



Portland Streetcar

Strategic Plan 2015-2020



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Mission Statement

The City of Portland Bureau of Transportation is a community partner in shaping a livable city. We plan, build, manage, and maintain an effective and safe transportation system that provides people and businesses with access and mobility. We keep Portland moving.

In compliance with Title VI of the Civil Rights Act and Title II of the Americans with Disabilities Act, it is the policy of the City of Portland that no person shall be excluded from participation in, denied the benefits of or be subjected to discrimination in any City program, service, or activity on the grounds of race, color, national origin, or disability. To help ensure access to City programs, services, and activities, the City of Portland reasonably: provides language translation and interpretation for limited English proficiency individuals; modifies policies and procedures; and, provides auxiliary aids, services and/or alternative formats to persons with disabilities. To request an accommodation, modification, translation, interpretation or language service; to file a complaint; or for additional information or questions on Civil Rights Title VI (race, color, national origin protections) and ADA Title II (protections for people with disabilities) matters (nondiscrimination in public City programs, services, activities) please call 503.823.5185, TTY at 503.823.6868, Oregon Relay Service at 711, or email title6complaints@portlandoregon.gov.

Section I.

Overview of Strategic Plan

Designed to connect neighborhoods, employer centers, and cultural destinations, Portland Streetcar is part of what makes Portland such a livable city. With frequent, affordable, and accessible service, the Portland Streetcar is a transportation option that serves the needs of a diverse community.

As the streetcar has expanded, collaboration between public and private partners has resulted in a mix of affordable housing, public open spaces, brownfield redevelopment, and public art along streetcar corridors.

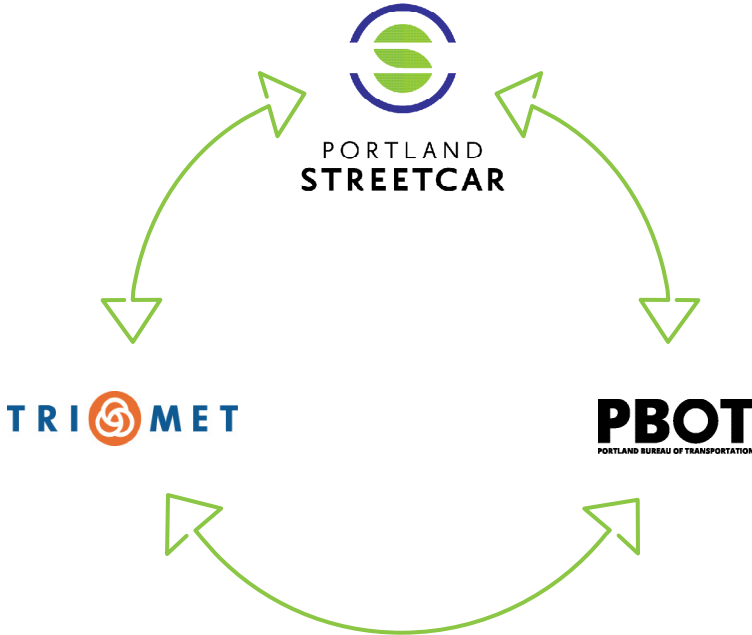
Careful planning, strategic expansion, and community involvement have ensured that the streetcar continues to improve service and operate in a fiscally responsible manner.

This five year strategic plan is designed to establish a trajectory for financial stability, long-term asset management, continued operational success, and targeted expansion into new markets.

Structure of Portland Streetcar

The Portland Streetcar is owned by the City of Portland and operated by the Bureau of Transportation (PBOT) in partnership with TriMet (the regional transit agency) and Portland Streetcar, Inc. (PSI), a non-profit that provides management support and private sector involvement in planning and operations.

The relationship between PBOT, TriMet, and PSI is outlined in the "Master Agreement", which was adopted by the parties in 2012 and governs how the system is funded and how the parties share resources to ensure long-term success for the system.



Portland's Mayor Charlie Hales on the importance of Portland Streetcar



As the Commissioner-in-Charge of Transportation when Portland Streetcar began its first service fourteen years ago, I had high hopes that this would bring revitalization to Portland. Looking now at our growing system, our ridership, which has grown beyond what I even expected, and the \$11.63 billion in growth of real market value private investment inspired and supported by our streetcar system – I am staggered.

The Portland Streetcar has supported higher-density development. Higher density in areas where Portland has the room to grow is better for livability in our city, better for our air quality and environment, and better for maintaining open spaces and our Urban Growth Boundary.

Portland's streetcar enhances our transit connections, binds together our urban universities and workforce development, provides a way for employees, residents, and customers to get to where they want to go without getting into a car, keeps our environment cleaner, and is the catalyst for redevelopment.

That's the Portland way.

Message from Director Leah Treat



On behalf of Portland and the many Portlanders that use the streetcar for commutes to work and school, short trips for errands, or to reach and enjoy Portland's cultural and entertainment venues, I am pleased to support this strategic vision that will guide the operations and plan for the growth of Portland Streetcar's footprint and ridership over the next five years. Portland Streetcar's 15,000 daily riders, as well as our entire community, should be proud of this unique transportation system.

Section II.

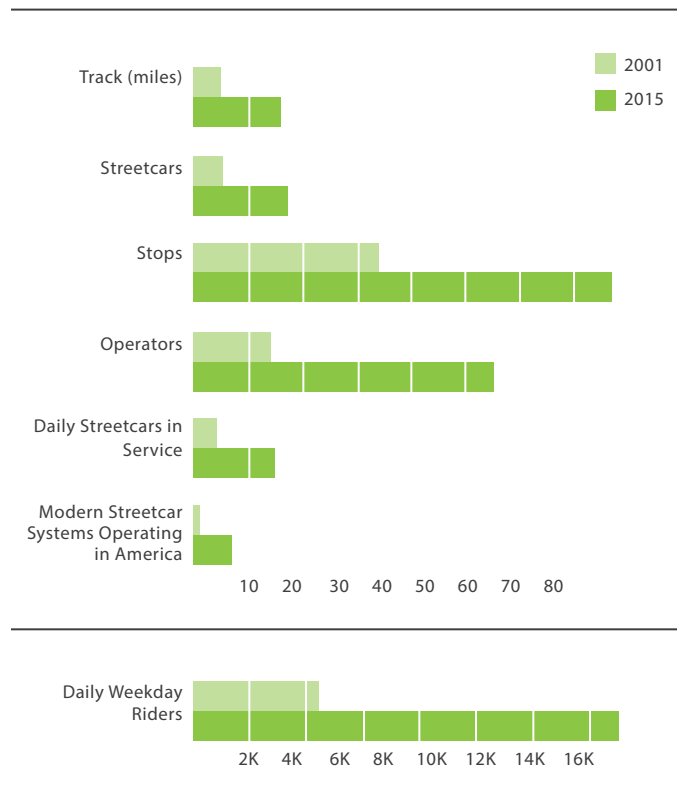
System Description

The Portland Streetcar system is a central city circulator that has grown tremendously and incrementally over the past two decades. In September 2015, Portland Streetcar opened the latest expansion over the Tilikum Crossing, completing a circular system over twenty years in the making. Since opening the original line connecting NW Portland to Portland State University in 2001 with 4.8 track miles and five streetcars, the system has grown to include 16 track miles and 17 streetcars today. The Portland Streetcar is designed with a frequency of service to move people around the growing city.

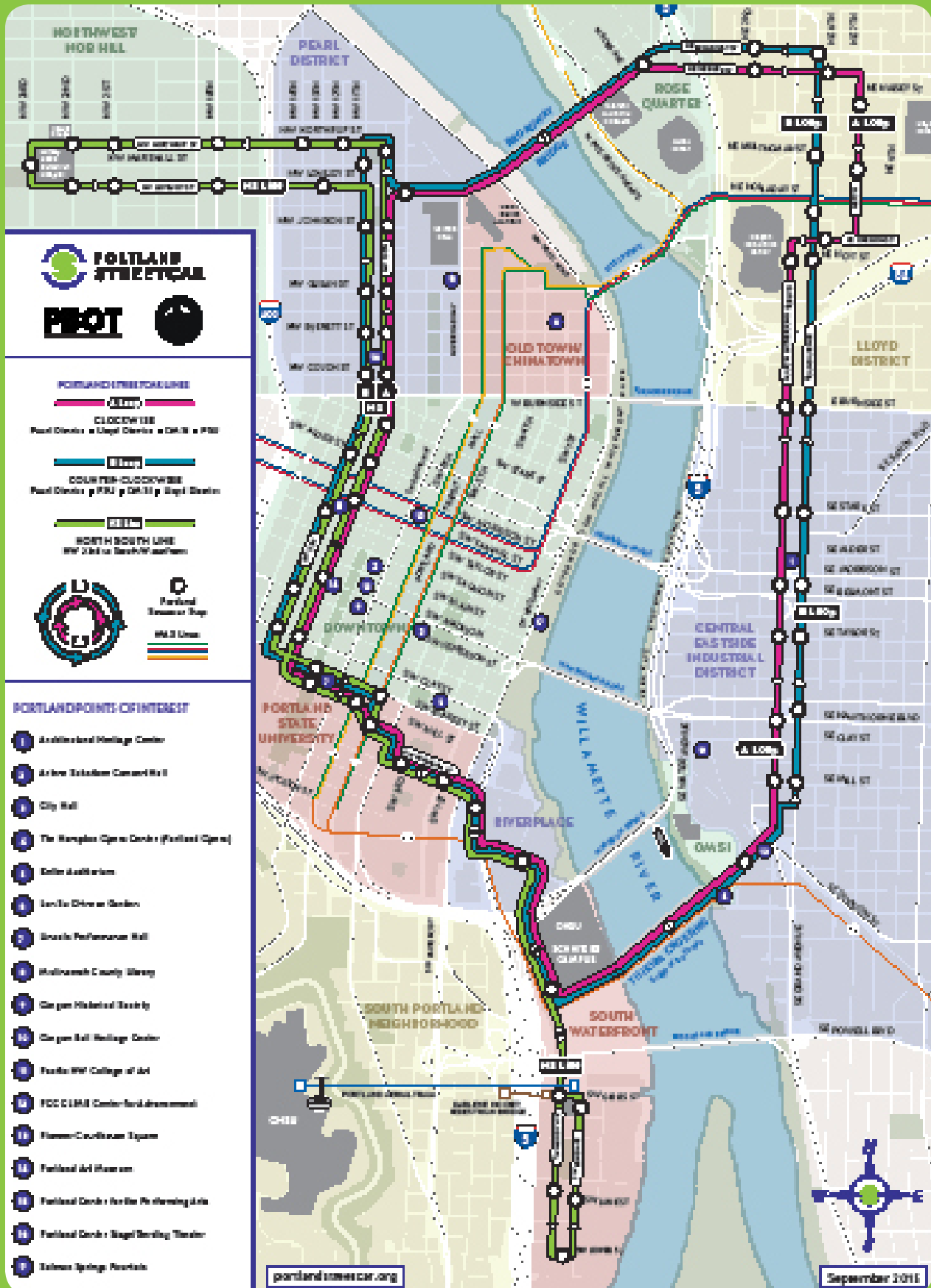
Since September 2015, Portland Streetcar operates three streetcar lines in Portland's central city: the North/South (NS) line connecting NW Portland with South Waterfront, and the A and B Loops, which operate in opposite directions connecting the Lloyd District, OMSI, South Waterfront, PSU, and the Pearl District with connections across the Broadway Bridge and the Tilikum Crossing.

Each loop uses four streetcars, and the NS line uses six (total of 14) and all three lines generally operate with 15-minute frequency. On a typical weekday over 15,000 rides are provided on Portland Streetcar, making it one of the most-used transit lines in the region, outpaced by only three light rail lines and two bus lines.

Portland Streetcar by the Numbers



Portland Streetcar System Map



Why Streetcar?

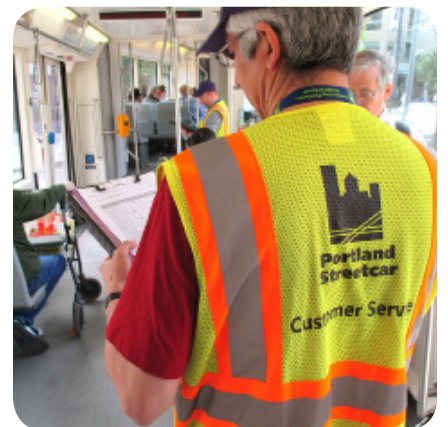
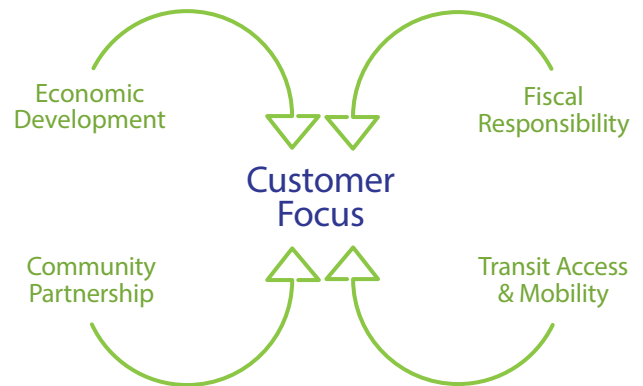
Portland Streetcar's strength lies in its ability to serve a variety of communities and trip purposes. Streetcar vehicles are larger than buses, but smaller than light rail. Streetcars can fit within an urban context and require far less space and separation than a typical light rail system. They can operate in dedicated lanes or share space with automobiles on major roads. In Portland, we use light rail and buses to serve longer commute trips and to connect our central city to suburbs and regional destinations. Portland Streetcar is used to provide a "single-seat" connection and much needed circulation within the central city and surrounding neighborhoods; 85% of all TriMet trips cross the streetcar line today.

Portland Streetcar is as much a mobility tool as it is a land-use planning and economic development tool. Over time, it has demonstrated its ability to steer growth to the centers and corridors identified for growth and density in our land use plans and it has provided high-quality, reliable transit service to our growing communities. Portland Streetcar's peak ridership is mid-day (11-4pm), in contrast to most transit systems which see ridership peaks during morning and evening rush hour. As such, Portland Streetcar emphasizes its role as a circulator by providing frequent service throughout the day so users can depend on its availability to run an errand, go to class, or commute to work.

Customer Focus

Portland Streetcar works to achieve multiple outcomes with the customer and community at the center of every decision. Portland Streetcar works to balance new development while embracing the local community, and provide quality transit to customers while recognizing the pressures this can put on the operators and mechanics that keep the system moving every day.

Over time, the streetcar system has grown with the city and operations have been scaled up accordingly. Investments in improved operations, system expansion, and safety and security are made with the customer's experience at the forefront.



Customer service agents performing duties on board

Section III.

Portland Planning Context

For more than forty years, Portland's planning documents have called for a streetcar system to support circulation with a planned increase of jobs and housing in the central city. Initially, the 1972 Downtown Plan called for a circulator service connecting major institutions and employment centers. Over time, plans continued to call for a transportation solution to serve the growing, dense, urban core of Portland.

The streetcar emerged as a tool to deliver an attractive, high-quality transit service to provide circulation and enhance the existing transit network. Its ability to integrate in an existing transportation system and support and encourage development consistent with land-use goals is unparalleled in the region. Since 1998, over \$4.5 billion in development has occurred along the streetcar lines and over 25% of the housing units built along the alignment are considered subsidized affordable housing. The real market value of the streetcar corridor has increased \$11.63 billion since 1998.

Since 1972, virtually every land-use and transportation plan in Portland has called for Portland Streetcar as a tool for supporting dense development in places where it is desired and in places where it can be supported with transit and other services and amenities like parks, schools, or employment.

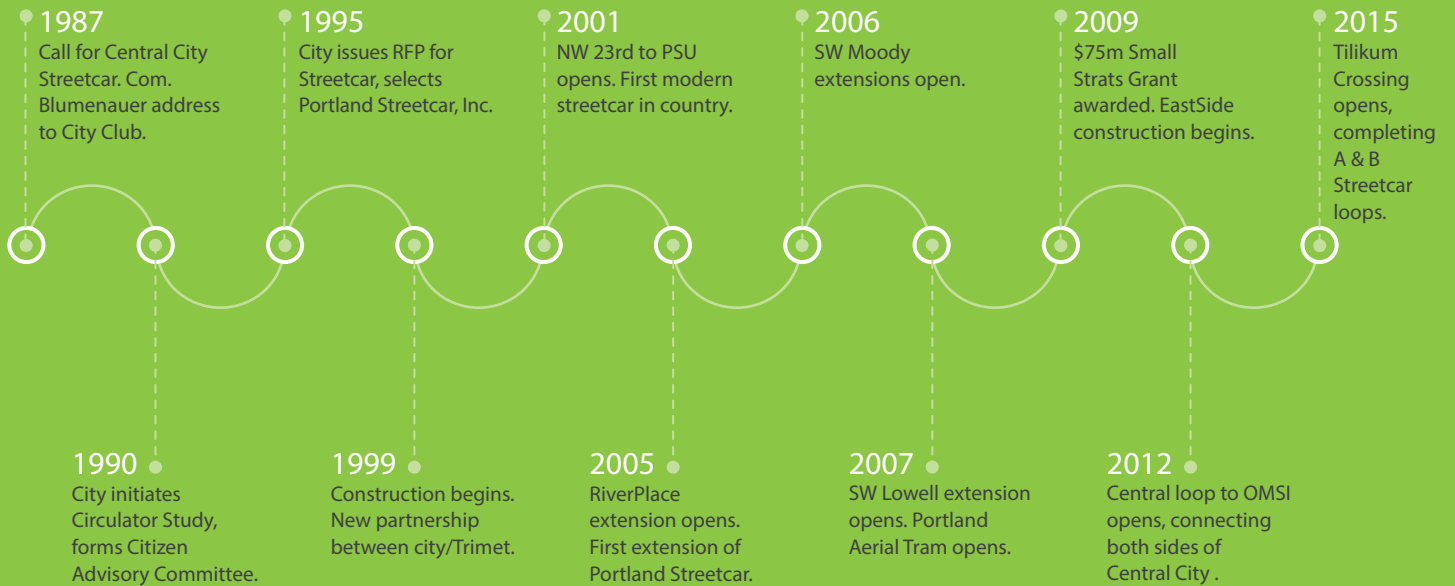
Portland Streetcar is included in all of these plans and others that call for aggressive mode share targets for non-automobile trips. Supporting car-free or car-light (fewer vehicles than adults) households is a key strategy for reducing traffic congestion, improving public health, and supporting climate initiatives aimed at reducing greenhouse gas emissions.

With over 15,000 riders per weekday, including upwards of 40 persons with mobility devices boarding the system every hour of service, Portland Streetcar is engrained in the daily routines of Portlanders choosing to live or visit the central city, and the operations have grown to become a major component of PBOT's daily activities.

Portland Plans Calling for Streetcar:

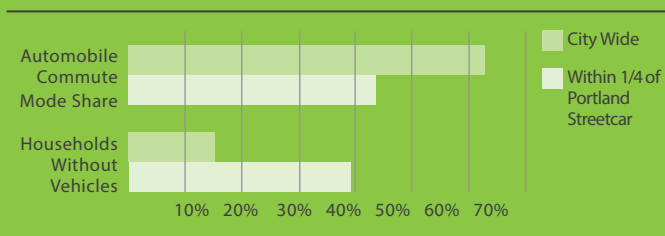
- 1972 Downtown Plan
 - 1980 Central City Plan
 - 1994-Present City of Portland Transportation System Plan (TSP)
 - Regional Transportation Plan (Metro RTP)
 - Portland Plan
 - Portland Comprehensive Plan
 - Portland Climate Action Plan for 2030
 - Portland Central City Plan and Central City Transportation Management Plan (CCTMP)
 - Portland Streetcar System Concept Plan
-

Streetcar Timeline



Streetcar & Car-Free/Light Households

The Streetcar helps support car-free and car-light households in the Portland area, which reduces congestion, cuts greenhouse gases and improves public health.



Source: 2013 US Census

Section IV.

The Vision for Portland Streetcar, Five Year Goals, and Performance Measures

The City of Portland is committed to a modern streetcar system. The City uses Portland Streetcar to meet multiple objectives related to the regional growth supporting development that relies upon a multi-modal transportation system, particularly public transit.

The vision for Portland Streetcar is to:

- Support and encourage growth in residential and commercial development in the central city, consistent with the City's Comprehensive Plan.
- Provide comfortable, convenient connections between housing, employment, educational institutions, services, and recreation.

More generally, the streetcar system was built to drive development toward the high-density neighborhoods identified in city and regional planning documents, and to provide a quality transit connection for those developments. PSI, the City, and TriMet track major milestones to guide future investments and to ensure the system operating consistent with the vision shared by all the partners.

This plan is meant to focus the partnership's work plan and resources on key areas of improvement for Portland Streetcar. Implementing the identified strategies will result in a more reliable and cost-effective streetcar system that is recognized within the community as a critical component of Portland's present and future.

Master Agreement Key Performance Measures:

- Total ridership by line
 - Total square feet of new residential and commercial construction along the streetcar alignment
 - Total employer payroll taxes collected along the streetcar alignment
-



1. Safety and Security

Goal: Provide a safe and secure streetcar system consistent with the City of Portland's Vision Zero policy, including the safety and security of Portland Streetcar staff, riders, and the general public.

Strategy 1.1: Reduce collisions between automobiles and streetcars 20% by 2020 through monitoring and improvement of persistently problematic intersections, and education and training for streetcar operators and the traveling public. Focus efforts on reducing the number of collisions that create large delay or expense to the streetcar system.

Performance Measure: Annually account for the streetcar collision rate calculated by the number of collisions involving the streetcar per one thousand revenue hours of service

2015 (2014): 0.82 crashes per 1,000 revenue hours

2020: 0.67 crashes per 1,000 revenue hours.



Strategy 1.2: Continue to improve the safety of the travelling public, especially that of passengers and those operating bicycles around streetcar tracks through targeted signage, system improvements, and on-going education. Establish a consistent and transparent reporting procedure for serious or fatal injuries on or around streetcar tracks in Portland.

Performance Measure: Number of serious (per State of Oregon definition) or fatal crashes on streetcar system by mode.

2015: Zero fatal or serious injuries on the streetcar system.

2020: Zero fatal or serious injuries on the streetcar system.



Strategy 1.3: Ensure the security of streetcar passengers and staff through targeted investments in security personnel, video surveillance, and partnerships with local and federal law enforcement agencies.

Performance Measure: Annually account for demonstrated progress towards investments or policies aimed at improving the security of passengers and employees such as procurement of video, partnerships with local law enforcement, or involvement in security-related drills or training.

2. Efficient and Cost-Effective Operations

Goal: Provide frequent transit for a majority of service hours at a cost-effective rate and with reliable, consistent scheduling for customers and operators.

Strategy 2.1: Provide service at 15-minute or better frequencies on all streetcar lines for a majority of service hours at a cost at or below \$180 per revenue hour through constant evaluation of staffing needs, overhead costs, and planned major maintenance projects. Evaluate the organizational structure to ensure appropriate staffing levels and functions, management oversight, and accountability.

Performance Measure: Cost per revenue hour is defined as the City of Portland’s annualized cost for the streetcar program divided by the total number of revenue hours of service provided per year in 2014 dollars (adjusted for inflation).

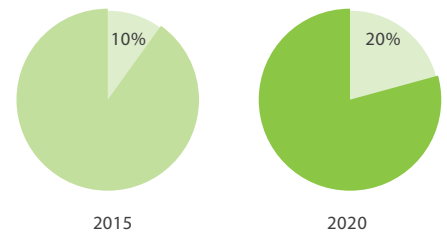
Strategy 2.2: Develop a twenty-year capital asset management plan to inform budgets and savings plans for investments in maintenance upgrades, vehicle and system overhauls, and other system requirements.

Performance Measure: Qualitative analysis of demonstrated progress toward adoption and routine updates of a 20 year capital asset plan.

Strategy 2.3: Increase fare-box recovery from 10% to 20% by 2020 through a transition to the regional E-Fare system in 2016, increased fare enforcement, improved operations of existing fare machines and technology, and adjustments to vehicle and station sponsorship opportunities.

Performance Measure: Percentage of operating costs covered by fares received by the City of Portland.

Operating Costs Covered by Fares Collected



3. Transit Performance

Goal: Provide reliable and efficient transit service to support a growing central city, which will include more resident and businesses, more cars and traffic, and more passengers relying on Portland Streetcar for access and mobility.

Strategy 3.1: Develop schedules and provide adequate staffing and vehicles to maintain at least 85% on-time performance across the system while accommodating operator breaks, predictable traffic patterns, and regularly scheduled “special” events at regional destinations.

Performance Measure A: Percentage of streetcars arriving at time-points within a window of up to one minute early, or five minutes late, by line, using NextBus GPS data.

Performance Measure B: Systemwide average daily ridership, tracked by line for weekdays and weekends.

Strategy 3.2: Evaluate the existing streetcar system for operational efficiencies, including signal timing improvements, station consolidation, dedicated rights-of-way, or other more long-term solutions including moving tracks to avoid persistent traffic issues and expected growth in number of vehicles on the roadway over time.

Performance Measure: Run time for streetcar lines as tracked by NextBus GPS data (including planned lay-overs).

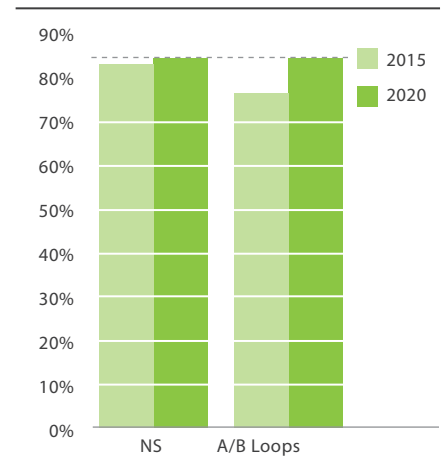
2015: NS - 89 minutes, A Loop - 60 minutes, B Loop - 60 minutes

2020: NS - 89 minutes, A Loop - 58 minutes, B Loop - 58 minutes

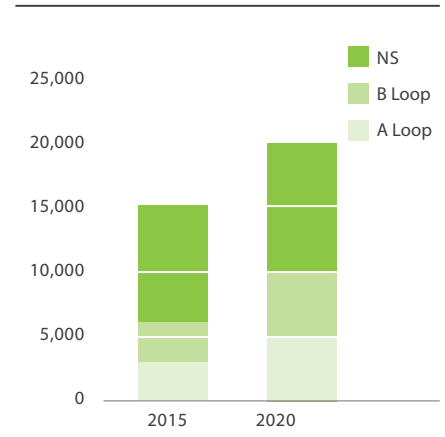
Strategy 3.3: Invest in technology to support better workflow and performance monitoring, including purchasing operations planning and reporting software, expanding the use of automatic passenger counters, and investigating new options for vehicle tracking and system monitoring software.

Performance Measure: Measureable steps taken toward improving operations planning and reporting through investments in technology.

On-Time Performance



Average Daily Ridership



4. Planning for the Future

Goal: Ensure the existing streetcar system is operating as efficiently as possible while exploring strategic expansions consistent with the land use visions included in adopted plans and policies. Ensure adequate capacity on the system, including vehicles and stations, for 20,000 riders per day by 2020.

Strategy 4.1: Ensure existing system has appropriate redundancies and operational fallback opportunities through investments in track “turn-backs”, tail-tracks, or other investments that can support operations during unplanned events such as bridge lifts or major delays. Specifically, examine opportunities for and invest in two-three “turn-backs” in the Lloyd District to support eastside operations during bridge lifts and/or construction.

Performance Measure: Number of opportunities to turn streetcars around within existing track system.

2015: Seven (N. Broadway, SE Stephens, SW 3rd/Harrison, OMSI, Riverplace, NW 11th/Lovejoy, NW 14th/Northrup)

2020: Nine (Priority Locations: NE Grand to NE Weidler, and Oregon Convention Center)

Strategy 4.2: Acquire three-five additional modern streetcar vehicles to support operations, and work toward providing a 10-minute frequency of service on all streetcar lines.

Performance Measure: Number of modern streetcars available for service.

2015: 17 streetcars

2020: 20-22 streetcars

Strategy 4.3: Evaluate solutions for improving customer information including electronic station signage and arrival information, mobile applications for real-time arrivals and ticketing, and an enhanced web presence to facilitate connections with riders, sponsors, and media.

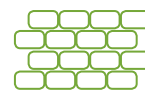


Performance Measure: Measureable steps taken toward improved customer service and information deployment.

Strategy 4.4: Evaluate and identify opportunities to expand the streetcar system consistent with the City's Comprehensive plan and Transportation System Plan. Specifically, examine SW Macadam Ave, NE Sandy, NE Martin Luther King Jr Blvd, and the NW/Montgomery Park neighborhood for streetcar viability including operational costs, community support, and funding availability, and recommend one or two major system expansions for inclusion in regional planning documents and project development.

Performance Measure: Inclusion of at least one new streetcar alignment in the 2018 Regional Transportation Plan.

Development Impacts within 1/4 mile of the Portland Streetcar



\$4.5 billion

Since 1998, \$4.5 billion in market value has been developed in the corridor.

New development comprises 28% of the total market value in the corridor.

5. Development and Public-Private Partnerships

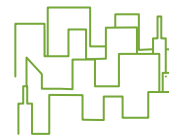
Goal: Further integrate streetcar planning with land-use decisions and building design to support transit-oriented-development and encourage “place-making” and public spaces through public-private partnerships, including the continued engagement of a Board of Directors for PSI, meant to represent the private sector interests of Portland.

Strategy 5.1: Annually account for and report on the total square feet of residential and commercial development, number of jobs and affordable housing units along the streetcar alignment.

Performance Measure: Annual publication of economic development figures on the Portland Streetcar website.

Strategy 5.2: Continue to integrate streetcar into large planned developments occurring over the next five years. Partner with developers and demonstrate support from the PSI Board of Directors for better planning for public spaces, transit plazas, or other unique opportunities to blend the streetcar into the city's streetscape.

Performance Measure: Number of Track Access Permits per year.



\$11.63 billion

The corridor has increased in market value by \$11.63 billion since 1998.

It comprised 11% of citywide market value in 1998. Post-Streetcar, it increased to 17% by 2015.



25%

25% of all apartments developed in the corridor from 1998 to 2015 were subsidized affordable housing units.

Monitoring Progress

Evaluating and reporting on progress toward the goals identified in this strategic plan will be a critical work plan item for the partners. Beginning in 2015, the partners will develop an annual report on Portland Streetcar based on the targets identified in this plan, as well as others such as ridership or economic development patterns consistent with the Master Agreement. The annual report will be available online and presented to Portland City Council, the TriMet Board of Directors, the PBOT Budget Advisory Committee, or others as needed or appropriate.