the transportation system could look like under different funding levels, but do not describe specific projects or investments.

## Investment Scenarios

The OPTP investment scenarios describe a continuum of services and improvements that make progress towards the OPTP’s vision, goals, policies, and strategies. The scenarios describe how the system could evolve and the results of different levels of public transportation investment. Table 4-1 summarizes the investment scenarios. The planning-level funding estimate for each investment scenario is informed by the needs analyses described in Chapter 2. The range of investment scenarios built from these analyses are intended to articulate different futures for the public transportation system, based on more or less funding. All scenarios assume that current local, state, and federal funding sources continue into the future, that they increase modestly over time to account for population growth, and that funding is available for all modes.

**Table 4-1** OPTP Investment Scenarios (2017 dollars)

|   | <b>Scenario 1:<br/>Preservation and Critical<br/>Improvements</b>  | <b>Scenario 2:<br/>Expanding Services</b>  | <b>Scenario 3:<br/>Realizing the Vision</b>   |
|---|--|--|---|
| <b>Description</b>                            | Current funding, inclusive of the Keep Oregon Moving Act, in addition to modest increases to account for population growth | Significant investment elevates public transportation across the state (equivalent to double the investment from the Keep Oregon Moving Act) | Additional investment funds most public transportation needs                                    |
| <b>Estimated change in funding from today</b> | Modest increase to keep pace with population growth  | +\$200 to +\$300 million per year, increasing with population growth over time<br><br>(1.3 to 1.4 times current investment)                  | +\$950 to +\$1.2 billion per year by the year 2045<br><br>(2.3 to 2.6 times current investment) |

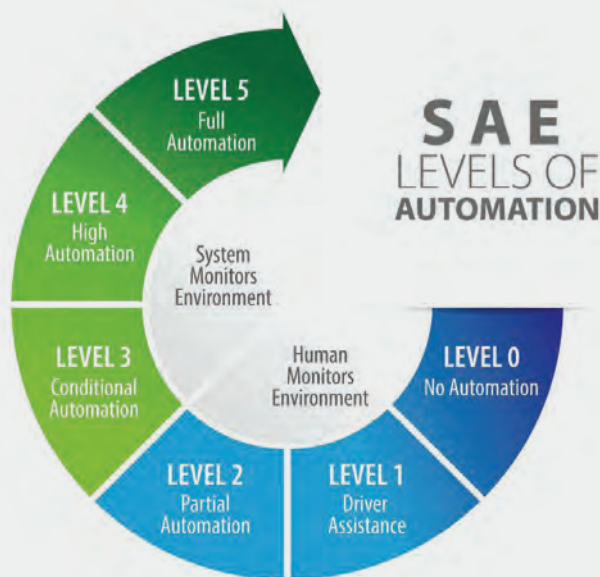
Public transportation funding is subject to uncertainty, including the investment made by the Keep Oregon Moving Act. Economic downturns can have dramatic effects on government revenues of all kinds, including employer and employee payroll taxes and property taxes, which represent substantial sources of public transportation revenue. Communities often cannot respond to increasing demand for service due to the volatility of local funding sources. In addition, federal funding levels fluctuate over time. Federal dollars are a major source of public transportation capital improvement funding in both urban and rural areas; however, programs and funding levels may change. Similarly, under each investment scenario, a steady and constant increase or decrease of funding is not likely. Rather, the scenario outcome descriptions assume an average change in funding over the planning horizon to year 2045.

Technology trends present major opportunities for making Oregon’s future public transportation system more efficient and easy to use. Like all states, Oregon is considering possible impacts of future changes that will affect the





transportation system in general, and public transportation specifically. New and rapidly expanding services such as ridesharing and carsharing, vanpools, links to multiple modes, and TNCs, will impact public transportation services. Emerging technologies, such as autonomous and connected vehicles, may provide new means of delivering transit in a safe, user-friendly, and cost-efficient way. New technologies will affect the types of public transportation services offered by the private and public sectors and desired by the public. Already, TNCs are bridging the first and last mile to public transportation in some areas, and carsharing and bikesharing services are increasingly used as part of multimodal trips that include public transportation. The scenarios described in this section contemplate these changes to the extent possible. Regardless of technology and service changes, public transportation will continue to be needed, desired, and beneficial to Oregonians.



One change we can expect from new technology is the introduction of new degrees of automation, including for transit vehicles. The Society of Automotive Engineers (SAE) has identified a spectrum of six levels of automation, from Level 0, in which there is no automation whatsoever, through Level 5, or full automation under all conditions.<sup>1</sup> These levels describe who is monitoring the driving and to what degree: a human or the system. This diagram shows the six levels of automation.

Some transit vehicles have been automated for a long time, but they tend to run on tracks entirely separated from other vehicles.<sup>2</sup> Introducing automated cars and transit vehicles that can operate in mixed traffic may have both positive and negative effects, such as:

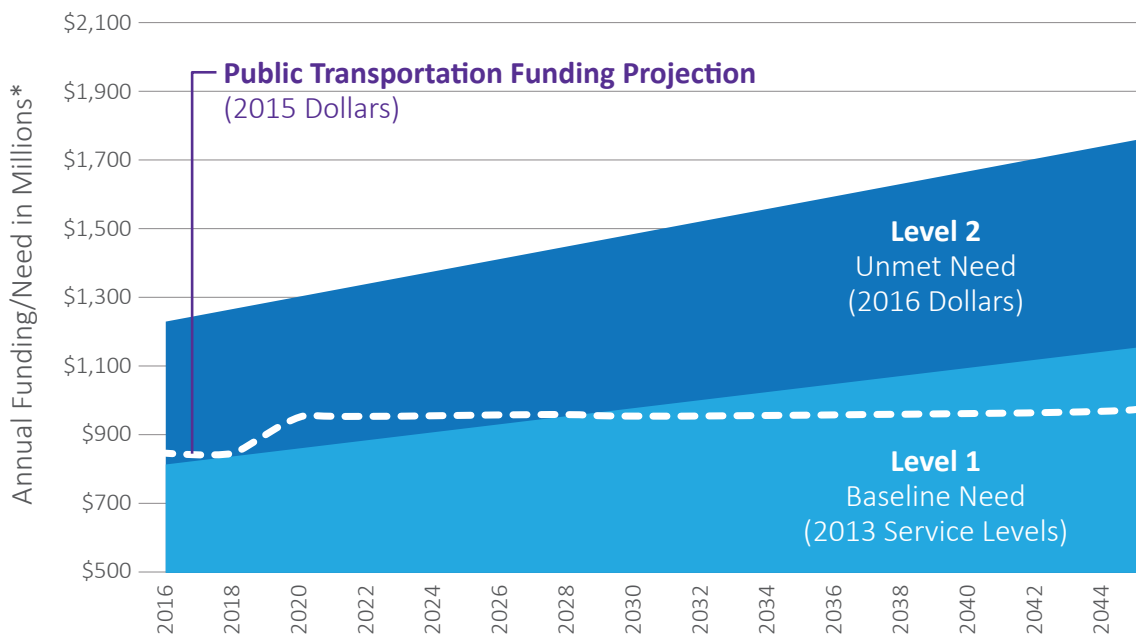
- Providing new transportation options—potentially supporting transit by delivering new riders and making transit stations accessible to more people, while also introducing services competitive with transit.<sup>3</sup>
- Reducing the cost of providing transit service—enabling more frequent service or expanded service areas and hours of service. With these benefits, impacts to workers also need to be considered, and if a conductor or other guide is still preferred, then cost savings will be less.<sup>4</sup>

## Scenario 1: Preservation and Critical Improvements (Baseline Scenario)

Funding allows for preservation of the existing system and some improvements

Oregon’s population is growing rapidly, adding tens of thousands of new residents each year. Current funding, inclusive of the funding provided by the the Keep Oregon Moving Act, will allow providers to improve service and keep up with population growth for about 10 years; then, demand from expected population growth will start to outpace funding from the Act (Figure 4-1). The increases in public transportation service funded through the Act will particularly benefit those who are transportation disadvantaged by providing more routes, more frequent service, more days of service, and potentially additional routes serving more areas.

**Figure 4-1 Oregon Public Transportation Funding and Needs**



*\*All figures are corrected to 2016 purchasing power*

**Scenario 1 could result in the following outcomes:**

### Public Transportation Service

#### Urban

**Modest service increases.** Current funding, plus increases to account for population growth, will allow for modest service increases in step with population growth. In the past, funding for public transportation has not kept pace with population growth, meaning that many providers will use funding from the Keep Oregon Moving Act simply to “catch up” to the levels of service their expanding communities require. Providers can implement more frequent service on some existing routes, a limited number of new routes, or expand service hours or days of service.



**Extended service hours, more frequent service.** Service hours and frequencies can be increased on existing routes to account for the evolving needs of a growing population. This may also mean a change from one type of service to another in small urban and rural areas: for example, fixed routes may replace today's demand response service in some small, urban communities, and enhanced bus service may be introduced in busy corridors in medium-sized urban areas.

## Rural

**Expanded demand response systems and improvement to fixed route service.** Days or hours of service for demand response systems in rural areas can be expanded. Demand response systems may be able to purchase additional vehicles and hire more drivers to decrease response times to rider requests. Fixed routes, which in rural areas generally operate several round trips each day, can be increased to hourly throughout the day, the days and times service is offered can be expanded.

## Intercity

**Better connections between systems and regions.** More funding can allow for more staff time and resources dedicated to linking the state's local public transportation systems. Enhanced connections can include timed transfers between different systems, more transfer points between systems, and resource sharing among systems to deliver needed regional connections that are currently not provided.

**Minor increases in regional and intercity services.** With this scenario, regional and intercity bus services supplied by local providers will see minor increases in frequency or routes. State funding for the Amtrak Cascades service will likely remain static, while additional efforts are made to increase ridership. Significant capital investment in Amtrak Cascades service is unlikely. While the Keep Oregon Moving Act does not provide additional funding for ODOT-funded Amtrak Cascades or POINT services, some increase in POINT service may be possible by reallocating existing resources.

## Technology

**Some investment in new vehicles and/or public transportation technologies.** Under this scenario, providers can make modest investments in existing or new technologies. For example, real-time travel information for riders can be made more widely available in medium-sized urban areas, and efare programs can be expanded to more systems around the state. Smaller providers that have not yet implemented automatic passenger counters (APC) or automatic vehicle locators (AVL), for example, can implement these technologies to aid service planning and delivery. Additionally, some investment will be made in information technology and partnerships with public agencies and private companies such as TNCs to better enable first and last mile access.

## ODOT's Greenhouse Gas Strategic Transportation Energy Planning model (GreenSTEP) model reinforces the benefits of public transportation investment

ODOT developed GreenSTEP to estimate and forecast the effects of various policies and other influences on the amount of vehicle travel, the types of vehicles and fuels used, energy consumption, and environmental impact. This model supported development of the Statewide Transportation Strategy (STS): A 2050 Vision for Greenhouse Gas (GHG) Emissions Reduction report, which found that public transportation use was essential to reducing GHG emissions.<sup>5</sup>

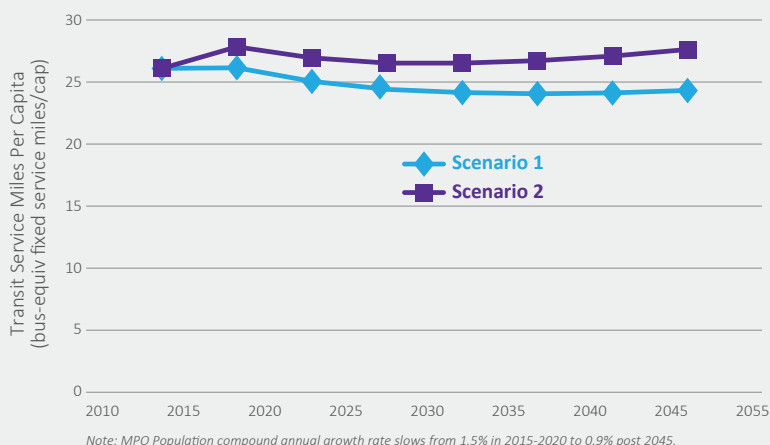
GreenSTEP estimates trips by transit, walk, and bicycle; and vehicle ownership, vehicle travel, fuel consumption, and GHG emissions at the individual household level. Its analysis is limited to six of Oregon's metropolitan areas that represent the large majority of trips by transit in the state. One input into the model is the participation of households in transportation options programs that support public transportation use. These transit supporting programs include home and work based TDM programs, active transportation investments, carsharing, and parking cash-out programs.<sup>6</sup>

ODOT used the GreenSTEP model to evaluate the potential benefits of funding at the levels of Scenario 1 and 2 compared to the funding level prior to the Keep Oregon Moving Act, passed in 2017. Assumptions included moderate participation in supporting transportation options programs. The GreenSTEP model analysis builds from the inputs assumed in the ODOT STS report.

### Results

The GreenSTEP results support other analysis showing that the amount of public transportation service in Scenario 1 (the current level of funding including Keep Oregon Moving Act funds) falls below today's per capita service level in about ten years. Scenario 2 (where twice the amount of funding for public transportation provided by the Keep Oregon Moving Act is assumed) allows the per capita service level to stay above today's level through the plan period. The GreenSTEP analysis found that:

- Transit trips per capita increase 7.3% in Scenario 1 and 16% in Scenario 2
- Household GHG emissions per capita are reduced by 0.7% in Scenario 1 and 1.5% in Scenario 2
- Autos owned by households decline by 0.2% in Scenario 1 and 0.5% in Scenario 2
- Households without cars increase by 1.8% in Scenario 1 and 3.9% in Scenario 2
- Daily VMT per capita decreases by 0.9% in Scenario 1 and 1.8% in Scenario 2



**Expansion of efare.** Efare is a transformational technology for riders and providers alike, allowing for a more seamless fare payment system, more equitable fare assessments, integration of fares between providers, and better data collection. Efare, presently available on the TriMet and Rogue Valley Transportation District (RVTD) systems, may be expanded to other public transportation systems, including other medium-sized urban, small urban, and county systems. The smallest systems, such as those serving rural Oregon counties, may not implement efare.

## **Fleet**

**Equipment generally maintained in good repair.** This level of funding would allow providers to keep more of their vehicles and other infrastructure in good repair. Most equipment would not need to be kept in service beyond its useful service life. Providers likely would have an opportunity to invest in low- or zero-emission vehicles as they expand and replace their fleets.

## **Communication and Coordination**

### **More resources devoted to coordination, planning, and communication.**

Providers can increase engagement with the jurisdictions and communities they serve to identify opportunities for new connections to neighboring systems, plan jointly for future service, and respond to community needs. Local providers would engage in more near- and long-term planning for service maintenance, preservation, and expansion. Local providers will have resources to commit to communication, education, and outreach to riders, extending the reach of these campaigns in communities.

**More one-stop information available.** Under this scenario, staff and funding resources could be dedicated to creating and maintaining a centralized source of public transportation information in Oregon. While short of the resources required to include all systems in the state, this level of funding would enable riders to get information about multiple regions at a single online location, as well as at a call center and/or strategically placed “brick and mortar” locations.

## **Scenario 2: Expanding Service**

### **Significant investment elevates public transportation service across the state**

This scenario would build upon the investment from the Keep Oregon Moving Act and result in substantial expansion of public transportation service in communities across Oregon through the OTPP planning horizon (2045). Providers would be able to increase service frequency, the types of services available, and the days and hours that service is offered throughout the state. Context-specific service increases would mean that public transportation can meet many daily travel needs for Oregonians.

For example, small urban areas (most of which today have only demand response and limited fixed route service) would have more fixed route service that reaches further into communities with increased service frequencies. Increased public transportation service will benefit those who are transportation disadvantaged by providing more routes, more frequent service, more days of service, and potentially additional routes serving more areas.

## What happens if funding declines?

Public transportation funding is subject to increases and decreases based on the funding source; sources include local, state, federal, and fare revenue. Any of these sources may experience declines due to changing conditions. State funding may decline temporarily due to economic recessions that affect payroll tax receipts, for example. ODOT and local providers in most cases do not have control over these risks. When funding declines, service reductions and other impacts could occur. Potential impacts from reduced funding include:

**Services are reduced.** Providers would likely strive to maintain overall service to the extent possible, but local providers would have to make some service reductions as they seek to preserve core services.

**Service is limited in rural areas.** Rural providers particularly depend on federal and state funding and operate with thin budgets. Stagnant or reduced funding would likely significantly impact rural providers, because they do not typically have substantial farebox revenues or other local revenues to support service.

**Regional connections remain unchanged or experience service declines.** The ability of public transportation providers to supply regional services, such as connecting to the neighboring system or the next larger town, would likely decline in urban and rural areas alike.

**Amtrak Cascades and POINT experience a reduction in service.** POINT service depends on federal funding, while Amtrak Cascades depends on resources from the state's general fund and farebox revenues, making both services vulnerable to declines in funding. Even a temporary reduction or interruption of Amtrak Cascades service would likely make it extremely difficult to resume service in the future.

**Older equipment is kept in use longer.** Providers will need to keep older equipment in service longer, increasing the likelihood of equipment breakdowns, service disruptions, and increased maintenance costs. In addition, they would likely forego implementing new technologies, such as efare, or fleet technologies, like automatic passenger counters.



**Scenario 2 could result in the following outcomes:**

## **Public Transportation Service**

### **Urban**

**Substantial service expansion.** With this level of funding, urban providers in communities around the state will be able to improve service in multiple ways, including longer service hours, more frequent service on existing routes, new routes and geographic coverage, and new vehicles and vehicle types. This could include bus rapid transit, or enhanced bus-priority investments in large- and medium- sized urban areas.

### **Rural**

**Demand response service available in most rural locales.** Most rural residents of Oregon would have access to a demand response public transportation system. Providers would be able to invest in sufficient vehicles and more drivers to provide improved response times to riders.

**Limited fixed route service between and within communities.** Fixed route service would replace demand response service between population centers in rural areas. Some new routes could serve commuters, while others might run at hourly service frequencies during the week.

### **Intercity**

**Increased regional and intercity service, including major rail capital investment.** Local providers can provide additional regional service for their riders and visitors that is well coordinated with neighboring systems. Intercity bus, such as POINT, would be expanded on existing routes, and the state could add several additional routes to serve intercity corridors not well served by local providers or the private sector. Increased funding may allow continued investment in Amtrak Cascades. In this case, the Amtrak Cascades service would see increased investment in the Willamette Valley rail corridor to begin implementing the preferred alternative described in the Environmental Impact Statement for the Oregon Passenger Rail project.<sup>7</sup> Investments may include two additional trips on the corridor and improved sidings that allow for more opportunities for trains to pass one another, resulting in better on-time performance.

## **Agency and Rider Experience**

### **Technology**

**Further steps toward fare integration.** This scenario would increase coordination among many public transportation providers in Oregon and take significant steps toward an integrated fare system, including fare amounts, instruments, and purchasing systems.

**Further expansion of efare to most public transportation systems in Oregon.** Efare could be expanded to smaller systems, especially those in rural areas, to facilitate easy fare payment for many Oregonians.

**Expansion of new and emerging technologies.** More providers may implement technologies such as Wi-Fi on transit vehicles, while more communities could develop real-time traveler information systems and other technologies that improve the rider experience. There would be more opportunity to collaboratively plan and implement creative solutions to first and last mile access through technologies and partnerships with private providers, bikeshare and carshare companies, and TNCs.

### **Fleet**

**Major vehicle fleet improvements.** Most new public transportation vehicles would be low- or zero-emissions. Greater funding would enable new vehicles to be equipped with current technology in all communities, including automatic passenger counters (APCs), GPS, and other emerging technologies that prove useful.

### **Communication and Coordination**

**Substantial benefits to providers and riders resulting from coordination, planning, and communication.** Riders would be able to transfer between urban public transportation systems with ease at multiple connection points, including shared facilities and mobility hubs. New public transportation service would be closely planned and coordinated with local jurisdictions, private developers, and others to ensure that the interests of all are balanced. Providers would have sufficient resources to devote to rider education, outreach, and communication, as well as increased coordination with transportation options services, to facilitate a seamless whole trip experience in large urban areas, with benefits realized in smaller urban and rural areas as well.

## **Scenario 3: Realizing the Vision**

### **Additional investment funds most public transportation needs**

This aspirational scenario builds upon the others and represents significant progress toward the vision articulated by the OPTP and further described in its goals, policies, and strategies. This scenario is equivalent to the level of investment envisioned under the Unmet Need from the OPTP Needs Assessment. While not every need would be met, most trips that riders want to take on public transportation would be served, systems and fares would be closely coordinated throughout the state, and integrated information about public transportation services would be easily available in a single location. This scenario also represents a very significant investment above current funding levels and would substantially expand public transportation services in nearly all areas of the state, both urban and rural. Providers would grow and expand in different ways that reflect the unique circumstances of the communities they serve. Scenario 3 would facilitate the highest levels of public transportation service and, therefore, attract new riders, provide a great benefit to those who rely on public transportation and have few other options, and serve visitors and tourists throughout the state.





Many potential avenues are available to raise revenue and leverage resources to achieve this scenario. Federal, state, and local revenue increases would be required to achieve the improvements to the system described. Partnerships at all levels of government—and between the public and private sectors—would be important to leveraging funds and improving service. The mix of new and increased fund sources and new partnerships would likely be different for each provider, reflecting their unique characteristics and decisions made in their communities.

### **Scenario 3 could result in the following outcomes:**

#### **Public Transportation Service**

##### **Urban**

**Major capital investments, including separated transitways and new high capacity transit.** High capacity transit and improvements that separate transit vehicles from traffic are expanded where needed throughout urban areas in Oregon. Additional corridors where transit vehicles are given priority treatments, bus-on-shoulder facilities, and/or separated transitways (rail or bus) would further increase capacity in congested corridors and result in decreased travel times and public transportation options less affected by congestion. Currently, high capacity transit is present only in Portland and Eugene-Springfield; under this scenario, other urban communities would implement high capacity transit services to serve congested or heavily travelled corridors.

**Service with excellent regional connections.** Under this scenario, riders would have an almost seamless experience on the public transportation system. Riders could transfer from one local public transportation system to another, within a public transportation system, or between modes using convenient and effective connections, shared facilities, and mobility hubs. Fare integration, timed transfers, and increased investment in coordination and collaboration would make this possible. More public transportation services are available more days of the week, later in the evening, and earlier in the morning. Mid-day frequencies are increased, and additional services are available in rural areas, including an expansion of fixed route service.

##### **Rural**

**Most travel needs met by rural public transportation services.** While rural areas of Oregon are unlikely to see the types and amount of public transportation service that urban areas achieve, under this scenario, nearly all rural residents would have access to a demand response or fixed route system to enable local trips. Connections between systems would allow rural residents to access urban areas with minimal transfer time and delay.

## Intercity

**Higher-speed passenger rail service developed.** In addition to the regional and intercity improvements described for Scenario 2 (Expanding Service), funding at this level available for intercity rail investment could result in fully developing the preferred alternative for higher-speed passenger rail in the Willamette Valley, including the planned six additional trips per day, improved tracks and sidings, and upgraded signaling systems.

### Agency and Rider Experience

**Statewide one-stop information available.** Significant staff and funding resources would be dedicated to creating and maintaining a single centralized source of public transportation information in Oregon. Information about systems throughout the state would be available in a single online location and call center, as well as at strategically placed “brick and mortar” locations and kiosks.

### Technology

**Full fare integration achieved.** This scenario would result in a universal efare system across most or all public transportation providers in Oregon. Riders would be able to seamlessly transition between and within public transportation systems in the state using a common fare system and shared efare payment technologies.

Public transportation technologies widely implemented on all systems. New technologies would be implemented in smaller urban areas and on rural systems to a much greater extent than Scenario 1 or 2, aided by aggressive implementation by the large urban providers.

### Fleet

**Fleet fully modernized to include low- and zero-emission vehicles.** This level of investment would allow the public transportation fleet to be fully converted to low- and zero-emission vehicles, helping the state achieve other state goals around greenhouse gas emissions reductions.

### Communication and Coordination

**Local providers closely coordinated to achieve a nearly seamless riding experience.** This scenario would permit providers to devote significant resources to communicating and coordinating with other providers throughout the state. Fare integration, seamless scheduling, and other improvements would allow riders to complete all trips with ease. Integration with expanded first and last mile solutions, such as car share, taxis, TNC services, park and rides, and bike share, would allow riders to switch between these services to complete their trips seamlessly. Strategic collaboration between public agencies and private partners, including TNCs, would create opportunities for new communication methods and improved service.



## Conclusion

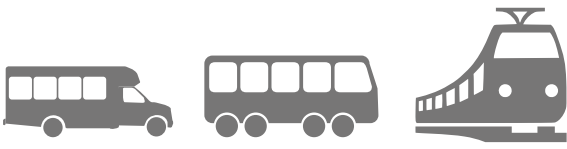
The OTP's vision describes a future where public transportation is available to meet Oregonians' daily travel needs in communities across the state. However, achieving the vision will require significant investment and cooperation. Today's level of available funding will not adequately support implementing the OTP policies and strategies. In the context of this reality, the investment scenarios provide a snapshot of how the public transportation system might look given progressively increasing levels of investment. They describe possible paths for incremental development of the system. In concert with the policies and strategies, the investment scenarios are intended to serve as a resource and guide for policymakers and public transportation providers as they make investment decisions.

In combination with the goals, policies, and strategies, as well as an understanding of public transportation needs and funding, the investment scenarios set the stage for implementation discussed in the next chapter.

## Endnotes

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5. More information on the Statewide Transportation Strategy can be found here: <https://www.oregon.gov/ODOT/TD/OSTI/pages/sts.aspx>.
6. More information on the design and development of the GreenSTEP model can be found here: <https://www.oregon.gov/ODOT/TD/TP/GreenStep/GreenSTEP%20Model%20Overview.pdf>.
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## Draft Chapter 5: Moving Forward

Working together is critical to achieving the OPTP vision. Local providers, the state, cities, counties, regional governments, tribes, private transportation operators, and other public transportation stakeholders all have different and important roles to play in OPTP implementation. The participation of all these stakeholders will be essential to the success of the OPTP.

The ideas and activities in this chapter begin the long-term process of implementing the OPTP with these partners in mind. Implementation activities reflect the current system conditions described in Chapter 2, build on the policies and strategies in Chapter 3, and are informed by the investment opportunities described in Chapter 4. These activities move the public transportation system toward the OPTP vision and providing the level of public transportation services that Oregonians need and desire to meet their everyday needs.

The activities described in this chapter are not all the implementation activities that will be undertaken; rather, they provide a starting point and represent many possibilities that could be explored. For example, technology is rapidly changing and will present new opportunities and challenges throughout the life of this plan. Technology impacts are an important theme that informs the OPTP and its implementation, as there is potential for major changes affecting not only the public transportation system, but also how we think about, operate, and experience transportation in general.

This chapter includes key initiatives; these represent implementation areas that affect multiple OPTP goals and policies, are critical to success of the plan, and are in need of immediate work. ODOT will start work on these following plan adoption; most will require coordination and collaboration with a variety of partners. ODOT will also develop its implementation work plan to guide state activities that move public transportation towards the OPTP vision. The work plan will define specific implementation actions for the agency and clarify roles and responsibilities for different aspects of the OPTP within the agency. It also will show items that can be addressed in the short, medium, and long-term.

Coordination, cooperation, and collaboration between the state, local providers, cities, counties, and other public transportation stakeholders is the most critical element to implementing the OPTP and realizing the OPTP's vision.

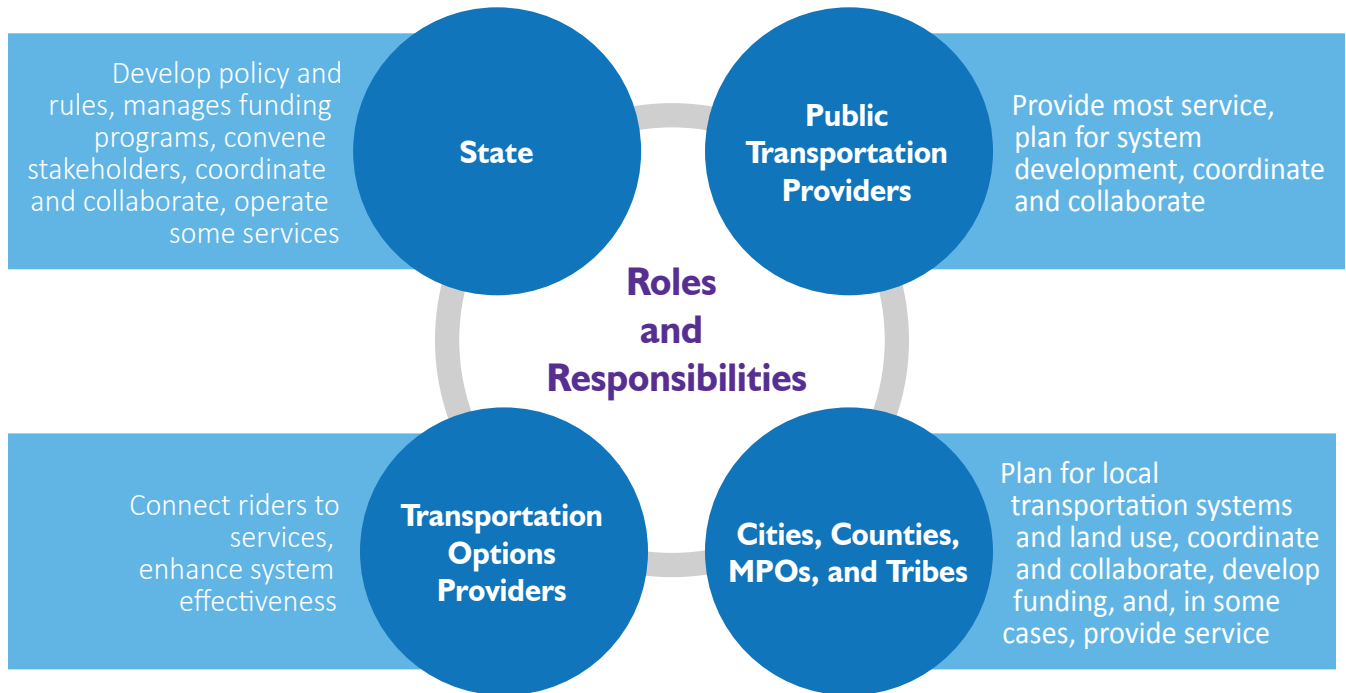
## Roles and Responsibilities

The OPTP’s policies and strategies, and their implementation, apply to multiple state, regional, and local transportation agencies unless otherwise specified. Responsibilities for implementing policies and strategies may shift over time, as funding, policy, or organizational responsibilities evolve.

The OPTP’s vision and goals will only be realized through cooperation among all those with a stake in public transportation. The implementation elements discussed later in this chapter provide a blueprint for how these stakeholders can work together and individually to further progress. This section considers each stakeholder’s role in plan implementation as each has different responsibilities for planning, funding, developing, and operating transit services.

The three major participant groups are the state (especially ODOT), public transportation providers, and tribes and local governments, including cities, counties, MPOs. These three groups are the primary public agencies that make public transportation funding, prioritizing, and development decisions. Although these groups are the focus of the OPTP, transportation options providers, social service agencies, and private sector participants are also critical. The OTC and state legislature also play a direct role in allocating funding and setting policy for the transportation system as a whole. Figure 5-1 describes primary implementation roles and Figure 5-2 describes ongoing implementation activities for ODOT and partners.

Figure 5-1



**Figure 5-2 OPTP Implementation Next Steps**

| ODOT   | Partner Agency and Public Transportation Provider Implementation  |   |
|--|---|---|
| <ul style="list-style-type: none"> <li>• Key Initiatives</li> <li>• Funding Programs</li> <li>• Convening, Coordination</li> <li>• Performance Monitoring</li> </ul> | <ul style="list-style-type: none"> <li>• Policy Change</li> <li>• Pilot Projects</li> <li>• Communication, Coordination, and Collaboration</li> </ul> | <ul style="list-style-type: none"> <li>• Keep Oregon Moving Act Implementation</li> <li>• TSP Updates</li> <li>• TDP Development and Updates</li> <li>• Performance Monitoring</li> </ul> |

ODOT will begin by developing a work plan for the agency that will describe more specific tasks and identify short-, mid-, and long-range activities. Successful OPTP implementation will require ongoing efforts by ODOT, its state, regional, local, and tribal agency partners, and public transportation providers. Figure 5-2 describes examples of ongoing efforts.

### State Roles

ODOT is the primary public transportation participant at the state level, overseeing funding programs and serving as a convener and facilitator of public transportation stakeholders. ODOT Rail and Public Transit Division (RPTD) performs the following public transportation roles:

- Establishes policy and rules for state funding programs
- Distributes state and federal funds
- Provides training and assistance to providers
- Operates specific services, including the intercity POINT and the Amtrak Cascades services

ODOT has a further important role as it convenes and facilitates conversations and collaboration among public transportation stakeholders. As a transit and infrastructure owner, as well as a stakeholder with a statewide perspective, ODOT has a unique role in bringing stakeholders together.

Other units of ODOT work with and provide support to RPTD and transit providers, including the Transportation Development Division units and Highway Division staff in every ODOT region. ODOT owns and maintains roadway, highway, and other transportation infrastructure across the state. As public transportation typically operates on roads and highways, ODOT is an important partner and stakeholder in public transportation statewide.

ODOT can use its infrastructure, program, and funding experience to develop statewide transit connections and strategic transportation hubs. ODOT will also support local initiatives by contributing to or advising pilot projects in line with state goals or undertaking some tests and pilots itself, particularly those that affect its areas of responsibility, such as highway and signal design.

## Tribal Government and Local Agency Roles

Tribes and local agencies including public transportation providers, cities, counties, and MPOs have related and often overlapping roles; for example, any of these may have some land use responsibilities or be a transit provider itself. Collaboration among tribes, local agencies, and providers is critical to meeting the OPTP's vision and goals, with respect to the fundamental link between land use and public transportation and other connections. In addition, clients of social and health service agencies are strongly affected by land use and transportation decisions that can help or hurt access to these important services. Strengthening relationships between providers, local governments, tribes, and social and health services agencies is vital to implementation.

ODOT can help initiate and facilitate these conversations so that they become a regular agency practice in the future.

## Public Transportation Providers

As the owners and operators of most public transportation services across the state, public transportation providers are naturally central to OPTP implementation. Coordinating with agencies, employers, service providers, ODOT, and many others is a core role of providers. This role also includes participating in state, regional, and local planning processes; reviewing and being informed about existing plans; and inviting local government and neighboring providers to participate in planning.

Providers may also work with ODOT, cities, and counties to maintain, develop, and enhance public transportation infrastructure, including stops, shelters, pullouts, transit priority treatments, accommodations for those with disabilities or who use mobility devices, and safe crossings. Providers must coordinate with these agencies, because they typically own the streets, sidewalks, and bicycle facilities so critical to accessing transit.

Partnerships are supported and encouraged by the OPTP policies and strategies. Public transportation providers can experiment with different partnership arrangements that could allow for sharing information, more efficient service provision, or other improvements that benefit riders. Providers can pursue partnerships including the following:

- Among transit providers in an area for shared outreach and a single website or payment system
- With transportation options providers to better integrate these services with public transportation
- With social service agencies to find the most efficient way to provide service



The Oregon Transportation Options Plan (TO Plan) provides a state vision and goals for fostering a variety of transportation options for meeting travel needs. The TO Plan and the OPTP support one another; the TO Plan advances strategies like individualized marketing campaigns and incentive programs to encourage use of transportation options, including public transportation.





- With large institutions such as employers, universities, or hospitals to
  - Understand their transit needs, explore opportunities to serve them efficiently
  - Coordinate siting decisions for major new campuses and facilities
  - Pursue co-funding opportunities, for example a transit agency and the institution together funding sufficient service to the campus
- With private companies, for example, to find solutions to first and last mile problems

Public transportation providers may be in the best position to take advantage of new partnership opportunities to further public transportation goals as they arise.

### **Cities, Counties, MPOs, and Tribal Governments**

These agencies are responsible for understanding and planning for transportation and land use priorities of their constituencies. Their decisions affect how and where transportation infrastructure is built and the type and intensity of land use in communities, both critical to the provision of public transportation services. A theme throughout the OPTP is that of coordinating land use, transportation infrastructure, and public transportation services to achieve desired outcomes for all. Coordination happens to varying degrees today and must be strengthened. These agencies can then use their planning and infrastructure responsibilities to support public transportation and provide travel options to their residents and visitors. In return, communities will benefit from more useful and efficient public transportation services. Following are specific coordination efforts to address:

- Referring to providers' plans and statewide plans, including the OPTP to ensure consistency
- Designating and supporting public transportation priority corridors in local plans
- Developing and providing infrastructure that supports and provides access to transit, including streets, sidewalks, crosswalks, and other intermodal connections
- Participating with the state and the providers to identify and develop mobility hubs where multiple services meet, and regional connections
- Leading or supporting pilot projects that test services, partnerships, and technologies that improve travel information and choices, access, and other needs

## Transportation Options Providers

Transportation options providers deliver services that help people find and use carpools, vanpools, shuttles, transit, and other alternatives to driving alone. Clients and customers of transportation options providers are often public transit riders too. Most public transportation agencies offer similar services focused on helping people access transit, including call centers for travel information and travel training to show people how to ride. These services are often called “mobility management.” Transportation options and mobility management are related services with overlapping goals. Working together, transportation options and transit providers can offer comprehensive services and more effectively implement travel choices, promote alternatives to driving alone, and bring new riders to transit.

## Planning Together to Implement the OPTP

Working together is a key theme of OPTP implementation and is essential to developing a seamless and effective public transportation system. As noted in Chapter 1, there are requirements for the various transportation plans to be consistent; however, transit plans are not always included in those requirements. Figure 5-3 illustrates the many opportunities for public transportation to interact with existing planning processes, including the following:

- Transportation system plans (TSPs) guide local agency transportation investments for all modes and must have a public transportation element.
- Regional transportation plans (RTPs) articulate regional investment priorities including transit capital investments.
- Transit development plans (TDPs) are strategic plans that describe transit’s current conditions and its further development.
- Coordinated Plans identify gaps and opportunities for improvement in delivering coordinated transportation services.
- Public transportation improvement plans are required by state legislation to be eligible for new funding. These list investments and how they address various program goals.

Figure 5-3 shows how these plans can and do inform one another. The right side of the chart, OPTP through construction and maintenance, shows the relationships among plans as required by Oregon rules and demonstrates the requirement that each plan be consistent with those on levels above it. It also shows how plans then inform programs and budgets as well as implementation and operations.

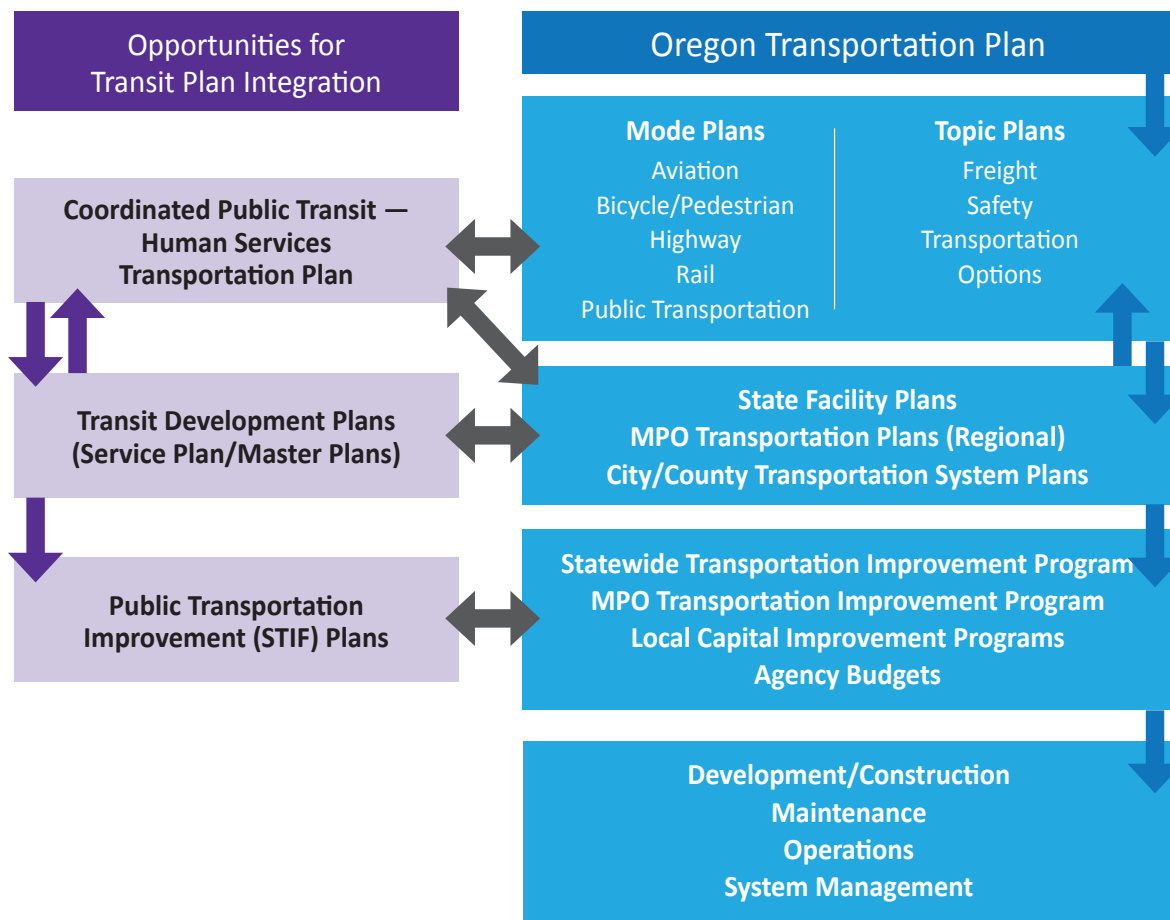
The left side and middle arrows of the chart show opportunities for integrating transit plans with the required transportation plans. Coordinated Plans are required by FTA and public transportation improvement plans are



required by transit funding legislation in Oregon. TDPs are not required, but are extremely helpful to transit agencies, local governments, and ODOT too. Following the new relationships added in this diagram would represent best practices for integrating public transportation in planning efforts.

The OTP and the OTPP recognize the differences in needs and complexity of communities. An urban MPO has very different needs to address than a rural county or small city. Policies and strategies in statewide plans are designed so they can be applied in context-specific ways given a community's unique needs. Communities should also consider which plans are needed and whether any can be combined. For example, a TDP might include an element that is the coordinated plan or, as TSPs should include a transit element, the TDP could be that transit element.

**Figure 5-3**



## Elements of Implementation

The OPTP is a statewide plan that applies to all transportation agencies and the public transportation service providers. The plan informs other public agencies and transportation decision makers, such as tribes, cities, and counties, as well as other organizations important to public transportation, such as social services organizations, private transportation providers, and health care organizations. Successfully implementing the OPTP will take all of these participants. The implementation elements described below reflect different and overlapping responsibility and authority of affected agencies, demonstrating the need to collaborate and coordinate efforts.

The OPTP will take time and effort to implement. The plan's policies and strategies require collaboration to be effective, and many of them require ODOT, local government, and stakeholder commitment over the long-term. Implementation will occur stepwise as plans are updated, laws and rules change, and funding is allocated to different projects, services, and programs. The OPTP is designed to support a wide variety of public transportation activities and to allow the state, local providers, and others to respond to new opportunities and emerging priorities.

**Public involvement and consultation**—Oregon has a long history of effective involvement and consultation with the public and stakeholders to develop plans that represent diverse community needs and perspectives. Public involvement occurs throughout the planning process, including decision making and monitoring results. Public forums, whether online or in person, provide opportunities for Oregonians to discuss issues and identify priorities and for agencies to share information, receive feedback, and take advice. Public transportation services reflect the unique needs of individual communities, making public involvement and consultation crucial to OPTP implementation.

**Oregon's planning framework**—Oregon's statewide planning structure promotes consistency between state, regional, and local plans. The TPR requires considering all modes, supporting integration of modes into one cohesive transportation system.

**Inclusive planning processes**—Public transportation is provided by a diverse array of providers, but only those that are operated by a city or county are required to be included in transportation system plans. Implementing best practices such as those shown in Figure 5-3 will support progress towards the OPTP vision. Including public transportation operators in local plans and local agencies in transit planning will help support integrated services that support multiple goals.

**Cooperation between ODOT and MPOs, cities, counties, and Area Commissions on Transportation (ACTs)**—Most transportation in the state, aside from highways and rail, is managed at the local and regional level. Cooperative relationships between ODOT and MPOs, cities, and counties increase opportunities to implement OPTP goals, policies, and strategies in regional and local decision making. ACTs, comprising a variety of local officials,



help guide the selection of state transportation investments and can reflect statewide planning priorities in local investment decisions.

**Federal, state, local, and tribal coordination and partnerships**—The OTP, with the OPTP and other topic and mode plans, advocates for increased planning coordination at the federal, state, regional, and local levels. OTP Goal 7 and OPTP Goal 10 address coordination, communication, and cooperation; these highlight the requirement and benefits of aligning interests, removing barriers, and implementing innovative solutions to enable the transportation system components to function as one system.

**Coordination among state agencies**—State agencies, including ODOT, the Oregon Health Authority, and the Departments of Human Services, Veteran Affairs, Education, Energy, and Land Conservation and Development, regularly coordinate programs. For instance, transportation and growth management is a joint program of ODOT and the Department of Land Conservation and Development; field staff from both agencies work with local governments to help them link their transportation planning with land use decisions. The Department of Energy promotes energy-efficient transportation and administers energy incentive programs that can support the transition to more fuel-efficient public transportation vehicles.

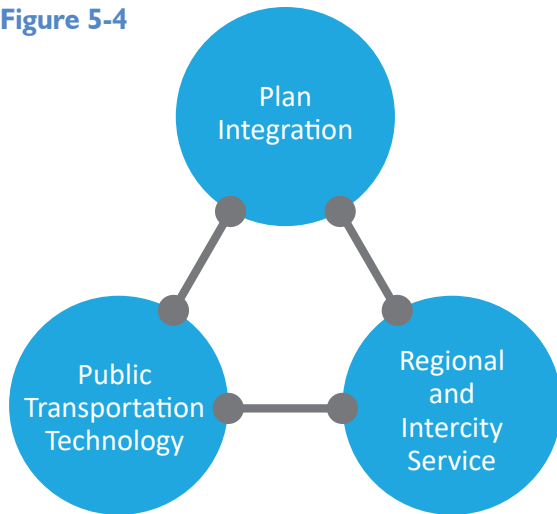
**Legislative action**—Some opportunities or challenges that arise may require legislative action to address. Through recent legislation, public transportation has a new dedicated source of state funds that will boost progress toward the OPTP vision. Implementing the OPTP over the long-term may require further legislative leadership to ensure stable funding, address challenges, or take advantage of new opportunities.

**Public-private partnerships**—Developing innovative partnerships between public and private sector transportation providers and other private parties can leverage resources and advance shared goals. Seeking opportunities to create system efficiencies by working with private providers can help bridge first and last mile connections and enable more riders to easily use transit.

**Investment priorities**—State, regional, and local plans guide selection of investments in transportation system and service improvements. The selected projects or other investments are shown in local jurisdictions' capital improvement programs, and the service plans of transit providers. Both the original long-term plans and the investment programs are approved by the agencies' governing bodies. ODOT's role in managing state and federal funds provides a further opportunity to support investment in developing and integrating the various modes and facilities including highways, public transportation, bicycling and walking, and other transportation options.

For ODOT, the OTC approves projects and other investments through the STIP, the 4-year investment program for ODOT. These decisions are based on recommendations from ACTs, MPOs, local governments, and other stakeholders. Similarly, the OTC will approve the public transportation improvement plans required for distribution of monies from the new Statewide Transportation Improvement Fund (STIF).

Figure 5-4



## Key Initiatives

Key initiatives respond to important themes emphasized by stakeholders throughout OTP development. They are broad initiatives that affect multiple OTP goals, policies, and strategies; they are critical to OTP success and require further work and development to implement. The key initiatives are activities ODOT can initiate, although most will require coordination with other state, local, and regional agencies and stakeholders. Work on the key initiatives will be further defined and started in the short-term, but ultimately, they will require long-term effort to fully realize. The timing, level of effort, and order of activities undertaken may change depending on agency priorities or resources. Not all activities described below are ones that ODOT will conduct, nor do they reflect all state and local OTP implementation activities. Public transportation providers, as well as regional and local governments, can and should act on implementation activities as able and appropriate.

### Public Transportation Plan Integration

This key initiative promotes an effective, efficient, and seamless public transportation system, building on the need to plan together. The focus of this key initiative is for ODOT to help agencies further integrate their planning activities; different areas of the state have different histories of plan development and integration. Of course, local agencies can and should undertake, or continue to improve, these activities as they consider their own efforts to implement this plan, or to update their own plans. ODOT will look for ways to promote and assist these efforts.

Activities under this key initiative may include the following.

- Coordinate activities and actions to help providers:
  - Improve planning activities to be more effective and inclusive.
  - Participate in one another's plans and consult with each another.
  - Work with regional and local governments to designate public transportation priority corridors.
  - Maximize coordination and collaboration between providers, the state, tribes, and local agencies.
  - Provide mechanisms for efficient coordination and collaboration.
  - Advance equity analysis, and enhance stakeholder involvement in planning.
  - Incorporate transit asset management practices as a planning tool.
  - Incorporate recent state funding program requirements with planning processes.



- Coordinate services with transportation options providers.
- Use information in Coordinated Plans in transit and transportation system planning, and include human service stakeholders in transit system planning.
- Determine whether developing a broad definition of a basic level of public transportation service that is scalable to different jurisdictions throughout Oregon is feasible. This evaluation may include the following tasks:
  - Research possible minimum level of service expectations.
  - Study definitions and characteristics of minimum service in different locales.

The final issue above, regarding public transportation level of service guidance for providers, needs further exploration. ODOT received mixed feedback on this subject during plan development; some stakeholders thought state guidance regarding service availability under different conditions might help provide a foundation for transit plans and advance local conversations about public transportation. Other stakeholders wanted to make sure any statewide expectations do not limit the ability of service providers to adapt and innovate to meet local needs. However, providing guidance about service levels (for example, service hours or frequencies under different conditions) may help advance progress towards the OPTP vision and goals. ODOT will further study this issue, with stakeholder input, to determine whether guidance should be provided to assist stakeholders and further support public transportation.

### Regional and Intercity Service

This key initiative focuses on providing public transportation service between cities and regions, and connecting Oregon communities to other states. Regional and intercity public transportation emerged as an important topic discussed by stakeholders throughout OPTP development. Moreover, this is a topic where ODOT has a clear role. ODOT’s statewide perspective can assist providers, and ODOT itself can help fill gaps and provide a logical system that links areas throughout the state.

Activities under this key initiative may include the following.

- Develop statewide strategies for intercity services:
  - Describe the desired intercity network, and identify potential hubs, missing and needed connections, insufficient service routes, and other needs.
  - Work with regional and local governments to designate regional and statewide public transportation priority corridors.
  - Integrate connections to other modes and first and last mile solutions to demonstrate what a fully functioning multimodal network might include.

### nwCONNECTOR

The Northwest Connector is a regional transit system operated by a consortium of five coastal and northwest Oregon transit agencies. Through collaboration, they coordinate transfers between their systems and offer a pass program (good on any of the five agencies’ buses) to help make seamless transit connections between the Willamette Valley and coastal cities like Tillamook and Astoria. Greater coordination among local transit providers can improve intercity and regional connections for riders in all areas of the state.

## Autonomous Vehicles – First Applications

Over the life of this plan, automated vehicles will emerge as a major transformative development in transportation, including public transportation. In 2018, autonomous transit vehicles are already in operation in several places in the United States and the world, especially where they can operate separately from other traffic. The technology to enable them to travel in mixed traffic is still in development, and autonomous vehicles will be confined to certain types of environments until technology advances. Many people are likely to first encounter automated vehicles operating as shuttles on a school campus or at a business park, where the vehicles can operate at low speeds within a fixed boundary.



An autonomous electric shuttle in Peru. Photo by Gngararra, commons.wikipedia.org

- Research and identify:
  - Best practices and lessons learned from other places to inform regional and intercity programs and policy.
  - Possible barriers to effective regional and intercity service, including governance issues, and actions to address them.
  - Fare policy recommendations, possible incentives for service provision, and best practices to balance funding and revenue with fare affordability.
- Support and initiate pilot projects:
  - Support and expand one stop traveler information and trip planning opportunities.
  - Partner with providers and others to support and expand universal fare opportunities.
  - Test potential new services to fill regional and intercity service gaps.

## Public Transportation Technology

Transportation technology is rapidly changing and how these changes and new developments will affect public transportation services is not yet known. Changing technology presents new opportunities and challenges for providers and riders alike. Opportunities include tools that enable more efficient operations and provide real-time travel information to riders, while challenges may include new services not being provided equitably among a city's neighborhoods or not serving all populations, such as people with disabilities. The OPTP provides a flexible framework to enable ODOT and providers to adapt to changes as they occur; ODOT will review the goals, policies, and strategies of the OPTP over time as new technologies and other changes occur. Some technologies are known but not yet fully developed or used in Oregon. This key initiative focuses on efforts to better understand and effectively use technology to help Oregonians meet routine needs via public transportation and promote a seamless and easy to use system. Local providers and local governments will likely take the lead on exploring new technology opportunities, including pilot projects, but the state may provide support for these efforts.

Activities under this key initiative may include the following.

- Evaluate, acquire, develop, and share technologies and standards statewide, incorporating these into procedures and researching and further describing technology alternatives and methods of accomplishing results such as the following:
  - Standards, methods, platforms, and/or guidance for data collection, governance, sharing, and use.
  - Public transportation planning aids, including transit planning software, transportation model improvement, and other analysis tools.





- Effective and timely communication of services available and travel options to communities served and riders via online, mobile, and other means.
- Enhanced statewide online and other services, building on existing statewide transportation options and traveler information services.
- Effective communication systems among and between vehicles, infrastructure, and operations centers.
- Shared efare systems and other shared or interoperable technologies.
- Pilot projects by public transportation providers and local governments to test new technologies, vehicle technologies, and service delivery models, such as testing various small vehicle first and last mile transit access technologies and solutions.
- Understand the impacts of new services on public transportation ridership, operations, funding, and revenue. Find ways to integrate new services with transit, building on strengths such that both transit and new services are successful.

## Keeping Track of Progress

The OPTP’s goals, policies, and strategies will guide statewide public transportation decisions and investments by proactively anticipating change and providing a blueprint for investing resources. Performance measures provide a means to document past trends and track future progress with regard to the OPTP’s goals, policies, and strategies; the key initiatives described above; and plan implementation and general outcomes.

OPTP performance measures are designed to be used at a statewide level; they complement and do not replace local performance measures tracked and reported by providers. In addition, OPTP performance measures each reflect multiple goals and policies and look at broad outcomes of OPTP implementation. It would not be feasible or desirable to have a measure for each. The performance measure selection process and final OPTP measures are described in this section.

At the statewide level, ODOT already tracks a number of transportation performance measures, several of which are directly related to public transportation, called key performance measures (KPMs).

This section reviews the existing measures that ODOT tracks relative to public transportation, and reviews the process for selecting measures for the OPTP. Finally, the measures selected for the OPTP are described.

## Selecting Performance Measures

A literature review, other states’ public transportation performance measures, and the many local measures used by providers in Oregon informed performance measures selected for the OPTP. Successful

performance measures are clear, concise, and, ideally, use readily available data. Criteria for selecting performance measures for the OPTP were based on a review of literature, other plans, available public transportation data, and public transportation performance measures used at the local, regional, and state level. OPTP performance measures meet the following criteria:

**Clear and concise**—Measures should be easy to understand and clearly defined in the context of OPTP and the statewide public transportation system.

**Linked to goals**—Measures should be directly linked to assess progress toward OPTP goals.

**Reliable and trackable**—Measures should use data that are readily available throughout Oregon and can be reliably tracked over time to deliver a clear and convincing story of Oregon public transportation.

**Informative and meaningful**—Measures should be meaningful and easily understood by Oregonians, incorporate social values, and help inform decisions on future policy, goals, and investments.

**Flexible**—Measures should be flexible enough to permit change as OPTP policies and strategies evolve over time, but they should also retain context with historical measurements.

**Balancing agency resources**—Resources are needed to keep track of performance measures. ODOT balanced the number of performance measures selected for the plan with available agency resources to track them.

## Transit Key Performance Measures<sup>1</sup>

**Statewide key performance measures (KPMs)** are used by Oregon agencies to track progress made toward state goals and objectives. ODOT has several KPMs, including some tied to public transportation. The OPTP's performance measures help track progress on key OPTP outcomes, while the KPMs help track progress more broadly on ODOT's transportation mission. Listed below are current ODOT KPMs related to public transportation:

- **Transit rides per capita** – This is the number of transit rides taken statewide per person in Oregon.
- **Oregon passenger rail ridership**—This is the number of annual rail service passengers on the Amtrak Cascades and Thruway bus service.
- **Transit vehicle condition**—This is the percent of public transit buses that meet replacement standards. ODOT has set a target of no more than 40 percent of vehicles statewide exceeding useful life through 2020. The state must also track this measure as part of its federal funding requirements.



## OPTP Performance Measures

These measures were selected to meet the statewide need of gauging progress and outcomes of the OPTP:

- **Statewide public transportation ridership per capita**—This is a fundamental measure that addresses many outcomes. Data are readily available for fixed route service and reported by most providers to NTD. Tracking ridership per capita will show changes corrected for population growth, indicating whether ridership is growing in excess of population growth. Ridership for demand response can be tracked separately if and when the data become readily available.
- **Public transportation revenue hours per capita**—This measure is correlated with ridership, tracking changes in the amount of service provided. Similar to ridership, tracking at the per capita level will show whether the amount of service provided is keeping pace with population growth. Data are readily available for fixed route services and reported by most providers to NTD. Tracking per capita will show the service level changes corrected for population growth and allow for determining whether more or less service is being offered as the state grows.
- **Cost per boarding for fixed route service (adjusted for inflation)**— This measure determines how efficiently public transportation service is being provided; efficient service is an important measure for accountability and stewardship of public funds. Data are readily available from transit providers and reported to NTD. Care should be taken when developing the exact methodology due to the differences between urban and rural systems.
- **Percent of public transportation vehicle fleet that is low- or zero- emission**—This measure addresses both environmental sustainability and public health. Data for this measure are not consistently collected today, but they are anticipated to be collected soon through ODOT RPTD for the vehicles purchased with ODOT assistance (about half the total fleet in Oregon).
- **Transit vehicle condition: percent of public transit buses exceeding useful life**—This measure reveals information about the financial condition of transit agencies around the state, as well as information about the age of buses that is relevant to safety, environmental sustainability (new and/or clean technologies), and service for those who benefit from state-of-the-art equipment such as people with disabilities. This important measure is also an ODOT KPM and is tracked in accordance with federal rules.

**Transit Asset Management (TAM)** is an FTA program that addresses transit assets with the goal of maintaining them in a state of good repair. Assets include vehicles, other equipment, facilities (e.g., buildings, and other transit infrastructure (e.g., rail track.

Most of this program and reporting will be completed by ODOT in partnership with providers statewide. ODOT assists with purchase and maintains an interest in approximately half of all transit vehicles in the state. This is why the TAM vehicle performance measure is included as a KPM for ODOT. In addition, the vehicle measure is a good indicator of the health of the system and is included in the OPTP measures as well.

The TAM performance measure is the percentage of vehicles that exceed useful life. ODOT has established a target for this measure of no more than 40% of vehicles exceeding useful life. This target may change over time.

For more information and an FTA TAM Performance Measures Fact Sheet, go to <https://www.transit.dot.gov/TAM>.

Data are generally available for these measures today, meaning they can be tracked during initial stages of plan implementation. These measures do not take the place of the many important and valuable measures that local providers track; the OPTP's measures are intended for monitoring progress on the statewide goals and policies articulated in this plan. An important implementation action will be to further describe the best way of calculating and presenting these measures. Targets for each performance measure will be set during plan implementation.

Other measures considered, as well as those that could be included as part of the OPTP at a later date when sufficient data are available, can be found in the Performance Measures Memo, included in Volume 2.

## Conclusion

The OPTP sets out a path forward for maintaining and improving the public transportation system across the state and further integrating public transportation with the transportation system as a whole, making its use a convenient, easy choice. It begins with preserving current service levels, improving service efficiency, improving frequency and reliability of services, and finally providing additional needed services. Implementing the policies and strategies, and realizing the vision and goals, will require a new level of collaboration between all of the agencies and stakeholders that fund, develop, and operate the system for the use and benefit of residents and visitors.

Working together to accomplish the OPTP vision for public transportation will benefit everyone, from those for whom public transportation is their only travel option, to daily riders, to drivers that occasionally ride. Even more broadly, progress towards the vision benefits all Oregonians who value an economically vital state with healthy, vibrant communities where all can meet their travel needs with a variety of efficient options.

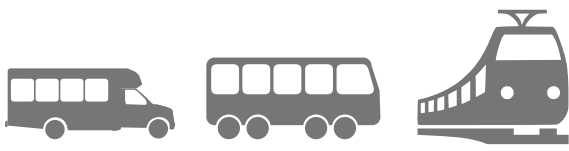
The OPTP establishes steps toward realizing a basic level of service that allows most to meet their needs, in addition to improving all aspects of the system from service enhancement, to rider experience, to first and last mile connections. Oregon has a unique opportunity at this time. New funding streams, engaged stakeholders, and clear evidence that Oregonians value public transportation provide support for providers and transportation agencies to commit to OPTP implementation and progress towards the vision.



## Endnotes

1. ODOT. 2018. Key Performance Measures. Retrieved from <https://www.oregon.gov/ODOT/PerformMang/Pages/index.aspx>





## Appendix A:

# Acronyms and Glossary

## OPTP Acronyms

This section shows acronyms used throughout the OPTP and their meaning.

|           |  |
|-----------|--|
| ADA       | American with Disabilities Act                           |
| ACT       | Area Commission on Transportation                        |
| APC       | automatic passenger counters                             |
| APTA      | American Public Transportation Association               |
| AV        | autonomous vehicle                                       |
| AVL       | automatic vehicle locator                                |
| BRT       | bus rapid transit  |
| CCA       | Clean Air Act (federal)                                  |
| CNG       | compressed natural gas                                   |
| CPTED     | crime prevention through environmental design            |
| DLCD      | Department of Land Conservation and Development (Oregon) |
| EJ        | environmental justice                                    |
| EPA       | Environmental Protection Agency (federal)                |
| EV        | electric vehicle   |
| FAST Act  | Fixing America's Surface Transportation Act              |
| FEMA      | Federal Emergency Management Agency                      |
| FHWA      | Federal Highway Administration                           |
| FTA       | Federal Transit Administration                           |
| GHG       | greenhouse gas   |
| GPS       | global positioning system                                |
| GTFS      | general transit feed specification                       |
| HSR       | high speed rail  |
| IT        | information technology                                   |
| ITS       | intelligent transportation systems                       |
| LEP       | Limited English Proficiency                              |
| miles/cap | miles per capita   |

|       |  |
|-------|--|
| MPG   | miles per gallon                               |
| MPH   | miles per hour                                 |
| MPO   | metropolitan planning organization             |
| NHTSA | National Highway Traffic Safety Administration |
| NTD   | National Transit Database                      |
| ODOE  | Oregon Department of Energy                    |
| ODEQ  | Oregon Department of Environmental Quality     |
| ODOT  | Oregon Department of Transportation            |
| OEM   | Oregon Office of Emergency Management          |
| OAA   | Older Americans Act (federal)                  |
| OPTP  | Oregon Public Transportation Plan              |
| ORS   | Oregon Revised Statute                         |
| OTA   | Oregon Transit Association                     |
| OTC   | Oregon Transportation Commission               |
| OTP   | Oregon Transportation Plan                     |
| PAC   | policy advisory committee                      |
| PMT   | project management team                        |
| PTAC  | Public Transit Advisory Committee              |
| POINT | Public Oregon Intercity Transit                |
| RPTD  | Rail and Public Transit Division               |
| SAC   | State Agency Coordination                      |
| SGR   | state of good repair                           |
| SOV   | single occupant vehicle                        |
| STF   | Special Transportation Fund                    |
| STIF  | Statewide Transportation Improvement Fund      |
| STIP  | Statewide Transportation Improvement Program   |
| STS   | Statewide Transportation Strategy              |
| TAC   | technical advisory committee                   |
| TDM   | transportation (or travel) demand management   |
| TDP   | transit development plan                       |
| TIP   | transportation improvement program             |
| TMA   | transportation management area                 |





|       |  |
|-------|--|
| TNC   | transportation network company             |
| TO    | transportation option                      |
| TOD   | transit-oriented development               |
| TPR   | Transportation Planning Rule (Oregon)      |
| TSP   | transportation system plan                 |
| USDOT | United States Department of Transportation |
| VMT   | vehicle miles of travel                    |

## OPTP Glossary

The Glossary is adapted for use with the Oregon Public Transportation Plan, primarily from glossaries and documents prepared by Federal Transit Administration, other Federal agencies, the Transportation Research Board, Community Transit Association of America, and ODOT.

**Access:** As used in transit, a measure of the ability of people to travel among various origins and destinations; a measure of relative access of a population to employment opportunities, community services, education, healthcare, etc. A measure of the ability of people to get to the nearest transit stop. The ability of persons with disabilities to use transit.

**Accessibility:** The ability to or ease with which people can reach or access destinations (including employment, education, activities, and services) via public transportation and return to their origin.

**ADA Accessibility:** The extent to which facilities and transit services, including transit vehicles, are free of barriers as defined by the Americans with Disabilities Act, and can be used by people who have disabilities, including users of mobility devices.

**Affordability:** refers to the ability of individuals and households to purchase transportation services, particularly those required to access basic goods and services (including health care, shopping, school, work, and social activities). Affordability can be defined as the situation in which the broadest range of household incomes can bear the financial burden of purchasing basic transportation services. Affordability is a critical objective since it affects the opportunities available to disadvantaged people.

**Affordable Housing:** In general, housing for which the occupant(s) is/are paying no more than 30 percent of his or her income for gross housing costs, including utilities. Some jurisdictions may define affordable housing based on other, locally determined criteria, and this definition is intended solely as an approximate guideline or general rule of thumb.

**Alternative fuels:** Vehicle engine fuels other than standard gasoline or diesel. Typically, alternative fuels burn cleaner than gasoline or diesel and may reduce emissions. Common alternative fuels include methanol, ethanol, and compressed natural gas, liquefied natural gas, clean diesel fuels and reformulated gasoline.

**Americans with Disabilities Act (ADA):** Passed by Congress in 1990, the ADA is a civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public. Under this Act, public transportation providers must ensure system-wide transit accessibility for people with disabilities including lift-equipped vehicles.

**Area Commissions on Transportation (ACTs):** ACTs are advisory bodies chartered by the Oregon Transportation Commission to address all aspects of transportation (surface, marine, air, and transportation safety) with primary focus on the state transportation system. ACTs play a key advisory role in the development of the Statewide Transportation Improvement Program, which schedules funded transportation projects.

**Automated vehicles (also called autonomous vehicles):** Fully automated vehicles are those in which operation of the vehicle occurs without direct driver input to control the steering, acceleration and braking. The Society of Automotive Engineers (SAE) has identified a spectrum of six levels of automation, from Level 0, in which there is no automation whatsoever, through Level 5, or full automation under all conditions.

**Availability:** Refers to whether or not transit is available to a rider spatially and in time, e.g. a stop close enough to for the rider to use; is there a sufficient service area covered to reach their destination, are vehicles running at useful times for the rider.

**Barrier:** A condition or obstacle that prevents an individual or a group from accessing the transportation system or transportation planning process. Examples include a physical gap or impediment, lack of information, language, disability, education and/or limited resources.

**Brokerage:** A method of providing transportation services where riders are matched with appropriate transportation providers through a central trip-request. The transportation broker may centralize vehicle dispatch, record keeping, vehicle maintenance and other functions under contractual arrangements with agencies, municipalities and other organizations. Actual trips may be provided by a number of different vendors.

**Busway:** A roadway reserved for buses only; also known as a “bus lane.”

**Buy America:** Federal transportation law which requires that all purchases of vehicles, equipment or any other manufactured item have defined percentages of U.S. made and assembled components, unless the purchase price is less than \$100,000 or the U.S. Department of Transportation has given the purchaser a Buy America waiver.

**Capital costs:** Refers to the costs of physical assets of a public transit system such as property, buildings and vehicles.

**Circulator bus:** A bus that makes frequent trips within a limited geographic area and with numerous stops along the route.



**Clean Air Act (CAA):** Federal legislation that details acceptable levels of airborne pollution and spells out the role of state and local governments in maintaining clean air.

**Complementary paratransit (also called ADA complementary paratransit service):** The Americans with Disabilities Act (ADA) requires public transit agencies that provide fixed-route service to provide complementary paratransit services to people with disabilities who cannot use the fixed-route bus or rail service because of a qualifying disability. The regulations define minimum service characteristics that must be met for this service to be considered equivalent to the fixed-route service it is intended to complement.

**Congestion Mitigation and Air Quality Improvement Program (CMAQ):** A flexible funding program administered by the Federal Highway Administration through ODOT to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas). CMAQ funds may be used for transit projects, rideshare projects, high-occupancy vehicle lanes or other similar purposes.

**Connectivity:** Presence of useful, integrated links people can use to move between places, transportation system modes, or segments of the same mode. For example, do service routes intersect usefully in one place and time, can fares be interchangeable, or is information about all necessary links in a trip available in one place.

**Consistent service:** Consistent service refers to reliability over a longer period of time, e.g. is there at least the same amount of service on a route over months or years.

**Coordinated Public Transit Human Services Transportation Plan (also called “coordinated plans”):** A plan for coordinating public transportation and human service agency transportation services that aims to maximize the programs’ collective coverage by minimizing duplication of services and filling gaps in services.

**Coordination:** Cooperative arrangements among public and private transportation agencies and human service organizations that provide transportation services. Coordination models can range in scope from shared use of facilities, training or maintenance to integrated brokerages or consolidated transportation service providers.

**Coverage:** Also called “availability,” refers to spatial availability, temporal availability and how far one may travel, i.e., the geographic service area of a transit provider.

**Demand response:** As defined by the Federal Transit Administration (FTA), demand-response is any non-fixed route system of transporting individuals

that requires advanced scheduling by the customer, including services provided by public entities, nonprofits, and private providers. A “demand-response system” is one where passenger trips are generated by calls from passengers or their agents to the transit operator, who then dispatches a vehicle to pick the passengers up and transport them to their destinations.

**Dial-a-ride service:** Another term for demand-response service (see above) where the rider telephones (or dials) to request service.

**Educational institution:** An educational institution is a place where people of different ages access instructional services, including childcare, preschools, kindergarten, elementary, middle and high schools, colleges and universities.

**Efare:** A term used to describe technology that allows electronic payment of transit fares.

**Efficiency, Transit:** According to the Transportation Research Board, transit efficiency generally refers to the ratio of inputs (capital and labor) to outputs (performance measures) in a given public transit system. Transit system efficiency can be measured in several possible ways, which can result in different conclusions about what solutions are optimal, such as accessibility-based transit efficiency (ratio of inputs to the spatial and temporal distribution of service coverage); economic efficiency (ratio of monetary inputs to fare revenues); or service efficiency (ratio of inputs to service performance measures, such as headway, ridership, or fare box returns). Transit agencies generally measure for system efficiency in several ways, as opposed to interpreting any single measure as representative of the system’s overall efficiency.

**Employment transportation:** Transportation specifically designed to take passengers to and from work or work-related activities.

**Environmental justice (EJ):** Refers to presence of and actions to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low income populations; also to ensure the full and fair participation by all potentially affected communities in the transportation decision making process; and to prevent the denial of, reduction in or significant delay in the receipt of benefits by minority and low-income populations.

**Equitable:** Generally means impacts have been considered and steps taken to ameliorate any disparate impacts that promote “fair” outcomes.

**Equity:** Equity, which is also called justice or fairness, refers to the distribution of impacts (benefits and costs) and whether that distribution is considered fair and appropriate.



**Environmental design:** Using the structures, spaces, lighting and people around an area to prevent crime and increase loss prevention. Early consideration in design and planning optimizes the investment, improving safety and security while reducing risk and incident. Environmental design for public transportation can include features such as fencing, gates, lighting, landscaping bus stop and shelter design to blend security with area aesthetics while adhering to local ordinances.

**Facility Plan:** State, regional or local plan for an individual transportation facility such as a highway segment, or a set of facilities, such as those in a designated area. A transportation facility plan may discuss issues for one transportation mode, such as public transit, bicycle or pedestrian; or it may discuss issues for multiple modes, such as a highway corridor or interchange area plan, a downtown plan, or special transportation area management plan that includes parts for access management, public transit, traffic safety, and/or bicycle and pedestrian improvements.

**Fare box revenue:** A public transportation term for the money or tickets collected as payment for rides. Can be cash, tickets, tokens, transfers or pass receipts, and may be pre-paid, concurrent or postpaid.

**FAST Act:** The Fixing America's Surface Transportation (FAST) Act was signed on December 4, 2015; it reauthorizes the federal surface transportation programs through Fiscal Year 2020.

**Federal Highway Administration (FHWA):** A component of the U.S. Department of Transportation that is responsible for ensuring that America's roads and highways are safe and technologically up-to-date. Although state, local, and tribal governments own most of the Nation's highways, the FHWA provides financial and technical support to them for constructing, improving, and preserving America's highway system. The FHWA's annual budget of more than \$30 billion is funded by fuel and motor vehicle excise taxes. FHWA is the lead agency in federal intelligent transportation (ITS) activities and regulated interstate transportation. In addition to ITS, funds under FHWA's Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Surface Transportation Program (STP), and Federal Lands Highways Program can be used for a variety of transit activities.

**Federal Transit Administration (FTA):** A component of the U.S. Department of Transportation that administers federal funding to support a variety of locally planned, constructed, and operated public transportation systems throughout the U.S., including buses, subways, light rail, commuter rail, streetcars, monorail, passenger ferry boats, inclined railways, and people movers. FTA provides financial assistance for capital, operating and planning costs of these public transportation systems. It also sponsors research, training, technical assistance and demonstration programs. Up to 1991 the FTA was known as the Urban Mass Transportation Administration.

**Fixed route service:** Fixed route services include any transit service in which vehicles run along an established path at preset times; the vehicles run on regular, scheduled routes with fixed stops and do not deviate from the route. Typically, fixed route service is characterized by printed schedules or timetables, designated bus stops where passengers board and alight and the use of larger transit vehicles.

**Flexible routing:** Flexible route service follows a direction of travel but allows for deviation or rerouting along the way to accommodate specific trip requests. Examples of flexible route systems are route deviation and point deviation.

**Headway:** The time interval between two buses on the same route. If buses operating along Route A arrive at Stop 1 at 9:00, 9:30, 10:00, 10:30, and 11:00, it is operating on half-hour headways during the period between 9:00 and 11:00. When headways are short the service is said to be operating at a high frequency, whereas if headways are long, service is operating at a low frequency.

**Human services transportation:** Transportation for clients of a specific human or social service agency that is usually limited to a specific trip purpose or is targeted to a specific population, such as seniors.

**Intelligent transportation systems (ITS):** Refers to a broad range of wireless and wire line communications-based information and electronic technologies. When integrated into the transportation system's infrastructure and into vehicles themselves, these technologies relieve congestion, improve safety and enhance productivity. Currently, ITS is made up of 16 types of technology based systems, divided into intelligent infrastructure systems and intelligent vehicle systems.

**Intercity transportation:** Long distance service provided between cities, often as part of a large network of intercity bus operators and/or passenger train services. Both express and local bus service may be provided. The Greyhound system is an example of a national intercity bus network. Oregon's POINT service is an example of a statewide intercity network. Passenger rail is an intercity public transportation service.

**Intermodal:** This refers to connections between different modes of transportation, and the facilities that enable people or freight to transfer between modes of transportation.

**Intracity transportation:** Transportation that allows people to move within a city. The service may include different transportation options such as bus connections to light rail, or bus connections to a bicycle trail.

**Jitney:** A privately owned, small vehicle that is operated on a fixed route but not on a fixed schedule or fixed stops.



**Limited English proficiency (LEP):** A term used in the United States that refers to a person who is not fluent in the English language, because it is not their native language.

**Low-income individual:** A person whose median household income is at or below the U.S. Department of Health and Human Services (DHHS) poverty guidelines. Public transportation programs may establish definition of “low-income” based on the DHHS definition.

**Match, also called “cost-sharing” and “local contribution”:** Funds required by various federal or state grant programs to complement funds provided by a state or federal agency for a project.

**Medicaid:** Medicaid is a healthcare program that assists low-income individuals in paying for medical care costs. Medicaid is a joint program, funded primarily by the federal government and run at the state level. In Oregon, Medicaid is called the “Oregon Health Plan.” The program pays for transportation to non-emergency medical appointments if the recipient has no other means to travel to the appointment and meets other qualification criteria.

**Metropolitan planning organization (MPO):** The organizational entity designated by law with lead responsibility for developing transportation plans and programs for urbanized areas of 50,000 or more in population. MPOs are established by agreement of the governor and units of general purpose local government that together represent 75 percent of the affected population of an urbanized area.

**Mobility:** Ability to and/or ease with which people can use the transportation system to travel between destinations.

**Mobility hub:** Mobility hubs are a place where transportation modes seamlessly connect. They usually involve transit, vehicle sharing such as car and vanpooling, concentrations of land uses, and an information component. Mobility hubs connect a variety of sustainable modes and services through a network of physical locations or “mobile points.” The points are located throughout a city or region to physically and electronically link the elements of a door-to-door trip.

**Mobility Management:** A customer driven, market based approach to transportation services. It focuses on:

- Individual travel needs.
- Offering a full range of travel options to the single-occupant auto, not just the mass transit mode.
- Offering a single point of customer access to multiple travel modes.

**Mode:** This term refers to a form of transportation, such as automobile, bus, light rail, passenger rail, bicycling, and walking.

**Mode and topic plans:** These plans refine and implement the broad policies of the Oregon Transportation Plan for specific modes such as public transportation and rail, or topics such as safety or freight over a long range period, typically twenty years or more. The plans analyze a topic or mode of travel and establish policies and implementation strategies that inform state facility plans and regional and local transportation system plans. Oregon periodically updates its mode and topic plans; these long-range plans set performance objectives and investment priorities for bicycle, pedestrian, freight, highway, public transportation, rail, safety, aviation, and other travel options.

**Mode, intermodal, multimodal:** Mode refers to a form of transportation, such as automobile, transit, bicycle, and walking. Intermodal refers to the connections between modes, and multimodal refers to the availability of multiple transportation modes within a system or corridor.

**Multimodal:** This term refers to the availability of multiple modes of transportation within a system or corridor.

**National Transit Database (NTD):** Reporting system managed by FTA that collects financial and operating data; reporters are recipients and subrecipients of transportation funds from FTA.

**Older Americans Act (OAA):** Federal law first passed in 1965. The act established a national network of federal, state, and local agencies to plan and provide services to enable older persons to maintain their independence in their homes and communities. The Act created the infrastructure for organizing, coordinating, and providing community-based services and opportunities for older Americans and their families. See State Units on Aging.

**Operating costs:** The sum of all recurring expenses (e.g., labor, fuel, administration) associated with the operation and maintenance of a transit system; excludes capital equipment purchases, depreciation, or leases.

**Oregon Transportation Plan (OTP):** The OTP is Oregon's 25 year transportation plan that comprehensively assesses state, regional, and local public and private transportation facilities and services and serves as the policy element of the state transportation system plan.

**Paratransit:** Paratransit is a broad term that may be used to describe any means of shared ride transportation other than fixed route mass transit services. Paratransit services usually use smaller vehicles (less than 25 passengers) and provide advance-reservation, demand-responsive service. ADA complementary paratransit service is a type of paratransit service provided to accommodate passengers with disabilities who are unable to use fixed route service and that meet specific service equivalency tests





**Peak Hour / Peak Period:** The period with the highest ridership during the entire service day, generally referring to either the peak hour or peak period (several hours). Transportation systems typically encounter two peak periods per day: AM Peak and PM Peak, however local service design may result in peak periods at other times of day; for example, change of shift at a large employer could cause a peak hour at shift times.

**Performance based planning:** Refers to the application of performance management principles within the planning and programming processes of transportation agencies to achieve desired performance outcomes for the multimodal transportation system.

**Person with disability:** An individual who by reason of illness, injury, age, congenital malfunction or other permanent or temporary incapacity or disability has a physical or mental impairment that substantially limits one or more major life activities. In public transportation, the term refers to people for whom the use of conventional transit facilities and services is impossible or is a hardship.

**Person-Trip / Passenger-Trip:** A one-way trip made by one person from one origin to one destination. A “round trip” is two or more one-way trips.

**POINT (Public Oregon Intercity Transit):** Intercity bus service in Oregon that is contracted and funded by ODOT to provide intercity connections to areas of the state to help fill the gaps in the state’s intercity system.

**Public transportation improvement plans (also called STIF plans):** These plans are required by the state 2017 Keep Oregon Moving Act (ORS 184.751) to be eligible for the new transit funding (Statewide Transportation Improvement Fund) contained in the legislation. These plans focus on investments and how the investments address various program goals.

**Public transportation priority corridor:** A corridor designated in a long range transportation plan developed with stakeholder participation, such as a transit development plan or transportation system plan, for higher capacity or enhanced public transportation service. Subsequent planning efforts carry the designation forward, e.g., in city development codes, to help with implementation.

**Radial network:** A public transit route service pattern in which most routes converge into and diverge from a central transfer point or hub, like the spokes of a wheel. Arterial or loop routes may be used. If the routes are timed to arrive and depart at the same time, it is called a pulse system.

**Rapid transit:** Rail or bus transit service operating completely separate from all modes of transportation on an exclusive right-of-way. Often operates as an express service with a minimal number of stops. Light Rail and Bus Rapid Transit are examples.

**Regional transportation plans (RTP):** A federally required long range transportation system plan done at a regional level (typically by a metropolitan planning organization) that guides investments for all forms of travel, including motor vehicles, transit, bicycle, walking, and the movement of people, goods and services. It articulates regional investment priorities for all forms of travel including transit investments.

**Reliability (also called service reliability):** Reliable service refers to how often transit service is provided as promised; affects waiting times, consistency of passenger arrivals from day to day, total trip time, and loading levels refers to daily route performance, e.g. do the vehicles arrive at stops at the scheduled times.

**Resilience / Resiliency:** Refers to a system's ability to accommodate variable and unexpected conditions without catastrophic failure, and to the system's ability to recover from a disrupting incident such as a natural disaster, deliberate attack, or accident.

**Ridership:** The number of people making one-way trips on a public transit system in a given time period.

**Ridesourcing:** Use of online platforms to connect passengers with drivers and automate reservations, payments, and customer feedback. Riders can choose from a variety of service types, including drivers who use personal, non-commercial vehicles; traditional taxicabs dispatched via the provider's applications, and premium services with professional livery drivers and vehicles. This type of technology also supports van and carpools.

**Safety:** Refers to physical or mechanical safety; it means the condition of being safe from hurt, injury, or loss. For public transportation, safety primarily refers to activities and policies related to prevention of accidents, vehicle and other equipment failures, and passenger safety, such as safety while waiting at stops and stations and riding on vehicles.

**Security:** refers to the feeling or perception of personal safety, or to the physical security of the transit system, transit vehicle, or other equipment. For public transportation, security refers to occurrences beyond the more typical crash or slip-and-fall, such as bomb threat, arson, hijacking, sabotage, cyber security event, assault, burglary, theft, vandalism, etc. Security planning and incident prevention is typically conducted by transit agencies, in consultation with other agencies such as the state Office of Emergency Management (OEM), Federal Emergency Management Agency (FEMA), police and fire, and federal Homeland Security, as well as others.

**State Units on Aging (SUAs):** Agencies of state and territorial governments designated by governors and state legislatures to administer, manage, design and advocate for benefits, programs and services for the elderly and their families and, in many states, for adults with physical disabilities. Since 1965 all State Units on Aging have administered the Older Americans Act (OAA) in their respective states.



**Statewide Transportation Improvement Fund (STIF):** State funding (2017 Keep Oregon Moving Act; ORS 184.751) from an employee-paid payroll tax on wages earned in Oregon. The fund is for improving public transportation services, except the money in the fund may not be used for passenger rail, such as light rail, commuter and other passenger rail.

**Statewide Transportation Improvement Program (STIP):** The funding and scheduling document for major road, highway, and transit projects in Oregon listing federally funded projects for a four year period.

**Statewide Transportation Strategy (STS) – A 2050 Vision for Greenhouse Gas Reduction:** The STS examines all aspects of the transportation system, including the movement of people and goods, and identifies a combination of strategies to reduce greenhouse gas (GHG) emissions.

**Title III:** A title of the Older Americans Act that authorizes expenditures for nutrition and transportation programs that serve older persons.

**Title VI:** A title of the Civil Rights Act of 1964 that ensures that no person in the United States will be discriminated against on the basis of race, color, or national origin. The transportation planning regulations, issued in October 1993, require that metropolitan transportation planning processes be consistent with Title VI.

**Transit amenities:** Amenities include, but are not limited to, bus shelters, trash and recycling cans, bike parking, signage, lighting, pedestrian havens and crossings, landscaping, benches, bus turn-outs, medians, and sidewalks.

**Transit development plans (TDPs):** Strategic plans that describe transit's current conditions and its further development. TDPs help Oregon's transit providers express goals and identify needs and strategies to achieve them over a 20-year horizon or specified time frame. A TDP is also an opportunity to inform and help integrate transit needs into TSP updates and other planning processes.

**Transit facilities:** Facilities include, but are not limited to, bus stops, park-and-rides, transit centers, and administrative and maintenance facilities.

**Transit oriented development (TOD):** Transit oriented development communities encourage higher-density residential and commercial development near bus lines, streetcar routes, and train stations. This proximity increases the likelihood that transit services will be better used by the public. Such increased usage, in turn, makes the construction and operation of transit easier for governments to finance.

**Transit providers:** A generic term for all entities that provide public transit services, including transit facilities and amenities. The assumption is that all "transit providers" have legal standing to provide the service, coordinate their planning efforts with local and state governments, and receive state and/or federal funding for transit programs. Transit providers can be non-profits, for-profits, public or private service providers, a special district, or a department of a city, county, and Indian tribal governments.

**Transportation control measures:** Local actions to adjust traffic patterns or reduce vehicle use to reduce air pollutant emissions. These may include high-occupancy vehicle lanes, provision of bicycle facilities, ridesharing, telecommuting, etc.

**Transportation disadvantaged:** Includes communities of color, people with low incomes, older adults, youth, and people with limited English proficiency and disabilities that are at a significant disadvantage without access to convenient, safe, well integrated transportation alternatives. All of these groups are often without easy access to cars and live in locations without convenient, safe transportation alternatives.

**Transportation improvement program (TIP):** A document prepared by states and planning commissions that describes projects to be funded under Federal transportation programs for a full-year period. Without TIP inclusion, a project is ineligible for Federal funding.

**Transportation management area (TMA):** A TMA is metropolitan area with a population of 200,000 or greater as determined by the latest decennial census. Within a TMA, all transportation plans and programs must be based on a continuing and comprehensive planning process carried out by the Metropolitan Planning Organization (MPO) in cooperation with state and transit operators. The TMA boundary affects the responsibility for the selection of transportation projects that receive Federal funds.

**Transportation network companies (TNC):** On-demand ride services, or “ridesourcing” use smartphone applications to connect drivers with passengers. These services use online platforms to connect people seeking services with sellers of those services (i.e. Lyft, Uber, etc.). Smart phones interface with integrated payment systems for ease of use.

**Transportation options:** Transportation options strategies, programs, and investments create choice in the state and local transportation systems, allowing people to bike, walk, take transit, drive, share rides, and telecommute. Historically, the purpose of transportation options programs and strategies [also referred to as transportation demand management (TDM)] has been to reduce reliance on single occupant vehicle travel during the busiest of times of day through strategies such as carpooling, high-occupancy vehicle lanes, and other mitigations strategies.

**Transportation Planning Rule (TPR):** One of the Statewide Planning Goals adopted by the Oregon Land Conservation and Development Commission that established state policies in 19 different areas. The TPR implements Goal 12 (Transportation Goal OAR 660-012); the TPR seeks to promote the development of safe, convenient and economic transportation systems that reduces reliance on automobiles. The TPR describes how local governments and state agencies must conduct their transportation planning.



**Transportation system plan (TSP):** A long range plan prepared for all transportation modes for a given area, usually a city, county, or region. It typically includes an inventory of the existing system, proposed improvement projects, and other elements as required by the Oregon Transportation Planning Rule. A TSP guides local agency transportation investments for all modes and must have a public transportation element.

**Trip generator:** A place that generates a demand for frequent travel is called a trip generator. Trip generators may be origins or destinations. For example, a high-density residential area generates a need for all kinds of trips outside of the residential area into commercial areas; a medical center generates trips for medical purposes; and a downtown area may generate trips for retail, recreational, or personal business purposes.

**Universal Design:** The design of facilities that accommodate all users, including people with disabilities and other special needs. Where possible, public transportation facilities are designed to allow safe access and use by people of all ages and abilities.

**Urbanized area (UZA):** An area that contains 50,000 or more population, plus incorporated surrounding areas, and meets size or density criteria established by the U.S. Census Bureau.

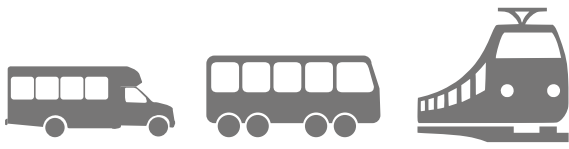
**U.S. Department of Health and Human Services (HHS):** The federal agency that funds a variety of human services transportation through the Administration on Aging, Head Start, Medicaid, Temporary Aid to Needy Families, and other federal programs.

**U.S. Department of Transportation (DOT):** The federal department responsible for the funding, efficiency, and safety of the nation's highway, aviation, transit, pipeline, and maritime transportation infrastructure.

**Wi-Fi (wireless fidelity):** Technology that allows the connection of computers, smartphones and other devices to each other and a network (Internet) using radio waves without the need to use wires.

**Workforce Housing:** Workforce housing generally means affordable housing for households with earned income that is not sufficient to secure quality housing in reasonable proximity to the workplace. The housing can be owned or rented and can refer to a single or multi-family residence.





## Appendix B:

# Draft Plan Process

The Oregon Public Transportation Plan (OPTP) reflects the input of many groups and individuals who participated throughout the plan development process. The plan was developed in accordance with the Oregon Transportation Commission (OTC) Public Involvement Policy, which requires that long range plans:

Meaningfully involve the public in important decisions by providing for early, open, continuous, and effective public participation in and access to key planning and project decision-making processes.

This policy encompasses both state and federal requirements for public participation, particularly those for statewide transportation planning. The process used to develop the OPTP met or exceeded applicable public participation requirements and is consistent with the OTC Public Involvement Policy.

The perspectives captured in the OPTP reflect the input of a broad range of stakeholders, including the public, local and regional governments, tribal governments, ODOT, and other interested state and federal agencies, Area Commissions on Transportation (ACTs), public transportation providers, other transportation mode interest groups, users of public transportation, equity groups, environmental groups, local citizens, land use groups, safety groups, and applicable ODOT advisory committees.

ODOT would like to offer special thanks to the members of OPTP committees for their time and commitment to an effective OPTP that represents our state. ODOT also wishes to thank the many citizens of Oregon and stakeholders including public transportation providers, tribe members, local jurisdiction staff and officials, and ACT who provided valuable comments and assistance.

## Oregon Public Transportation Plan Committees

### Policy Advisory Committee

The Policy Advisory Committee (PAC) guided the development of the OPTP.

**David Lohman** – Oregon Transportation Commission (Chair)

**Craig Campbell** – AAA Oregon

**Steve Dickey** – Cherriots (Salem-Keizer Transit)

**Ben Duncan** – Multnomah County

**Karen Girard, Heather Gramp, and Steve White** – Oregon Health Authority

**Amanda Hoey** – Mid-Columbia Economic Development District

**Sharon Konopa** – City of Albany

**Robin McArthur, Bill Holmstrom, and Matt Crall** – Land Conservation and Development Commission and Department of Land Conservation and Development

**Neil McFarland and Kate Lyman** – TriMet

**Jeff Monson** – Commute Options

**Susan Morgan** – Association of Oregon Counties

**Tonia Moro** – Rogue Valley Transit District and Metropolitan Planning Organization (MPO)

**Cosette Rees** – Lane Transit District

**Bob Russell** – Oregon Trucking Association

**Lisa Scherf** – City of Corvallis

**John David (JD) Tovey** – Confederated Tribes of the Umatilla Indian Reservation

**Elaine Wells** – Ride Connection

### Technical Advisory Committee

The technical advisory committee (TAC) advised ODOT on specific topics throughout the development of the OPTP:

**David Arnold** – Association of Oregon Rail and Transit Advocates

**Jan Campbell** – Oregon Disabilities Commission

**Tyler Deke** – Bend MPO

**Lee Girard** – Multnomah County

**Chris Hagerbaumer** – Oregon Environmental Council

**Daniel Hauser and Michael Eliason** – Association of Oregon Counties

**Julie Jacobs** – Oregon Department of Human Services

**Susan Law** – Federal Highway Administration, Western Federal Lands Highway Division

**Sasha Luftig and Tom Schwetz** – Lane Transit District

**John Mikulich** – MTR Western

**Doug Pilant** – Tillamook County Transit

**Dennis Pinheiro** – Douglas County

**Jamie Snook** – Metro

**Jenna Stanke Marmon** – Oregon Bicycle and Pedestrian Advisory Committee, Jackson County

**Ian Stude** – Portland State University

**Frank Thomas** – Community Connections of Northeast Oregon

**Paige West** – Rogue Valley Transit District





# Decision Making

The OTP Public Involvement Plan shows the project’s decision-making structure. The OTC is the decision maker; they approved the direction and have final approval of the Plan. The policy advisory committee (PAC) was approved by the OTC and the members were appointed by the ODOT director.

Decision making was supported and informed by substantial and broad stakeholder input to build a plan that has statewide support. To accomplish this, the OTP had an open, continual, and effective planning process that was appreciated by stakeholders. OTP Plan decision making structure is shown in Figure B-1.

**Figure B-1. Decision structure**



The OTP decision structure includes the following groups:

- **OTC**—The OTC establishes state transportation policy. The commission guides the planning, development, and management of a statewide integrated transportation network that provides efficient access, is safe, and enhances Oregon’s economy and livability. The five member commission is appointed by the governor and is balanced to ensure that different geographic regions of the state are represented and political views are balanced. The OTC receives recommendations from the PAC and will take consider public comment when they evaluate adopting the OTP.
- **PAC**—The PAC represents a broad range of interests and was created specifically to provide input and recommendations for the OTP. The PAC is advisory to the OTC and ODOT. The PAC recommended content as the OTP was developed and advised staff as they further developed plan components. The PAC considered content developed by the project

management team (PMT) as informed by the TAC, focus groups, and general public. The PAC provided consensus based recommendations to the OTC and ODOT and acted as a steering committee for plan development. The PAC had a total of 13 meetings.

- **TAC**—The TAC was composed of public transportation providers and others directly affected by the OPTP. The TAC provided technical advice and input to the PMT on specific topics throughout plan development, and the PMT assembled the information and advice received to inform PAC discussions. The TAC has held 6 meetings.
- **PMT**—The PMT was composed of the ODOT project manager, Transportation Development Division and Rail and Public Transportation Division leadership, key agency staff, and the consultant team. The PMT developed information for discussion by the PAC and incorporated input from a variety of sources including the TAC, focus groups, and the public.
- **Focus Groups**—ODOT used focus groups of transit riders and others in different areas of the state to gather further input to inform its development of policies and strategies. The PMT gathered input from the focus groups and used the information to inform content developed for the PAC and PAC discussions.

## Public Outreach

ODOT invited a wide variety of people to participate in the development of the OPTP and review its draft contents, to ensure that the diversity of interests throughout the state are considered in the plan. ODOT sought input from tribal governments, transit riders, transit service providers, human services providers, local and regional agencies, advisory and advocacy groups, and the public, including inviting people with low incomes, minorities, people whose primary language is not English, and people with disabilities to participate.

ODOT also used public meetings of the 12 ACTs to help reach varied parties throughout the state during outreach for the OPTP. ACT membership is broad and includes at least 50 percent local elected officials from the area (city, county, and MPO officials), representatives from federally recognized tribal governments in the area, port, and transit agency officials. The remainder of the membership is made up of interested stakeholders representing interests such as freight, trucking, bicycle, pedestrian, public transportation, environmental, land use, education, public safety providers, public interest advisory committees, ODOT, and the public.

## Communication Tools

Various communication tools were employed to reach a wide variety of participants and to engage them successfully in a format that would meet their communication preferences. Tools included the following:

- **Website, email lists, newsletters, individual letters, and social media**—These forms of communication were used to share information with



stakeholders and the public throughout OTP development. The email list of parties interested in the OTP contains over 700 individual addresses; this and other email distribution lists were used to announce input opportunities and invite people to participate in the online open houses.

- **Advisory committees**—The OTP was developed with a PAC and TAC, each comprising representatives of a wide variety of affected groups. Committee meetings were open to the public and held throughout the project.
- **Online open houses**—Virtual meetings were held to enable more residents and stakeholders to participate. These present similar information as in person presentations and enable participants to provide written comment.
- **Stakeholder meetings and presentations**—Presentations were made at meetings of various stakeholder groups, including ACTs, the Oregon Public Transit Advisory Committee, MPO groups, and state boards, commissions, and others during outreach phases. Most of these were public meetings, announced and open for interested parties to attend.
- **Listening meetings**—ODOT conducted a number of public meetings with a diverse set of public transportation stakeholders from other agencies and organizations to elicit their feedback on issues, trends, challenges, and opportunities to consider in the OTP.
- **Conference participation**—At each Oregon Public Transportation Conference held during the OTP development, ODOT staff and consultants conducted sessions to gather feedback on the relevant issues for that plan stage.
- **Focus groups**—Small group discussions were held with invited stakeholders about specific topics such as equity and serving riders that rely on public transportation as their primary means of travel.

## Outreach at Plan Development Stages

### Plan Development Project Scoping

Outreach activities prior to and early in the plan development project helped inform the scope of the plan development project and identify themes and topics to address.

- Public transportation stakeholders were interviewed, including 30 individuals and 6 groups representing different public transportation interests across the state. Interviewees represented over 25 agencies and organizations and 15 ODOT staff from different regions, divisions, and agency programs. Information from these meetings was used to determine the scope of the new OTP and identify topics to address in the plan.

- A public transportation provider survey was conducted online to seek Oregon public transportation providers input. The survey asked for providers' feedback to help identify issues, trends, opportunities, and challenges they face as they provide service to Oregon communities. The survey was announced through emails to providers and at the Oregon Public Transportation Conference. ODOT received 43 responses to the survey.
- The Oregon Public Transportation Conference Workshop hosted approximately 60 participants who attended a 2-hour workshop for the OTP. The primary workshop objective was to discuss several topics with public transportation providers to gather their ideas and build on survey themes with more detail and context.

### **Draft Vision and Goals, Opportunities and Challenges**

The first major project milestone saw a draft vision and goals developed for the OTP. In this round of outreach, the project team shared the draft vision and goals and conducted discussions with stakeholders and the public that informed policy development:

- Listening meetings were held to solicit feedback to clarify opportunities and challenges for public transportation and inform development of policies and strategies. Six workshop-style meetings were held around the state, and these were announced via the project website, email lists, social and local media; more than 140 people attended the listening meetings.
- An online open house held concurrent with the listening meetings was announced online, in press releases, and social media; it shared OTP information and solicited written feedback. More than 250 people provided feedback through the online open house.
- ODOT convened three rider focus groups across Oregon to gain a better understanding of the needs, concerns, and ideas of certain riders. ODOT, local transit providers, and other service providers worked together to identify and invite people to attend these meetings, focusing on individuals who rely on public transportation as their primary means of travel. Each meeting included 8 to 12 participants who shared information about barriers they face, concerns they have, and their top priorities for improving public transportation.



## Draft Policy and Strategy Review

The next major project milestone saw draft policies and strategies prepared for the OPTP. These are the core of the plan and set direction for plan implementation activities. The purpose of this outreach was to share the draft policies and strategies with stakeholders and the public and gather feedback to improve them and inform the draft plan:

- Public meetings were held around the state. One focus was on the 12 ACTs because of their diverse membership and locations. Other stakeholder group presentations were given to various boards, commissions, and other groups with an interest in public transportation. Altogether, more than 400 individuals participated in about 30 ACTs, public, and stakeholder meeting presentations.
- An online open house was available concurrently with the public meetings. ODOT emailed invitations to participate in the open house to over 700 individuals and agencies, and 94 stakeholder groups. ODOT used press releases and social media to reach an even larger audience. Other groups assisted ODOT by sharing the online open house invitation via their newsletters. These groups included the Oregon Transit Association, League of Oregon Cities, Association of Oregon Counties, Oregon Environmental Council, and a local Commute Options program. ODOT received about 175 written responses through the online open house.
- Individual letters were sent requesting consultation with various groups, including interested state and federal agencies, federally recognized tribal governments, natural resource agencies, and equity groups. Offers for individual meetings were extended.
- At the 2017 Oregon Public Transportation Conference, staff and consultants hosted a session focused on ideas about implementing the OPTP policies and strategies, particularly those related to technology, intercity and regional transit, and mobility management. About 35 participants attended and joined in the conversation.

## Draft OPTP Public Review and Comment

A minimum 45-day public review and comment period is required prior to adoption of Oregon statewide plans. The Draft OPTP was released for public review by the Oregon Transportation Commission (OTC) on May 17, 2018. The public review and comment period was from May 17 through July 20, 2018; with a public hearing at the OTC meeting on July 20, 2018. At the close of the public review period, the project team worked with the Policy Advisory Committee to determine whether changes to the Plan were required. The team documented all written comments received and the responses and plan changes made as a result. The Project Management Team worked with the Policy Advisory Committee to finalize the Plan in response to public comment and reported the outcome as part of the OTC consideration for Plan adoption.

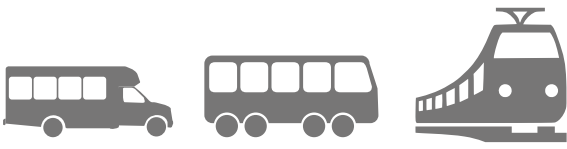
Public Meetings were held around the state. Outreach events were held throughout the state and with a diversity of stakeholders and groups. Presentations and discussions were held at all twelve Area Commissions on Transportation. Further discussions were held with metropolitan planning organizations, all nine federally recognized tribes, various boards and commissions, local and regional governments, and others with an interest in public transportation. Altogether, more than 560 individuals participated in about 40 ACT, public, and stakeholder meeting presentations and discussions.

An Online Open House was available concurrently with the public meetings. ODOT emailed invitations to participate in the open house to over 700 individuals and agencies, and about 100 stakeholder groups. ODOT used press releases and social media to reach an even larger audience. Other groups assisted ODOT by sharing the online open house invitation via their newsletters. These groups included the Oregon Transit Association, League of Oregon Cities, Association of Oregon Counties, Oregon Environmental Council, and others. ODOT received about 580 individual visitors to the online open house and 53 written responses through the online open house.

Individual letters were sent requesting consultation and offering meetings with various groups, including interested state and federal agencies, federally recognized tribal governments, natural resource agencies, equity groups, public transportation providers as well as public transportation labor unions.

A public hearing was held for the draft OPTP at the July 20, 2018 OTC meeting. Five letters of comment were received and one public transportation provider gave testimony to the Commission.



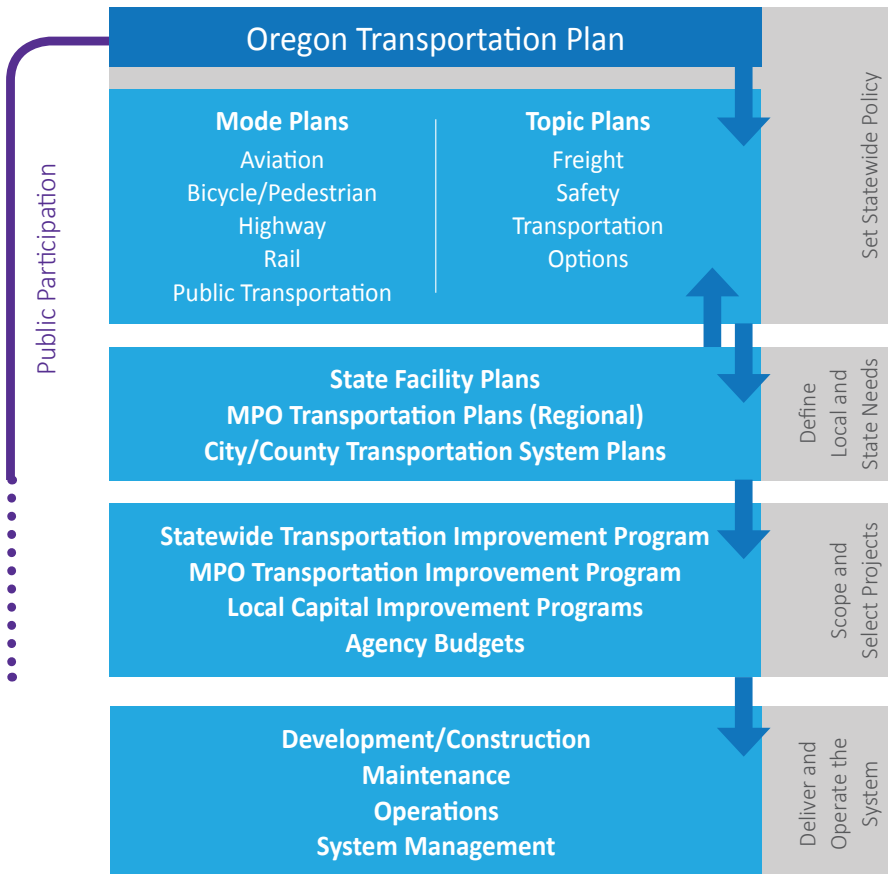


## Appendix C:

# Legal Context of the Oregon Public Transportation Plan

The Oregon Public Transportation Plan (OPTP) is a modal element of the Oregon Transportation Plan (OTP), the state’s multimodal policy plan. Collectively the OTP, the Public Transportation Plan, and other mode and topic plans fulfill state and federal planning requirements, assume legal authority accordingly, and provide an overall policy foundation for the state transportation system. The Oregon Transportation Commission (OTC) adopts state level plans and approves programs. The policies, goals, and strategies in the plans direct the work of the Oregon Department of Transportation (ODOT) and impact transportation decisions of local jurisdictions, through their Transportation System Plans (TSPs) and other planning efforts, which must be consistent with statewide plan direction. Region and local plans refine policies and strategies to each context as appropriate and identify projects and programs. These projects and programs are then prioritized for investment. Construction, maintenance and operational activities occur as part of implementation and are influenced or directed by earlier planning or investment decisions.

**Figure C-1. Integrated Transportation Planning**



Following is more specific information about how the OTP and its mode and topic plans, including the Oregon Public Transportation Plan, fulfill state and federal requirements. In addition, a discussion is provided on how the OTP and each mode and topic plan relate to one another and the overall statewide policy framework.

## State Planning Requirements and Relationships to State Laws

### Oregon Transportation Commission (OTC) Role – Duties and Responsibilities

ORS 184.617(1) states:

*(b): The Oregon Transportation Commission shall develop and maintain state transportation policies, including but not limited to policies related to management, construction and maintenance of highways and other transportation systems in Oregon, including but not limited to aviation, ports and rail.*

*(c): Develop and maintain a comprehensive, 20-year long-range plan for a safe, multimodal transportation system for the state which encompasses economic efficiency, orderly economic development and environmental quality. The comprehensive long-range plan*

*(A) Must include, but not be limited to, aviation, highways, mass transit, ports, rails and waterways: and*

*(B) Must be used by all agencies and officers to guide and coordinate transportation activities and to insure transportation planning utilizes the potential of all existing and developing modes of transportation.*

Oregon Transportation Commission (OTC) members are appointed by the Governor and approved by the Legislature for an established term. OTC members reflect a statewide perspective, with members from different geographic regions of the state. The OTC establishes state transportation policy, adopts ODOT's long range transportation plans, including the Oregon Transportation Plan and mode and topic plans such as Bicycle and Pedestrian, Highway, Rail, Public Transportation, Freight, Safety, Transportation Options, and state facility plans. The Aviation modal plan is the responsibility of the Department of Aviation, but is coordinated with ODOT and the OTC. The OTC is also approves the Statewide Transportation Improvement Program (STIP) every three years. The OTC also approves the Statewide Transportation Improvement Fund (STIF) Plans, which are derived from local public transportation plans.

In Oregon, the Oregon Transportation Plan and the adopted mode and topic plans (Aviation, Bicycle and Pedestrian, Freight, Highway, Public





Transportation, Rail, Transportation Options, and Transportation Safety Action), and facility plans are designated as the Statewide Transportation System Plan. Thus the OTP and each of the mode, topic and facility-specific plans have legal authority.

The Oregon Transportation Plan (OTP) is the umbrella policy plan that achieves the statutory planning requirement for the Oregon Transportation Commission (OTC) and the Oregon Department of Transportation (ODOT). The OTP is the overall policy document and is refined by the mode and topic plans. ORS 184.617(1) (c) (B) requires state agencies to use the OTP to “guide and coordinate transportation activities” but it does not authorize the OTC to impose OTP goals, policies and performance recommendations on other state agencies. However, the OTP operates in the legal context of the State Agency Coordination Program and the Land Conservation and Development Commission’s Transportation Planning Rule that impose additional requirements and authority in the planning process for other jurisdictions. The OTP, and its mode and topic plan elements, must also comply with federal legislation.

The 2017 Keep Oregon Moving Act (ORS 184.751) established the STIF, a new dedicated funding source for public transportation (STIF funding comes with specific eligibility requirements, including a public transportation improvement plan (STIF Plan) that documents proposed projects, planned expenditures, project benefits, and discrete measureable outcomes. Rules implementing these requirements were adopted in 2018, (Chapter 732, Division 040). STIF plans are required to derive their projects from local plans such as transit development plans, transportation system plans, regional transportation plans, or coordinated plans. These requirements became effective July 1, 2018. The OPTP is designed to support requirements and priorities for STIF in law, and STIF implementation will support the OPTP.

The 2017 Keep Oregon Moving Act included a change in the duties and responsibilities of the OTC [ORS 184.617(1)(e)], that require that the state long-range multimodal transportation plan (the OTP) and modal plans include a “list of projects for at least 20 years into the future that are capable of being accomplished using the resources expected to be available”” Some state mode plans, including the OPTP, are for modes primarily planned, implemented, and operated by local or even private entities. In the future, the various mode and topic plans will likely reference strategic investment plans or other project lists just as the OPTP references the STIF plans that are developed to enable use of the new public transportation funds. STIF plans are required of providers and others to request STIF funds, and they will list the projects identified by the relevant agencies as priorities for their services and communities. The STIF plans are required to be updated biennially, and will be approved by the OTC.

## Relationship to State Agency Coordination Program (OAR 731-15-0045)

The Oregon Transportation Commission adopted rules to implement ODOT's State Agency Coordination (SAC) Program in September 1990. The program establishes procedures used by the Department to ensure compliance with statewide land use planning goals in a manner compatible with acknowledged city, county and regional comprehensive plans.

The adoption of transportation policy falls under the requirements of the State Agency Coordination Program rules (OAR 731-15). The rules require ODOT to involve interested parties and affected jurisdictions when developing plans or adopting major amendments to plans and the Department must ensure the plan is in compliance with all applicable statewide planning goals (OAR 731-015-0065). The Findings of Compliance with the Statewide Planning goals for the OPTP can be found in the Plan's Appendices.

## Relationship to the Statewide Planning Goals and the Transportation Planning Rule (OAR 660-012)

The Oregon Land Conservation and Development Commission adopted Oregon's statewide planning goals that established state policies in 19 different areas. The Transportation Planning Rule (TPR), OAR 660-012 implements the Land Conservation and Development Commission's Planning Goal 12 (Transportation). It requires ODOT to prepare a statewide transportation system plan (TSP) to identify transportation facilities and services to meet state needs. The Oregon Transportation Plan and adopted multimodal, mode, topic and facility plans serve as the State Transportation System Plan (TSP).

The TPR requires that metropolitan areas conduct additional planning and certain counties to prepare regional TSPs consistent with the adopted state TSP (OAR 660-012-0015(2)). Cities and counties must prepare local TSPs that are consistent with the state TSP and applicable regional planning. (OAR 660-012-0015(3)). Since the Oregon Transportation Plan and its mode, topic and facility plans are the adopted TSP for the state, the TPR requires that regional plans and local TSPs be consistent with them.

## Federal Planning Regulations

### Relationship to 23 CFR 450: Planning Assistance and Standards

The federal Fixing America's Surface Transportation (FAST) Act, signed into law in December 2015, and continues many of the federal planning requirements of its predecessors, from the Intermodal Surface Transportation Efficiency Act (ISTEA) (1991) through Moving Ahead for Progress in the 21st Century Act (MAP-21) (2013). The FAST Act establishes



federal transportation policy, funding levels, and guidelines for state and metropolitan planning organization transportation planning. The new federal planning guidance rule was published in May 2016 to reflect the FAST Act changes. The new law continues the requirement that states conduct a statewide planning process that is coordinated with transportation planning activities carried out in metropolitan areas and that involves consultation with non-metropolitan jurisdictions, considering all modes of transportation.

Federal direction for the development and content of the long-range statewide transportation plan is contained in 23 CFR 450, which implements the Federal Highway Administration's and the Federal Transit Administration's transportation planning statutes. Each state must carry out a continuing, cooperative, and comprehensive statewide multimodal transportation planning process, including the development of a long-range statewide plan. 23 CFR 450.216 (a) enunciates this as:

*The State shall develop a long-range statewide transportation plan, with a minimum 20-year forecast period at the time of adoption, that provides for the development and implementation of the multimodal transportation system for the State. The long-range statewide transportation plan shall consider and include as applicable, elements and connections between public transportation, non-motorized modes, rail, commercial motor vehicle, waterway, and aviation facilities, particularly with respect to intercity travel.*

### Relationship to the Americans with Disabilities Act (ADA)

The following description was taken from the Department of Justice's *Information and Technical Assistance on the Americans with Disabilities Act*.

The Americans with Disabilities Act (ADA) was signed into law on July 26, 1990 by President George H.W. Bush. ADA is one of America's most comprehensive pieces of civil rights legislation that prohibits discrimination and guarantees that people with disabilities have the same opportunities as everyone else to participate in the mainstream of American life – to enjoy employment opportunities, to purchase goods and services, and to participate in State and local government programs and services. Modeled after the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, religion, sex, or national origin – and Section 504 of the Rehabilitation Act of 1973 – the ADA is an “equal opportunity” law for people with disabilities. This Plan includes policies and strategies intended to help meet the ADA and build upon its requirements.

### Relationship to the Oregon Transportation Plan

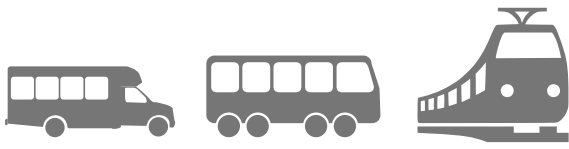
The Oregon Transportation Plan is the state's long range (25 year) multimodal transportation plan. The OTP is the overarching policy document among a series of plans that together form the state transportation system plan. The OTP considers all modes of Oregon's transportation system as a single system and addresses the future needs of Oregon's transportation system.

The OTP establishes a vision, goals, policies, and strategies and initiatives that address the challenges and opportunities facing Oregon. The Plan provides the framework for prioritizing transportation improvements based on various future revenue conditions, but it does not identify specific projects for development. The Oregon Transportation Plan's goals, policies and strategies guide the development of state multimodal, mode, topic and facility plans as well as regional and local transportation system plans.

The Oregon Public Transportation Plan (OPTP) is a mode plan under the OTP umbrella. Mode plans analyze a specific transportation option and establish policies, strategies and investment priorities pertinent to that mode. The OPTP refines the OTP and provides detailed policies and strategies related to the public transportation system in Oregon. As an element of the OTP it has legal authority. The 2018 Oregon Public Transportation Plan supersedes the 1997 Oregon Public Transportation Plan.

In relationship to other mode and topic plans, the Oregon Public Transportation Plan carries equal weight. The policies and strategies in the OTP and mode and topic plans collectively represent the transportation policy framework for the state. While the plans are separate, they are in essence all equal components of the single OTP.





## Appendix D:

# Findings of Compliance with Oregon's Statewide Planning Goals

## Statutory Background and Requirements for the Oregon Public Transportation Plan

Adoption of the 2018 Oregon Public Transportation Plan (OPTP) fulfills federal and state requirements and objectives of public transportation planning. The OPTP was prepared by the Oregon Department of Transportation (ODOT) that will also maintain, coordinate, and administer the Plan.

The Oregon Transportation Commission (OTC), the state approval authority, adopts the OPTP as part of its legal responsibility and authority under ORS 184.617. The OPTP includes policies for public transportation planning. The OPTP is an element of the Oregon Transportation Plan (OTP), as are other mode and topic plans. Collectively, the OTP with the adopted mode and topic plan components constitute the state's transportation system plan (TSP).

Federal direction for the development and content of the long-range statewide transportation plan is contained in 23 CFR 450, which implements the Federal Highway Administration's and the Federal Transit Administration's transportation planning statutes. Each state must carry out a continuing, cooperative, and comprehensive statewide multimodal transportation planning process, including the development of a long-range statewide plan.

## Findings of Compliance with the State Agency Coordination Agreement

ODOT's State Agency Coordination Agreement (SAC) requires the OTC to adopt findings of fact when adopting final modal system plans (OAR 731-015-0055). Pursuant to these requirements, the following findings and supporting information supplements the OTC adoption of the 2018 Oregon Public Transportation Plan.

Coordination Procedures for Adopting Final Modal Systems Plans (OAR 731-015-0055):

- (1) Except in the case of minor amendments, the Department shall involve the Department of Land Conservation and Development (DLCD), Metropolitan Planning Organizations (MPOs), and interested cities, counties, state and federal agencies, special districts, and other parties in the development or amendment of a mode or topic plan. This involvement may take the form of mailings, meetings, or other means

that the Department determines are appropriate for the circumstances. The Department shall hold at least one public meeting on the plan prior to adoption.

(2) The Department shall evaluate and write draft findings of compliance with all applicable statewide planning goals.

(3) If the draft plan identifies new facilities which would affect identifiable geographic areas, the Department shall meet with the planning representatives of affected cities, counties, and metropolitan planning organization to identify compatibility issues and the means of resolving them. These may include:

(a) Changing the draft plan to eliminate the conflicts;

(b) Working with the affected local governments to amend their comprehensive plans to eliminate the conflicts; or

(c) Identifying the new facilities as proposals which are contingent on the resolution of the conflicts prior to the completion of the transportation planning program for the proposed new facilities.

(4) The Department shall present to the Transportation Commission the draft plan, findings of compatibility for new facilities affecting identifiable geographic areas, and findings of compliance with all applicable statewide planning goals.

(5) The Transportation Commission, when it adopts a final modal systems plan, shall adopt findings of compatibility for new facilities affecting identifiable geographic areas and findings of compliance with all statewide planning goals.

(6) The Department shall provide copies of the adopted final modal systems plan and findings to DLCDC, the metropolitan planning organizations, and others who request to receive a copy.

**FINDING:** Development of the 2018 Oregon Public Transportation Plan was based on an open and ongoing public involvement process which included MPOs, Area Commissions on Transportation (ACTs), cities, counties, state agencies, public transportation providers, other stakeholders and interest groups, and input from interested citizens. Targeted outreach on the Draft OPTP went to DLCDC, tribes, federal and state agencies, MPOs, ACTs, and other interested parties. The OPTP does not include new facilities and therefore (3) is inapplicable.

ODOT formed and worked closely with a 17 member Policy Advisory Committee (PAC) to guide plan development and a 17 member Technical Advisory Committee (TAC) to provide advice on specific topics. The PAC was chaired by an OTC member and included representatives from local and regional jurisdictions, public transportation providers including one from a tribe, economic development and health agencies, and the auto and freight communities. The PAC met 13 times over the course of plan development.



PAC meetings were open to the public, with specific times scheduled for public comments at each meeting.

The Land Conservation and Development Commission (LCDC) participated on the OPTP PAC. DLCD received a letter notifying them that the draft Plan was available for public review and comment. At their May 17, 2018 meeting, the OTC reviewed the Draft Oregon Public Transportation Plan and released the document for public review and input. The public comment period was open for more than 60 days. A public hearing was held at the July 20, 2018 OTC meeting to provide an opportunity for interested parties to testify directly to the Commission.

Broad notice on the availability of the Draft OPTP was sent as described in the Plan Development Process (Appendix B). Appendix B is included herein and made a part of this finding. Agency, public, and stakeholder notifications about the Draft OPTP provided a range of materials including links to the full document, a Fact Sheet summarizing key information about the OPTP, links to supporting and technical materials from Plan development, public review and hearing dates, and a description of ways to provide comments. Information was also provided on how to request materials in Spanish and alternative formats. The public involvement and outreach process followed OTC Policy 11 – Public Involvement Policy for statewide planning processes and the Statewide Transportation Improvement Program (STIP).

The OTC took action on the proposed OPTP and Draft Findings of Compliance with Oregon’s Statewide Planning Goals at their September 20, 2018 meeting, which allowed for additional opportunity for public comment. Notice of OTC consideration was also broadly distributed as part of the September 2018 OTC Meeting Packet.

The September 20, 2018 OTC Meeting Packet included the following material and information for OTC consideration:

- OTC Cover Memorandum
- 2018 Oregon Public Transportation Plan, including Findings of Compliance with Oregon’s Statewide Planning Goals
- Outreach Summary
- Compilation of Written Public Review Period Comments Received with Responses and Changes Made to the Plan

Per the State Agency Coordination Agreement, and customary ODOT practice, information on the adopted Oregon Public Transportation Plan and final Findings of Compliance with Statewide Planning Goals will be distributed to DLCD, MPOs, interested participants from the Plan development process, and others who request a copy following adoption. The final documents will be available on the Plan Project webpage: <https://www.oregon.gov/ODOT/Planning/Pages/OPTP.aspx> (as posted at the time of this document).

# Findings of Compliance with Oregon's Statewide Planning Goals

The State of Oregon has established 19 statewide planning goals to guide state, regional and local land use planning. The goals express the state's policies on land use and related topics. The findings below are based on applicability and content of the Oregon Public Transportation Plan (OPTP).

**1. Citizen Involvement** – *The purpose of Goal 1 (660-015-0000(1)) is “To develop a citizen involvement program that ensures the opportunity for citizens to be involved in all phases of the planning process.”*

**FINDING:** The development and review of the OPTP provided extensive opportunities for citizen involvement as demonstrated in the Plan Development Process, which is OPTP Appendix B. Outreach for the Draft OPTP was conducted in compliance with Oregon Transportation Commission (OTC) Policy 11 – Public involvement, which establishes public involvement objectives for the development and update of statewide plans, including modal plans, such as the OPTP. Outreach activities were conducted in compliance with the relevant policies in the Oregon Transportation Plan (OTP) including OTP Goal 7, Coordination, Communication and Cooperation.

Highlights of outreach during the OPTP process included:

- The Plan was developed with guidance of a Policy Advisory Committee and a Technical Advisory, each representing a wide range of stakeholder interests.
- Throughout the Plan development process, various communication tools were employed to reach a wide variety of participants and to engage them successfully in a format that would meet their communication preferences. Tools included website, project fact sheets, email lists, individual letters, press releases, and social media. A notification was posted on the project website for the availability of alternate formats of the materials. The Plan process employed listening meetings, focus groups, and online open houses.
- Notification of public review was sent to DLCD, interested state and federal agencies, tribal governments, MPOs, Area Commissions on Transportation, Oregon cities and counties, interested advisory committees and interested project stakeholders.
- Public input was solicited throughout the process and particularly at a number of milestones. 1) Draft Vision and Goals, Opportunities and Challenges; 2) Draft Policy and Strategy review and 3) Draft Plan review.
- Presentations were provided to numerous groups before and during the public review period.
- A public hearing was held at the July 20, 2018 OTC meeting.





Public meetings were held around the state. Diverse groups and locations were included, such as all twelve Area Commissions on Transportation and different MPO group meetings. Discussions were held with all of the nine federally recognized tribes as well as various boards, commissions, local and regional governments, state and federal agencies, public transportation providers, and others with an interest in public transportation. For the Draft Plan review, more than 560 individuals participated in about 40 ACT, public, and stakeholder meetings. In addition, the online open house had more than 580 unique visitors.

## Communication Tools

Various communication tools were employed to reach a wide variety of participants and to engage them successfully in a format that would meet their communication preferences. Tools included:

- **Website, email lists, newsletters, individual letters, press releases, and social media** – these forms of communication were used to share information with stakeholders and the public throughout Plan development. The email list of parties interested in the OPTP contains over 700 individual addresses; this and other email distribution lists were used to announce participation opportunities and invite people to participate in the online open houses.
- **Advisory committees** – the OPTP was developed with a PAC and a TAC comprised of representatives of a wide variety of affected groups. Committee meetings were open to the public and were held throughout the project.
- **Online open houses** – virtual meetings to enable more residents and stakeholders to participate. These present similar information as in person presentations and enabled participants to provide written comment. Online open houses were provided concurrently with the listening meetings, Draft Policies and Strategies review, and the Draft Plan review.
- **Stakeholder meetings and presentations** – presentations were made at meetings of various stakeholder groups, including Area Commissions on Transportation (ACTs), the Oregon Public Transit Advisory Committee, MPO groups, and state boards, commissions, and others during outreach phases. Most of these were public meetings and were announced and open for interested parties to attend.
- **Listening meetings** – ODOT conducted a number of public meetings with a diverse set of public transportation stakeholders from other agencies and organizations to elicit their feedback on issues, trends, challenges, and opportunities to consider in the OPTP.
- **Conference Participation** – at each of the Oregon Public Transportation Conferences held during the development of the Plan, ODOT staff and consultants conducted sessions to gather feedback on the relevant issues for that plan stage.

- **Focus groups** – small group discussions with invited stakeholders about specific topics such as equity and serving riders that rely on public transportation as their primary means of travel.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 1, Citizen Involvement.**

*2. Land Use Planning – The purpose of Goal 2 (OAR 660-015-0000(2)) is “To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions.”*

**FINDING:** As a document produced by ODOT and adopted by the OTC, the Oregon Public Transportation Plan does not have authority over specific land use decisions. However, the OPTP supports land use planning in Oregon, just as land use planning directly influences public transportation and the types of services that can be effective in various areas. The OPTP advocates for early engagement of public transportation providers in the planning and development process to help ensure that new growth and development can be adequately served. Similarly, the OPTP advocates for local jurisdictions to participate in the planning processes of public transportation providers.

Several OPTP policies demonstrate consistency. The most notable is Goal 8: Land Use- Public transportation is a tool that supports Oregon’s state and local land use goals and policies. Agencies collaborate to ensure public transportation helps shape great Oregon communities providing efficient and effective travel options in urban, suburban, and rural areas.

The policies under this goal cover such things as:

- Integrating public transportation with other community plans including transportation, land use, and economic development plans; working with developers, employers, community service providers and public agency decision making in siting and development decisions;
- Recognizing the impact land use has on people’s ability to use public transportation and other transportation options; and
- Locating housing near public transportation routes and services.

OPTP Goal 9: Funding and Strategic Investment, addresses developing program and funding criteria to address community public transportation service needs in alignment with state, regional, and local plans. It also addresses complying with federal and state requirements and to protect the existing public transportation system and identify investment priorities. Examples include requirements for environmental justice, state of good repair, transportation asset management, and performance based planning.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 2, Land Use Planning.**



**3. Agricultural Lands** – *The purpose of Goal 3 (OAR 660-015-0000(3)) is “To preserve and maintain agricultural lands.”*

**FINDING:** The OPTP does not directly impact or hinder the overall objectives of Statewide Planning Goal 3, Agricultural Lands. The OPTP does not propose specific facilities that would encroach or impact agricultural lands. OPTP, Goal 8: Land Use recognizes public transportation as a tool that supports Oregon’s state and local land use goals and policies; it supports collaboration to ensure public transportation helps shape communities by providing efficient and effective travel options in urban, suburban, and rural areas.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 3, Agricultural Lands.**

**4. Forest Lands** – *The purpose of Goal 4 (OAR 660-015-0000(4)) is “To conserve forest lands by maintaining the forest land base and to protect the state’s forest economy by making possible economically efficient forest practices that assure the continuous growing and harvesting of forest tree species as the leading use on forest land consistent with sound management of soil, air, water, and fish and wildlife resources and to provide for recreational opportunities and agriculture.”*

**FINDING:** The OPTP does not directly impact or hinder the overall objectives of Statewide Planning Goal 4, Forest Lands, which protects forest lands primarily for resources purposes. The OPTP does not propose specific facilities on or near forest lands. OPTP Goal 7: Environmental Sustainability policies and strategies encourage the use of public transportation fleets, facilities, and services to safeguard and enhance Oregon’s natural resources and environment. OPTP Goal 8: Land Use calls on agencies to collaborate to help public transportation shape the state’s communities by providing efficient and effective travel options in all areas of the state. One of the policies in OPTP Goal 9: Funding and Strategic Development, refers to developing program and funding criteria to address community public transportation service needs in alignment with state, regional, and local plans. OPTP Goal 10: Communication, Cooperation, and Coordination addresses collaborating with various agencies, jurisdictions and transportation providers to support public transportation that helps meet state, regional, and community goals.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 4, Forest Lands.**

**5. Natural Resources, Scenic and Historic Areas, and Open Spaces** – *The purpose of Goal 5 (OAR 660-015-0000(5)) is “To protect natural resources and conserve scenic and historic areas and open spaces.”*

**FINDING:** The OPTP does not directly impact or hinder the overall objectives of Statewide Planning Goal 5, Natural Resources, Scenic and Historic

Areas, and Open Spaces. The OPTP does not propose facilities on or near lands protected by Goal 5. Public transportation service to historic areas and open spaces can conserve energy by reducing the need for the use of single occupant vehicles. OPTP Goal 2: Accessibility and Connectivity supports coordinating seamless regional and intercity bus and rail service to enable various types of trips, including recreational trips. OPTP Goal 5: Health advocates the use of public transportation services to support healthy lifestyle options by providing access to a wide variety of goods and services including recreation. The policies and strategies of OPTP Goal 7: Environmental Sustainability encourages the use of public transportation fleets, fuels, and services to safeguard and enhance Oregon’s natural resources and environment.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 5, Natural Resources, Scenic and Historic Areas, and Open Spaces.**

**6. Air, Water and Land Resources Quality** – *The purpose of Goal 6 (OAR 660-015-0000(6)) is “To maintain and improve the quality of the air, water and land resources of the state.”*

**FINDING:** The OPTP does not directly impact or hinder the overall objectives of statewide Planning Goal 6, Air, Water and Land Resources Quality. The OPTP does not propose specific facilities as part of the document. OPTP Goal 7: Environmental Sustainability, Public transportation contributes to a healthy environment and climate by moving more people with efficient, low-emission vehicles, reducing greenhouse gases and other pollutants, recognizes that public transportation is important to reducing greenhouse gasses and achieving state environmental goals and targets, supports transitioning to low or zero emissions technology and encourages the implementation of sustainable transit system operations policies and practices to safeguard and enhance Oregon’s natural resources. OPTP Goal 5: Health acknowledges that public transportation fosters improved health of Oregonians through the promotion of clean air.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 6, Air, Water and Land Resources Quality.**

**7. Areas Subject to Natural Hazards** – *The purpose of Goal 7 (OAR 660-015-0000(7)) is “To protect people and property from natural hazards.”*

**FINDING:** The OPTP recognizes the challenges associated with natural hazards and the role that public transportation can play in emergency management planning and emergency response and recovery during and after natural disasters and other emergencies. OPTP Goal 6: Safety and Security addresses the integration of public transportation agencies



with others to support the resilience of the transportation system. Public transportation can help with the evacuation of people with disabilities and those that do not have access to other transportation options. The strategies encourage coordination with law enforcement, emergency responders, and incident management personnel to identify the ways that public transportation can contribute to emergency planning and support recovery.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 7, Areas Subject to Natural Hazards.**

**8. Recreational Needs** – *The purpose of Goal 8 (OAR 660-015-0000(8)) is “To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.”*

**FINDING:** The OPTP does not directly impact or hinder the objectives of Statewide Planning Goal 8, Recreational Needs. The OPTP does not propose specific facilities as part of the document. OPTP Goal 2: Accessibility and Connectivity, supports coordinating seamless regional and intercity bus and rail service to enable various types of trips, including recreational trips. OPTP Goal 3: Community Livability and Economic Vitality identifies that a reliable public transportation system supports the livability and economic vitality of Oregon communities, including tourism in Policy 3.2: Promote and support use of public transportation for tourism and special events in Oregon. This policy includes strategies that promote tourist use of public transportation by making it easy to use; supports collaboration with tourism agencies to identify places in Oregon where public transportation can better serve tourists; and encourages new service and programs to enhance access to tourist destination. In addition, OPTP Policy 5.1 addresses access to recreation, parks, and natural spaces via public transportation.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 8, Recreational Needs.**

**9. Economic Development** – *The purpose of Goal 9 (OAR 660-015-0000(9)) is “To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon’s citizens.”*

**FINDING:** The OPTP supports economic development in Oregon in a number of ways throughout the plan. Public transportation is an essential element of a multimodal transportation system that helps meet business needs; it provides transport to work, and customers to businesses and services; provides access for visitors and tourists to Oregon’s attractions and tourist destinations. It also plays a role in the more efficient movement of goods in congested areas by giving people a more efficient means of travel thus leaving more of the corridor available for the transport of goods.

OPTP Goal 3: Community Livability and Economic Development- Public transportation promotes community livability and economic vitality by efficiently and effectively moving people of all ages to and from homes, jobs, businesses, schools and colleges, and other destinations in urban, suburban, and rural areas. Under this goal there are policies and strategies that address access to education and employment; promotes the use of public transportation for tourism and special events; and recognizes the need to collaborate to achieve efficiencies. It also promotes the use of public transportation in support of livability and community affordability while serving a variety of riders through easy to use services for all including youth, older adults and people with disabilities. Goal 5: Health builds on this by recognizing the importance of public transportation to social engagement and the ability to live independently.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 9, Economic Development.**

**10. Housing** – *The purpose of Goal 10 (OAR 660-015-0000(10)) is “To provide for the housing needs of citizens of the state.”*

**FINDING:** The OPTP does not have direct application to the provision of housing, but acknowledges in OPTP Goal 8: Land Use, that the availability of public transportation supports the development of housing near public transportation routes and that including it in various plans would be advantages. Strategy 8.1A: Integrate transportation, economic development, housing, and land use strategies that support public transportation in a wide range of community plans, including comprehensive plans, transportation system plans (TSPs), coordinated public transportation human service plans, and others.

OPTP Goal 3: Community Livability and Economic Development, Strategy 3.3D links public transportation services to affordable communities by such techniques as affordable fares for people with low incomes and service design that enables households to own fewer vehicles.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 10, Housing.**

**11. Public Facilities and Services** – *The purpose of Goal 11 (OAR 660-015-0000(11)) is “To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.”*

**FINDING:** Public transportation is an essential component of developing and maintaining an efficient transportation network in urban and rural areas. This is stated clearly in OPTP Goal 10: Communication, Collaboration, and Coordination, Policy 10.5: Collaborate among agencies, jurisdictions, and providers to ensure the public transportation system is integrated as



a component of the broader multimodal transportation system in Oregon. Provide leadership for public transportation activities and build upon efforts to coordinate public transportation services, especially statewide services. Public transportation is seen as an important tool in OPTP Goal 8: Land Use, Public transportation is a tool that supports Oregon’s state and local land use goals and policies. Agencies collaborate to ensure public transportation helps shape great Oregon communities providing efficient and effective travel options in urban, suburban, and rural areas.

Other parts of the OPTP support elements of planning for an efficient transportation system. Policy 1.6 encourages working proactively with state, local and planning efforts as a tool to support transportation planning; the concept of mobility management services is seen as way to better coordinate services and OPTP Goal 2: Accessibility and Connectivity supports the connection between services and modes.

### **The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 11, Public Facilities and Services.**

**12. Transportation** – *The purpose of Goal 12 (OAR 660-015-0000(12)) is “To provide and encourage a safe, convenient and economic transportation system.”*

**FINDING:** The Oregon Public Transportation Plan is the public transportation modal element of the Oregon Transportation Plan. The OPTP’s long range vision sees public transportation as an integral, interconnected component of Oregon’s transportation system that helps further the state’s quality of life and economic vitality and contributes to the health and safety of all residents. Goals in the OPTP support this vision such as Goal 1: Mobility; Goal 2: Accessibility and Connectivity; Goal 3: Community Livability and Economic Vitality; and Goal 5: Safety and Security. Each of these goals is followed by policies and strategies that encourage a safe, convenient and economic public transportation system to move people.

### **Transportation Planning Rule, OAR 660-012**

Statewide Planning Goal 12, Transportation, and administrative rule, the Transportation Planning Rule (TPR), have several elements for assuring that statewide planning goals are considered in transportation planning efforts. The TPR is a broad administrative rule that covers a range of applications, some of which are summarized below:

- The preparation and coordination of transportation system plans
- Coordination with federally required transportation plans in metropolitan areas
- Elements of TSPs
- Complying with statewide planning goals

- Determination of transportation needs
- Evaluation and selection of transportation alternatives
- Transportation financing programs
- Implementation of TSPs
- Transportation project development
- Timing and adoption of TSPs
- Plan and land use regulation amendments
- Transportation improvements on rural lands
- Exceptions for improvements on rural lands

The Transportation Planning Rule includes elements to assure that statewide planning goals are considered when developing transportation plans. While most of the TPR provisions are directed to the development and coordination of local transportation system plans, some of the provisions are applicable to the development of a statewide transportation system plan. The Oregon Transportation Plan (OTP) serves as the statewide transportation system plan, and the Oregon Public Transportation

Plan (OPTP), is a modal element of the OTP that further refines and defines the policy framework for the public transportation system. These findings address those rule components applicable to the development and adoption of the OTP and a statewide modal plan element. The OTP and its elements form the policy foundation for the state, providing the long-range vision and a framework to guide state, regional, and local transportation decisions that apply the statewide framework to help identify specific needs and projects. Local Transportation System Plans must be consistent with the state Transportation System Plan as defined in the TPR (OAR 660-012-0045).

### **Purpose, OAR 660-012-0000**

Many elements of the OPTP reflect objectives from the TPR purpose statement. Section (1) of the purpose statement is included below for context.

*(1) This division implements Statewide Planning Goal 12 (Transportation) to provide and encourage a safe, convenient and economic transportation system. This division also implements provisions of other statewide planning goals related to transportation planning in order to plan and develop transportation facilities and services in close coordination with urban and rural development. The purpose of this division is to direct transportation planning in coordination with land use planning to:*

*(a) Promote the development of transportation systems adequate to serve statewide, regional and local transportation needs and the mobility needs of the transportation disadvantaged;*





- (b) Encourage and support the availability of a variety of transportation choices for moving people that balance vehicular use with other transportation modes, including walking, bicycling and transit in order to avoid principal reliance upon any one mode of transportation;*
- (c) Provide for safe and convenient vehicular, transit, pedestrian, and bicycle access and circulation;*
- (d) Facilitate the safe, efficient and economic flow of freight and other goods and services within regions and throughout the state through a variety of modes including road, air, rail and marine transportation;*
- (e) Protect existing and planned transportation facilities, corridors and sites for their identified functions;*
- (f) Provide for the construction and implementation of transportation facilities, improvements and services necessary to support acknowledged comprehensive plans;*
- (g) Identify how transportation facilities are provided on rural lands consistent with the goals;*
- (h) Ensure coordination among affected local governments and transportation service providers and consistency between state, regional and local transportation plans; and*
- (i) Ensure that changes to comprehensive plans are supported by adequate planned transportation facilities.*

**FINDING:** The OTP identifies and refines the state and public role in public transportation to serve as an effective element of the multimodal transportation network within Oregon. The Plan serves to enhance public transportation as an efficient, effective and safe multimodal option for the movement of people. The OTP vision provides guidance for developing public transportation services in Oregon and is supported through the Plan’s goals, policies and strategies. The OTP does not propose specific facilities for construction.

The Oregon Public Transportation Plan supports the above list under OAR 60-012-0000. The OTP:

- (a) Is a statewide document supporting and promoting the development of public transportation systems that serve state, regional and local needs. OTP Goal 1: Mobility calls for working *proactively with state and local planning bodies to support local and regional public transportation plans and goals throughout the state.* OTP Goal 2: Accessibility and Connectivity calls for *convenient public transportation connections to and between services and travel modes in urban, suburban, rural, regional, and interstate areas.* Addressing the needs of the transportation disadvantaged is a theme throughout the OTP, and is most clearly*

stated in OPTP Goal 4: Equity- *Public transportation provides affordable, safe, efficient, and equitable transportation to jobs, services, and key destinations, improving quality of life for all Oregonians.* Policies and strategies include engaging transportation disadvantaged in public transportation decision making; understanding and communicating disparities, barriers and needs especially for the transportation disadvantaged, and calls for integrating equity concerns in funding decisions.

(b) Puts public transportation on par with other modes through the creation of a modal plan element of the Oregon Transportation Plan. The Oregon Public Transportation Plan is designed to enhance and encourage the use of public transportation options in the development of a multimodal system. The Plan promotes public transportation, in addition to other modes, to support individual transportation choice.

(c) Identifies safety and access as two explicit goal areas of the Plan. OPTP Goal 2: Accessibility and Connectivity links convenient public transportation with connections to and between services and travel modes in urban, suburban, rural, regional, and interstate areas. OPTP Goal 6: Safety and Security, discusses planning for, designing, locating stops and stations to support safe facilities and street design and coordinating with others to *provide safe crossings and access to the public transportation facility by pedestrians, bicyclists, and people with disabilities.* It also calls for developing and applying design and location guidance for safe transportation facilities considering different contexts, such as *vehicle speed, roadway characteristics and constraints, planned land uses, users and uses, and areas of pedestrian, cyclists, or transit priority.*

(d) Public transportation plays a role in the safe, efficient and economic flow of freight and goods and services in congested corridors by giving people a more efficient option for travel than driving alone. It is a critical element of the multimodal system that helps meet business needs by getting people to work and customers to businesses; this helps spread travel demand across multiple modes. OPTP Goal 3: Community and Livability provides context. OPTP Goal 1: Mobility, Policy 1.5 is about ways to promote efficient mobility and reduce traffic congestion by promoting reliable and efficient service on public transportation priority corridors in a number of ways. It specifically calls for partnering with local agencies and providers to identify state highways that serve as both transit and freight corridors and to identify solutions to any conflicting need. OPTP Goal 1 encourages *enhanced roadway design procedures, rules, and guidance to better accommodate transit vehicles on key corridors and support safe access to transit, with roadway design addressing all modes.*

(e) The protection of existing and planned transportation facilities for their identified function is expressed in the Oregon Transportation Plan and through the mode and topic plans, which include statewide



policies that describes the function of facilities by way of classification and designations. The OPTP acknowledges that these contexts must be considered when applying the policies of the Plan. As a state modal plan the document is not specific to any facilities, corridors or sites. The OPTP, as a modal plan, does not propose specific projects or transportation facilities. The OPTP connects planning for improvements and services in OPTP Goal 8: Land Use by calling for agencies to collaborate to *ensure public transportation helps shape great Oregon communities providing efficient and effective travel options in urban, suburban, and rural areas.* The OPTP specifically links the various levels of planning in Strategy 8.1A: *Integrate transportation, economic development, housing, and land use strategies that support public transportation in a wide range of community plans, including comprehensive plans, transportation system plans (TSPs), coordinated public transportation human service plans, and others.*

(f) The OPTP has a statewide focus, comprehensive of urban and rural lands and areas. The Plan identifies and notes the importance of understanding the community types, including urban, suburban, and rural areas. OPTP Goal 8: Land Use specifically addresses supporting state and local land use goals and policies. OPTP Goal 2: Accessibility and Connectivity, also discusses transportation connections between services and travel modes, including regional and interstate connections.

(g) OPTP Goal 2: Accessibility and Connectivity, addresses rural lands, along with urban, suburban, regional and interstate, and the need for public transportation services that provides access for rural communities to regional services. OPTP Goal 8: Land Use sets the stage for coordination by calling for agencies to collaborate in the planning process. This is further supported in OPTP Goal 10: Communication, Collaboration, and Coordination, as it calls for both public and private transportation providers and levels of governments to work together and foster partnerships for a more efficient transportation system. To assure consistency, regional and local plans were reviewed, and agencies had the opportunity, through the extensive outreach of plan and participation on Plan committees, to express their views and see it reflected in the Plan. As the OPTP is the statewide plan for public transportation, regional and local plans must be consistent with it per the Transportation Planning Rule.

(h) Draws the connection between transportation planning and comprehensive plans, which are addressed in OPTP Goal 8: Land Use. OPTP Strategy 8.1F explicitly calls for the consideration of public transportation in urban growth boundary planning. While the OPTP does not propose specific projects, it does support the development of local government plans that will address planned transportation facilities.

(i) Draws the connection between transportation planning and comprehensive plans, which are addressed in OPTP Goal 8: Land

Use. OPTP Strategy 8.1F explicitly calls for the consideration of public transportation in urban growth boundary planning. While the OPTP does not propose specific projects, it does support the development of local government plans that will address planned transportation facilities.

### **Definitions, OAR 660-012-0005**

**FINDING:** The definition section of the OAR details the meanings of specific transportation terms. The Oregon Public Transportation Plan is written with a similar understanding of terms.

### **Transportation Planning, OAR 660-012-0010**

**FINDING:** Section 0010 of the TPR recognizes that the state TSP is comprised of a number of elements as described in ODOT’s State Agency Coordination Program. The SAC states, “(1) (a) The state TSP shall include the state transportation policy plan, modal systems and transportation facility plans as set forth in OAR 731, Division 15.” The OPTP is a component of the state TSP, along with the statewide policy plan (OTP), other modal, topic, and facility plans.

### **Preparation and Coordination of Transportation System Plans, OAR 660-012-0015**

*Section 0015 of the TPR conveys that the state TSP shall include the state transportation policy plan, modal systems plans and transportation facility plans.*

**FINDING:** The OPTP is a modal transportation plan under the OTP. As noted above, the state policy plan (OTP), modal system plans and transportation facility plans are separate documents that together make up the state TSP.

### **Coordination with Federally-Required Regional Transportation Plans in Metropolitan Areas, OAR 660-012-0016**

**FINDING:** The Oregon Public Transportation is not applicable to Section 0016 of the TPR.

### **Elements of Transportation System Plans, OAR 660-012-0020**

*Section 0020 of the TPR stipulates that a TSP “shall establish a coordinated network of transportation facilities adequate to serve state, regional and local transportation needs and that the TSP will include a description of the type or functional classification of planned facilities and services and their planned capacities and performance standards....”*

**FINDING:** Section 0020 does not apply to the OPTP because the OPTP does not include any projects. It is a policy document.



## **Complying with the Goals in Preparing Transportation System Plans; Refinement Plans, OAR 660-012-0025**

**FINDING:** The majority of TPR Section 0025 does not apply to the OPTP because the Plan does not include any specific proposals for transportation facilities, services or major improvements. However, TPR Section 0025, Subsection 2 states “Findings of compliance with applicable statewide planning goals and acknowledged comprehensive plan policies and land use regulations shall be developed in conjunction with the adoption of the TSP.” This requirement is addressed through development of this “Findings” document and its supporting information.

## **Determination of Transportation Needs, OAR 660-012-0030**

*Section 30 of the TPR requires that TSPs identify transportation needs relevant to the planning area and the scale of the transportation network being planned including state, regional and local transportation needs.*

**FINDING:** Understanding public transportation needs is an important part of planning for the future of public transportation in Oregon. For the Oregon Public Transportation Plan (OPTP), “needs” refers to the estimated annual dollar amount range required by public transportation providers to provide services in communities across Oregon in the year 2045 under several future service scenarios. These scenarios are not tailored to address specific needs in specific locations. Instead, they are intended to describe a range of potential investment levels statewide.

The analysis is not intended to propose or define a particular level of transit service. Instead, it helps illuminate the potential gap between needs and the anticipated resources available to providers around the state. By showing order of magnitude investment requirements and potential resource gaps, the needs assessment helps inform implementation strategies. Understanding future needs enabled ODOT, the project team and the Plan Policy Advisory Committee to develop a forward-looking set of actions and investments by agencies and leaders throughout the state that support the growth and development of public transportation.

The project team established three levels of need for the OPTP. The **Baseline Need** scenario represents the resources needed to provide the same level of service per capita (e.g. service miles) as is provided today. Baseline Need accounts for expected growth in population to 2045, meaning more resources are required in the future to provide a level of per capita service similar to what is provided today.

**Unmet Need** represents the resources needed to provide a higher level of service in communities than is provided today. Unmet Need is presented as a range, with the high end estimated by looking at the level of service provided in communities with a higher level of per-capita service as compared to peer communities, then estimating the resources needed to provide that same level of service across all communities of a certain size. The average amount

of service in each community type was used to estimate the low end of the range. This level of need would also support public transportation service goals for those communities that have engaged in scenario planning.

**Additional Unmet Need** represents the resources required to serve nearly all potential public transportation trips individuals would take were sufficient service available. This level of need is estimated qualitatively in terms of how the state’s public transportation system might look if this level of need was met.

The sources used to develop the needs included the National Transit Database, and information from the Oregon State Office of Economic Analysis, ODOT Major Projects Section, and ODOT Rail and Public Transportation Division data. The project team also interviewed selected providers to verify the data and additional information used to develop needs and inform the assessment.

As a statewide plan, determination of need was derived from data across the state and consistent with the scale of the transportation network being planned.

### **Evaluation and Selection of Transportation System Alternatives, OAR 660-012-0035**

*TPR Section 0035 stipulates that TSPs shall be based upon evaluation of potential impacts of system alternatives.*

**FINDING:** The OPTP does not address changes or amendments to specific system alternatives and is not applicable to TPR Section 0035.

### **Transportation Financing Program, OAR 660-012-0040**

**FINDING:** The OPTP does not identify specific facilities or improvements. However, it describes the types of investments needed and a framework to identify, prioritize, and fund public transportation services. OPTP Goal 9: Funding and Strategic Investment, recognizes that investment in public transportation varies depending on the size, local priorities, history of decisions made, public transportation services in place, and other characteristics. The strategic investment policies support data-driven, performance-based and participatory planning processes to identify needs. The policies and strategies provide guidance to help local jurisdictions and providers make decisions for developing and maintaining public transportation systems in the context of the full transportation system in their communities. OPTP, Chapter 4: Investment Considerations describes several investment scenarios that illustrate a range of potential outcomes based on the level of investment. The OPTP serves as a policy framework to support local providers, who are in the best position to make local investment decisions.

The Oregon Public Transportation Plan is the modal element of the Oregon Transportation Plan. The OTP informs the Statewide Transportation



Improvement Program (STIP) which in turn identifies projects in need of financing. The new Oregon public transportation funding source (Statewide Transportation Improvement Fund) has uses specified in legislation and OARs (Chapter 732, Division 040), but it also relies on approved planning processes.

### **Implementation of the Transportation System Plan, OAR 660-012-0045**

**FINDING:** TPR Section 0045 addresses actions required by local governments to implement its TSP and does not directly apply to the OPTP. However, ODOT will develop an implementation plan after the OPTP is adopted.

### **Transportation Project Development, OAR 660-012-0050**

**FINDING:** TPR Section 0050 does not apply to the OPTP. The OPTP does not propose specific transportation projects.

### **Timing of Adoption and Update of Transportation System Plans; Exemptions, OAR 660-012- 0055**

**FINDING:** Section 0055 of the TPR covers the adoption, update and exemptions of local TSPs and does not apply to the OPTP.

### **Plans and Land Use Regulation Amendments, OAR 660-012-0060**

**FINDING:** Section 0060 of the TPR addresses the coordination and review that must occur when a local government considers an amendment to its comprehensive plan and land use regulations. The OPTP does not invoke consideration of a local plan amendment or regulation, so this provision is not applicable.

### **Transportation Improvements on Rural Lands, OAR 660-012-0065 and OAR 660-012-0070**

**FINDING:** TPR Sections 0065 and 0070 apply to transportation improvements on rural lands. The OPTP does not propose new transportation improvements. These sections of the TPR are not applicable.

### **The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 12, Transportation.**

**13. Energy Conservation – The purpose of Goal 13 (OAR 660-015-0000(13)) is “To conserve energy.” Goal 13 declares that “land and uses developed on the land shall be managed and controlled so as to maximize the conservation of all forms of energy, based upon sound economic principles.”**

**FINDING:** The OPTP does not propose specific facilities or specific land use development, but it supports the use of public transportation to access destinations. The Plan recognizes that public transportation helps reduce transportation emissions of all kinds, including greenhouse gas emissions,

by providing an efficient way for many to travel, especially as compared with single occupant vehicle driving. This is emphasized in OPTP Goal 7: Environmental Sustainability, Policy 7.1: *Support public transportation investments as a key approach to reducing greenhouse gas emissions, as emphasized in state policy* and Policy 7.2: *Transition to low- or zero-emission vehicle technologies, including all electric, hybrid, biofuels, compressed natural gas, and other fuel and propulsion technologies*. OPTP Goal 8: Land Use sees public transportation as a tool that supports state and local land use goals and policies as a means of providing efficient and effective travel options.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 13, Energy Conservation.**

**14. Urbanization** – *The purpose of Goal 14 (OAR 660-015-0000(14)) is “To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.”*

**FINDING:** Public transportation service is commonly used to move people in urban areas where destinations are in closer proximity. Public transportation is a mode that can and is used in urban areas to more efficiently and effectively provide transportation options. The most notable goal in the Plan that addresses this is Goal 8: Land Use, which discusses various ways to consider, plan and support public transportation in land use decisions. This is best expressed in Strategy 8.1F: *Integrate public transportation and urban growth boundary planning to ensure the needs and benefits of public transportation are considered in planning for community growth.*

OPTP Goal 2: Accessibility and Connectivity, addresses the importance of public transportation and regional and intercity services as part of a well-connected transportation system to support rural and urban employees and customers to reach their location to access jobs, education, services, health care facilities shopping, recreation and other destinations.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 14, Urbanization.**

**15. Willamette River Greenway** – *The purpose of Goal 15 (OAR 660-015-0005) is “To protect, conserve, enhance and maintain the natural, scenic, historical, agricultural, economic and recreational qualities of lands along the Willamette River as the Willamette River Greenway.”*

**FINDING:** The OPTP does not plan for specific uses on lands protected in the Willamette River Greenway. OPTP Goal 3: Community Livability and Economic Vitality recognizes and supports the role of public transportation in improving Oregon communities’ vibrancy. OPTP Goal 7: Environmental





Sustainability acknowledges that public transportation contributes to a healthy environment and reducing greenhouse gasses and other pollutants. And OPTP Goal 8: Land Use encourages collaboration in planning ensuring the ability of public transportation to help shape great communities and effectively provide service. OPTP Goal 10: Communication, Collaboration, and Coordination promotes transit providers working together and with other partners to provide a seamless, easy to use public transportation system that encourages riding rather than driving for many trips.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 15, Willamette River Greenway.**

**16. Estuarine Resources** – *The purpose of Goal 16 (OAR 660-015-0010(1)) is “To recognize and protect the unique environmental, economic, and social values of each estuary and associated wetlands; and to protect, maintain, where appropriate develop, and where appropriate restore the long-term environmental, economic, and social values, diversity and benefits of Oregon’s estuaries.”*

**FINDING:** The OPTP does not propose any land uses that would impact estuarine resources. OPTP Goal 3: Community Livability and Economic Vitality recognizes and supports the role of public transportation in improving Oregon communities’ vibrancy. OPTP Goal 7: Environmental Sustainability acknowledges that public transportation contributes to a healthy environment and reducing greenhouse gasses and other pollutants. And OPTP Goal 8: Land Use encourages collaboration in planning ensuring the ability of public transportation to help shape great communities and effectively provide service. OPTP Goal 10: Communication, Collaboration, and Coordination promotes transit providers working together and with other partners to provide a seamless, easy to use public transportation system that encourages riding rather than driving for many trips.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 16, Estuarine Resources.**

**17. Coastal Shorelands** – *The purpose of Goal 17 (OAR 660-015-0010(2)) is “To conserve, protect, where appropriate, develop and where appropriate restore the resources and benefits of all coastal shorelands, recognizing their value for protection and maintenance of water quality, fish and wildlife habitat, water-dependent uses, economic resources and recreation and aesthetics. The management of these shoreland areas shall be compatible with the characteristics of the adjacent coastal waters; and to reduce the hazard to human life and property, and the adverse effects upon water quality and fish and wildlife habitat, resulting from the use and enjoyment of Oregon’s coastal shorelands.”*

**FINDING:** The OPTP does not propose any land uses that would impact coastal shorelands. OPTP Goal 3: Community Livability and Economic

Vitality recognizes and supports the role of public transportation in improving Oregon communities' vibrancy. OPTP Goal 7: Environmental Sustainability acknowledges that public transportation contributes to a healthy environment and reducing greenhouse gasses and other pollutants. And OPTP Goal 8: Land Use encourages collaboration in planning ensuring the ability of public transportation to help shape great communities and effectively provide service. OPTP Goal 10: Communication, Collaboration, and Coordination promotes transit providers working together and with other partners to provide a seamless, easy to use public transportation system that encourages riding rather than driving for many trips.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 17, Coastal Shorelands.**

**18. Beaches and Dunes** – *The purpose of Goal 18 (OAR 660-015-0010(3)) is “To conserve, protect, where appropriate develop, and where appropriate restore the resources and benefits of coastal beach and dune areas; and to reduce the hazard to human life and property from natural or man induced actions associated with these areas.”*

FINDING: The OPTP does not propose any land uses that would impact beach and dune resources. OPTP Goal 3: Community Livability and Economic Vitality recognizes and supports the role of public transportation in improving Oregon communities' vibrancy. OPTP Goal 7: Environmental Sustainability acknowledges that public transportation contributes to a healthy environment and reducing greenhouse gasses and other pollutants. And OPTP Goal 8: Land Use encourages collaboration in planning ensuring the ability of public transportation to help shape great communities and effectively provide service. OPTP Goal 10: Communication, Collaboration, and Coordination promotes transit providers working together and with other partners to provide a seamless, easy to use public transportation system that encourages riding rather than driving for many trips.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 18, Beaches and Dunes.**

**19. Ocean Resources** – *The purpose of Goal 19 (OAR 660-015-0010(4)) is “To conserve marine resources and ecological functions for the purpose of providing long-term ecological, economic, and social value and benefits to future generations.”*

FINDING: The OPTP does not propose any land uses that would impact ocean resources. OPTP Goal 3: Community Livability and Economic Vitality recognizes and supports the role of public transportation in improving Oregon communities' vibrancy. OPTP Goal 7: Environmental Sustainability acknowledges that public transportation contributes to a healthy environment and reducing greenhouse gasses and other pollutants. And



OPTP Goal 8: Land Use encourages collaboration in planning ensuring the ability of public transportation to help shape great communities and effectively provide service. OPTP Goal 10: Communication, Collaboration, and Coordination promotes transit providers working together and with other partners to provide a seamless, easy to use public transportation system that encourages riding rather than driving for many trips.

**The Oregon Public Transportation Plan is in compliance with and supportive of Statewide Planning Goal 19, Ocean Resources.**

## Conclusion

The OPTP is the state’s modal transportation plan for public transportation. The process used to develop the OPTP met federal and state regulations and Oregon’s own statewide transportation planning requirements.

The OPTP was developed in compliance with OAR 731-015-055, Coordination Procedures for Adopting the Final Modal Systems Plans and the Oregon Transportation Commission’s Policy 11 – Public Involvement Policy. These Findings of Compliance with Statewide Planning Goals and supporting information were presented to the OTC for consideration and adoption at their September 20, 2018 meeting.

As a component of the state’s Transportation System Plan, the OPTP must be in compliance with statewide planning goals. Based on the analysis of each statewide goal represented by the findings in this report, the OPTP is found to be in compliance with all 19 statewide planning goals.

