

Oregon Department of  
Transportation State Safety Oversight  
Agency  
Annual Report  
Calendar Year 2021



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## A. Summary

The State Safety Oversight Agency (SSOA), housed within the Oregon Department of Transportation's (ODOT) Commerce and Compliance Division (CCD), is responsible for safety oversight of the light rail, streetcar and trolley systems within Oregon, all of which are termed Rail Fixed Guideway Public Transportation Systems (RFGPTS). These are regulated separately and distinctly from heavy rail, such as Amtrak or WES Commuter Rail, which runs from Wilsonville to Beaverton. Currently, there are two RFGPTS that receive federal funding, placing them under federally-mandated state oversight, as well as under state regulations. There are two smaller systems that do not receive federal funding, and therefore are subject only to state regulations. The Federal Transit Administration (FTA) provides funding for rail transit agencies and for the SSOA, and has promulgated regulations that require all SSOAs to provide a written report about its activities throughout the previous calendar year to the Governor of each state, including Oregon, and to the Boards or related positions at the rail transit agencies (RTA), along with FTA.

## B. Overview

ODOT is designated as the SSOA for the State of Oregon. The program is currently housed within the Commerce and Compliance Division, Rail Safety Section, of ODOT. Oregon is one of 31 states, including the District of Columbia and Puerto Rico, with a designated SSOA program. Through inspections, audits, investigations, attendance at various meetings, and document review, the SSOA program oversees the safety of RFGPTS for compliance with federal regulations found in 49 CFR Parts 670, 672, 673, and 674, as well as Oregon Statutes (*e.g.*, ORS 824.045) and Oregon Administrative Rules (OAR), Division 741, Chapter 60 (and Chapter 65, applicable to only the Astoria Riverfront Trolley and the Willamette Shore Trolley, located in Lake Oswego). The Tri-County Metropolitan Transportation District of Oregon (TriMet) light rail system, commonly referred to as MAX, and the Portland Streetcar (PSC), receive federal financial assistance, thereby placing them under federal and state jurisdiction and subject to both federal and state regulations. The Astoria Riverfront Trolley and the Willamette Shore Trolley do not receive federal financial assistance; they are subject to state (but not federal) oversight. This report focuses on those systems subject to federal regulations, pursuant to 49 CFR 674.13(a)(7).

## C. Current Regulatory Environment

Oversight of RFGPTS in Oregon began in 1997, before FTA had developed a formal program for such oversight. Over the years, the program has grown and morphed into a regulatory-based program, in accordance with the changes wrought by FTA. More recently, federal regulations have been instituted to comply with 49 U.S.C. 5329, as amended. Currently, the RTAs are subject to a variety of FTA regulations that have been captured in the OARs so that the SSOA is able to monitor and enforce compliance with the regulations. The most recent FTA regulation (49 CFR 673) became final July 19, 2019, which gave the RTAs a year from that date (to July 20, 2020) to develop a new Public Transportation Agency Safety Plan (PTASP).

As a result of complications and delays resulting from the COVID-19 crisis, FTA agreed to defer enforcement of that rule, via a Notice of Enforcement Discretion, until December 31, 2020, thus allowing the RTAs more time to develop and have approved their PTASP. In spite of the enforcement deferral, the RTAs were still subject to the July 20, 2020 deadline. Due to continuing issues related to COVID-19, the FTA issued a second Notice of Enforcement Discretion, putting off until July 21, 2021 any enforcement actions resulting from failure to develop and get approved an RTA's PTASP. Since the enforcement discretion actions only delayed *enforcement*, the initial due date of July 20, 2020, still remained in effect. For that reason, the SSOA encouraged the RTAs to have their PTASPs done by the initial deadline of July 20, 2020. However, neither

TriMet nor PSC made the July 2020 deadline, and indeed needed additional *months* to finalize their plans. They were ultimately completed, approved, and certified in late 2020.

#### **D. Authority and Compliance**

The federal regulations governing the SSOA program are found in 49 CFR Part 674. Additionally, 49 CFR 673 has some provisions with which the SSOA must comply, although the rule itself (Part 673) governs the RTA's development and implementation of its PTASP and how the RTA is to work with its SSOA on a variety of matters within the PTASP. FTA required each SSOA to obtain certification of its program as compliant with 49 CFR 674, no later than April 15, 2019. Oregon's SSOA obtained certification in June, 2018. Thereafter, the notification rules and event descriptions contained in 49 CFR 674 became enforceable.

The SSOA has been working with each RTA to help them understand and properly comply with the updated definitions and notification scheme, but that alone has not produced the desired result. Ultimately, the SSOA found it necessary to provide the RTAs with an addendum to SSOA's Program Standard on January 1, 2021, that detailed the definitions the RTAs were to be using so that they would begin making proper notifications and reporting. PSC was able to adjust its notifications and related reporting early on, but TriMet continues to have trouble with proper notifications and reporting, although they are making some progress on the notifications.

#### **E. Program Function**

ODOT's SSOA program is structured to maximize RFGPTS safety and to fulfill all FTA requirements found in 49 CFR Parts 673 and 674. Towards that end, in July 2021, the SSOA updated its OARs to reflect the changes in the federal regulations related to 49 CFR 674 and 673, and to include revisions to the state regulations. Thereafter, ODOT updated and revised its federally required Program Standard, a legal document that identifies RTA responsibilities for safety functions, and explains how SSOA interprets the regulations and what is expected of the RTAs to comply. The revised version of the program standard was issued to the RTAs in November, 2021. At that point, the RTAs were to formally begin using the updated Program Standard and comply with the updated OARs. While Portland Streetcar has made every effort to comply with the updates, TriMet has continued to struggle with compliance.

ODOT's current Program Standard discusses:

- The development, implementation, and subsequent revisions and reviews of the PTASP, and ODOT's review and approval of said PTASP;
- Investigations of accidents, incidents and occurrences;
- Review, approval and oversight of the development and implementation of corrective action plans (CAPs) related to accidents, hazards, internal and external reviews and audits, etc.;
- Regular and periodic on-site reviews of PTASP implementation and compliance, including triennial safety audits.

The Program Standard provide procedures for how to manage corrective actions, including monitoring and review, safety risk management and monitoring, auditing, accident investigation; it also explains the SSOA's statutory obligations and those of the RTAs, along with guidance and examples.

Each time the rules or statutes are updated or changed, the Program Standard must be revised and re-submitted to FTA with the SSOA's annual report. Once approved, the new Program Standard is then provided

to the RTAs. Pursuant to the requirements in 49 CFR 674, the Program Standard must be sent to FTA annually for review, whether or not changes were made during the year. The SSOA works regularly with the RTAs to monitor and enforce compliance with the Program Standard and with the RTAs' PTASP.

The RTAs are subject to regulations that require notification of certain events, including accidents and hazards. Most events must be reported to the SSOA (in the form of a notification) within 2 hours. The program standard details what types of events the RTAs must send notifications for and in what time frame. They are reported via email or by phone, or in person if an SSOA staffer happens to be on site at the time (as does routinely happen). Any verbal notification must be followed up with a written one.

The SSOA tracks events and corrective actions and reports them annually to FTA. Additionally, the SSOA may join with the RTA in investigating accidents or may conduct its own independent investigation when deemed necessary. Generally, SSOA makes its determination on whether it will conduct an independent investigation using these guidelines:

Any accident occurring on RTA controlled property:

- Resulting in three or more fatalities or serious injuries to passengers;
- Resulting in a serious injury or death to a rail transit agency employee or contractor;
- Resulting in damage to rail transit property in excess of \$100,000;
- Involving uncontrolled equipment causing damage or injuries;
- Likely to have been caused by failure of a rail transit vehicle or any part thereof;
- Likely to arouse considerable public interest.

A rail transit vehicle (RTV) colliding with:

- A private passenger vehicle that results in the death or serious injury of three or more persons;
- A commercial vehicle, emergency vehicle or school bus that results in a single fatality or serious injury to multiple occupants in the vehicles involved;
- Another rail transit vehicle or any other rail transit equipment on or adjacent to the tracks.

SSOAs are responsible for overseeing safety at the RTA, establishing and maintaining training requirements for SSOA staff, and conducting audits and investigations of the RTA and its compliance with its PTASP. 49 CFR 674.39 requires the SSOA to provide, at least annually, a status report on the safety of the rail fixed guideway public transportation systems the SSOA oversees, to the Governor of its state, the boards of the RTAs, and to the FTA. The submission to FTA of such a report is now done through an on-line reporting system. Rather than try to copy that report to the Governor and the Boards, ODOT's SSOA has decided to provide this written summary of the information.

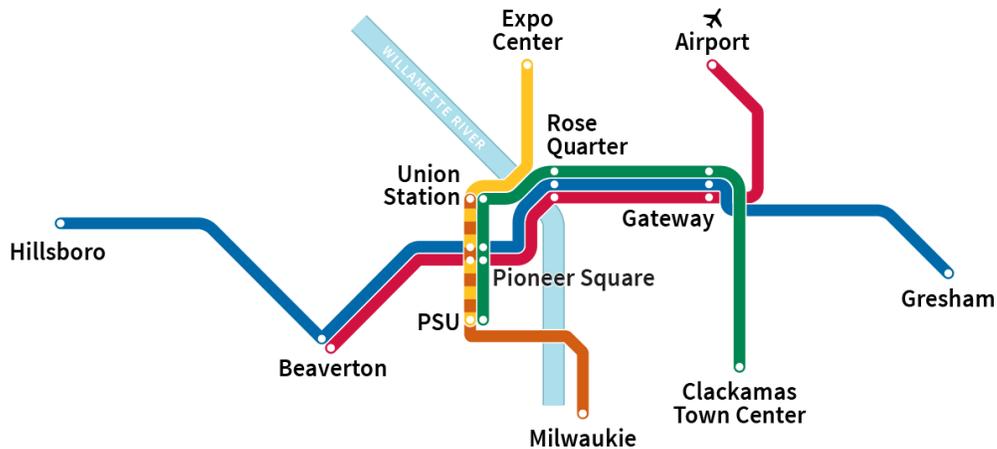
## **F. SSOA Program Staffing**

The program currently has three full-time rail transit compliance specialists – Lynda Horst, John Cyrus, and Aaron Cowell, and a relatively new manager, Chris Malm. The program received approval for the addition of a fourth rail transit compliance specialist. The announcement currently is out on the street.

## G. Rail Fixed Guideway Public Transportation Systems under SSOA Oversight

### 1. Tri-County Metropolitan Transportation District of Oregon (TriMet)

TriMet provides rail transit service in the Portland metropolitan area, which includes Clackamas, Multnomah, and Washington Counties. TriMet operates a light rail transit system called the Metropolitan Area Express, or MAX, which is subject to state safety oversight and is one focus of this review. MAX serves the downtown Portland area and west to Beaverton and Hillsboro (along the Blue Line), east to Gresham (Blue Line), north/east to Portland International Airport (Red Line), north to the Expo Center (Yellow Line), south/east to Clackamas Town Center (Green Line), and south to Milwaukie (Orange Line).



The MAX Blue line east side, from Gresham to City Center, opened in September 1986, with 30 stations and 15 miles of track. The Blue line west side, from Hillsboro to City Center, opened in September 1988, with 32 stations and 18 miles of track. The Airport, or Red, line, opened in September 2001, and runs 5.5 miles with 4 stations, from the Airport to City Center and on to the Beaverton Transit Center. MAX's Yellow line runs from the Expo Center to City Center, a length of 5.8 miles, with 10 stations, and opened in May 2014. The Green Line opened in September 2009, and runs from Clackamas Town Center to City Center. It has 20 stations along I-205 and the Portland downtown Mall, and 8.3 miles of track. The newest extension, the Orange line, opened in September 2015, and runs from Milwaukie to City Center. This line included construction of the Tilikum Crossing, the first of its kind (in the U.S.) multi-modal bridge across the Willamette River that carries light rail and streetcar trains, buses, bicyclists and pedestrians, but no private vehicles.

Trains on all lines consist of two light rail vehicles from among a fleet of 145 LRVs, including Type 1 Bombardier high-floor (non-wheelchair accessible) cars from the original rail line and low-floor Types 2, 3, 4 and 5 Siemens low-floor (with wheelchair access) cars. Due to accessibility requirements, trains always include at least one low-floor LRV.

All MAX LRVs are propelled by electric traction motors, which derive power via a roof-mounted pantograph that glides along the overhead catenary system. The trains run on a total of 59 miles of track and serve 97 stations.

TriMet is funded primarily through payroll taxes in the tri-county area serviced by the system (Multnomah, Clackamas and Washington counties). Additional funding is received from passenger revenues, and federal formula grant funds.

## **2. Portland Streetcar**

Portland Streetcar (PSC) is owned and operated by the City of Portland in partnership with the Tri-County Metropolitan Transportation District of Oregon (TriMet), which contributes a portion of operating funding. TriMet also provides operational and maintenance support. The City of Portland contracts with Portland Streetcar, Inc. (PSI), to construct and promote the Streetcar system. PSI is a private, non-profit corporation. Thus, the Streetcar is staffed by a combination of City of Portland employees, TriMet employees, and PSI personnel.

PSC is managed by the Portland Bureau of Transportation (PBOT), under the direction of the Commissioner-in-Charge of Transportation. The Commissioner-in-Charge of Transportation has appointed a Citizen Advisory Committee to advise the Commissioner, City Council, and Streetcar management on matters involving planning, design, and operation of the system.

In July of 2001, PSC began revenue service following over 10 years of planning, construction, and testing. The Streetcar has expanded from its original terminus at Portland State University, opening the River Place extension in March 2005, the SW Gibbs extension in October 2006, the SW Lowell extension in August 2007, and the PSC Central Loop project in 2015 to form the current eight-mile continuous loop from NW 23rd Avenue to Bancroft in the South Waterfront District, which is slightly south of the connection with the Portland Aerial Tram.

The Portland Streetcar currently has 72 stops, and on a typical weekday travels an average of 1,289 revenue miles. Ridership was down considerably in 2020 due to the COVID pandemic, but it is slowly picking back up again.



### **3. The Astoria Riverfront Trolley**

The Astoria Riverfront Trolley (ART) is a heritage trolley located in Astoria, Oregon. The track, right-of-way, and trolley barn are owned by the City of Astoria. The Riverfront Trolley Association, Inc., is a nonprofit organization that owns and operates ART under the umbrella of the City of Astoria and the authority of the City Council. The city reserves the decision-making authority for right-of-way and track design and configuration, through its City Manager. The City Manager has assigned responsibility for these items to the Public Works Director of the City of Astoria.

The ART provides service along Astoria's Riverfront from the trolley barn located near Hamburg Street, to the East End Mooring Basin near 39<sup>th</sup> Street. The trolley is not currently running due to COVID restrictions. When it did run, schedules called for operations in three or three and one-half hour volunteer shifts seven (7) days per week, between noon and 6pm, during Spring Break (late March timeframe) and from Memorial Day to late October. The ART typically operates only on weekends in November, and may operate in December. The ART also operates charter trips at other times. Operations are subject to weather conditions and Operations and Safety Committee determination. Currently, until the track has been fully rehabed, the trolley operates from noon- 6pm Friday through Sunday. The Riverfront Trolley Association has a Board of Directors responsible for policy guidelines, financial decisions, and general oversight of operations. An Operations and Safety Committee oversees the day-to-day operations of the system. The committee meets monthly. The Board appoints a member of the Operations and Safety Committee to be the Board Liaison.

The ART is a volunteer organization with the exception of three paid positions: a trainer, a scheduler, and a bookkeeper. Volunteers cover several duties, including motormen, conductors, maintenance workers, advertising, and merchandise positions. The ART is self-supporting; it does not receive funding for operations from the city. Its revenues include fares, advertising, charter fees, donations and sales of trolley memorabilia. It receives a small matching grant from the urban renewal district for capital items.

### **4. Willamette Shore Trolley**

The Willamette Shore Trolley (WST) had been providing scenic trolley rides on a 6-mile section of historic rail line between Lake Oswego and Portland, Oregon, since 1987, and is operated by volunteer members of the Oregon Electric Railway Historical Society (OERHS, a not-for-profit Oregon Corporation, 501c3). During 2020, the trolley did not run, due to COVID restrictions.

When it does run, two Vintage Trolley vehicles run on the line. The line parallels the Willamette River and goes by stately mansions, crosses over a bridge and four trestles and through the 1400 foot Elk Rock Tunnel. The line ends at Bancroft Street in Southwest Portland. For several years, the line stopped prior to the Sellwood Bridge, as the bridge was undergoing rebuilding. Now that the refurbish of the bridge is complete, the line now continues into Southwest Portland.

Because neither Trolley system receives funding from FTA, they are not subject to the federal regulations only to the state regulations. As a result, the SSOA must bill both ART and WST for its oversight.

## **H. SSOA activities in 2021**

As the COVID pandemic wound down, SSOA staff had more opportunities to get out in the field, to conduct more inspections and attend on-site meetings. One considerable hurdle for the RTAs was staffing. Several people left their positions in 2020 and 2021, and TriMet has had difficulty filling some of those positions.

### *New and Revised PTASPs:*

2021 was the second year in which the RTAs were required to submit to SSOA a revised PTASP, incorporating the changes noted by SSOA from the prior year's review. Both RTAs did a good job of revising their plans on a timely basis. The final revised versions were to be submitted to SSOA for review and approval by the deadline of December 31, 2021. TriMet succeeded in submitting its PTASP by the deadline. Portland Streetcar almost made it. Although their plan was complete, it took longer than expected to get a signature from a commissioner who was required to sign it. Even with that delay, they still got it to SSOA quite soon after the first of the year. Both plans were reviewed by SSOA and approved; a checklist was used in order to make sure all required elements were met.

One of the changes made in the OARs and in the Program Standard in 2021 was to change the due date for the PTASPs from December 31<sup>st</sup> of each year to July 1<sup>st</sup> of each year, beginning with the 2022 versions of the plans. This was done to relieve the burden of so many year-end obligations at both the RTAs and the SSOA.

### *Accident Investigations:*

Currently, the SSOA has delegated the responsibility for accident investigation to the RTAs. Once the RTAs have completed their accident investigation and submit a report to SSOA, the SSOA will review the report. If it is a satisfactory report, *i.e.*, it includes all the required elements of an investigation, SSOA will adopt the report as its own. However, if the report is not satisfactory, the SSOA will return the report to the RTA for correction and resubmission.

## **I. SSOA Planned Activities: 2022**

In addition to daily oversight functions, SSOA's primary goal in 2022 is to continue to regain the ground lost due to the COVID pandemic. Planned activities for 2022 include, but are not limited to:

- TriMet Triennial Audit
- PSC Triennial Audit
- TriMet Quarterly meetings
- PSC Quarterly meetings
- Regular inspections
- Competency management reviews
- PTASP reviews
- Corrective Action Plan management

**J. SSOA Reporting by the Numbers:**

Below are the reported numbers for events involving the RTAs during the calendar years indicated:

<b>2020</b>	<b>Collisions</b>	<b>Fatalities</b>	<b>Derailments</b>	<b>Pedestrian Incidents</b>	<b>Inspections</b>	<b>Defects</b>
<b>TriMet</b>	37	2	2	12	111	50
<b>PSC</b>	19	0	0	0	24	1
<b>ART</b>	0	0	0	0	1	0
<b>WST</b>	0	0	0	0	0	0
<b>2021</b>	<b>Collisions</b>	<b>Fatalities</b>	<b>Derailments</b>	<b>Pedestrian Incidents</b>	<b>Inspections</b>	<b>Defects</b>
<b>TriMet</b>	11	4	2	6	260	26
<b>PSC</b>	8	0	1	0	7	1
<b>ART</b>	0	0	0	0	2	0
<b>WST</b>	0	0	0	0	0	0

## Appendix A: Acronyms

CAP	Corrective Action Plan
CFR	Code of Federal Regulations
FAST	Fixing America's Surface Transportation
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HOS	Hours of service
LRV	Light rail vehicle
OAR	Oregon Administrative Rules
ODOT	Oregon Department of Transportation
ORS	Oregon Revised Statutes
PBOT	Portland Bureau of Transportation
PSC	Portland Streetcar
PSI	Portland Streetcar, Inc.
Pub. L.	Public Law
RFGPTS	Rail Fixed Guideway Public Transportation System
RTA	Rail Transit Agency
SB	Senate Bill
SEPP	Security and Emergency Preparedness Plan
SMS	Safety Management System
SOP	Standard Operating Procedure
SSOA	State Safety Oversight Agency
SSOP	State Safety Oversight Procedures
SSPP	System Safety Program Plan
TriMet	Tri-County Metropolitan Transportation District of Oregon
TSSP	Transit Safety Institute's Transit Safety and Security Program
TTP	Technical Training Plan
USC	United States Code

# Appendix B: ODOT SSOA Org Chart

## RAIL SAFETY & COMPLIANCE

