

PORTLAND STREETCAR DEVELOPMENT ORIENTED TRANSIT



**PREPARED BY THE OFFICE OF TRANSPORTATION
AND
PORTLAND STREETCAR, INC.**

PORTLAND, OREGON

**Sam Adams, City Commissioner
Michael Powell, Board Chair**

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Portland Streetcar Development Oriented Transit April 2008

On July 20, 2001, the Portland Streetcar opened and became the first modern streetcar system in North America. It is part of a unique public/private strategy to link investment in high quality transit service with major redevelopment.

Like many other cities, Portland is growing in population and is proactively looking for ways to promote economic development while managing growth. Keeping Downtown Portland healthy is critical to the region's economic stability. The Portland Streetcar is at the heart of a new approach to shaping cities that promotes investment at the City's core, provides homes for people of diverse income groups and supports the urban amenities that make great cities great. Since 1997 when the original streetcar alignment was identified, properties along its length have experienced significant changes:

- \$3.5 billion has been invested within two blocks of the streetcar alignment.
- 10,212 new housing units and 5.4 million square feet of office, institutional, retail and hotel construction have been constructed within two blocks of the alignment.
- 55% of all CBD development since 1997 has occurred within 1-block of the streetcar and properties located closest to the streetcar line more closely approach the zoned density potential than properties situated farther away.
- Developers are building new residential buildings with significantly lower parking ratios than anywhere else in the region.

Development Oriented Transit

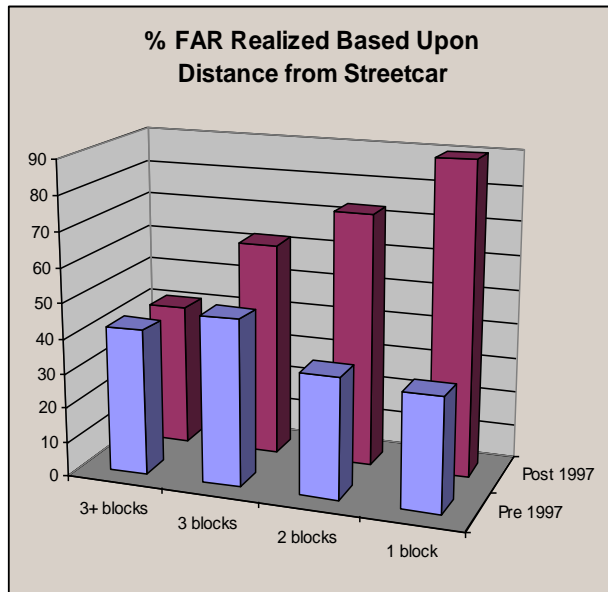
The Portland Streetcar was initiated by the City of Portland to connect two major redevelopment areas: 70 acres of abandoned rail yards and a contaminated brownfield site just north of Downtown (the River District) with another 128 acres of largely underused or vacant industrial land requiring environmental remediation at the opposite end of Downtown (the South Waterfront).

Over the 17-year evolution of the Portland Streetcar, the goals have remained consistent:

- Use a commitment to a high quality transit service as an incentive for high density mixed-use development within the Central City. Link neighborhoods with a convenient and attractive transportation alternative and attract new transit ridership.
- Connect major attractions in the Central City with high quality transit.
- Build and operate in mixed traffic and on existing right-of-way at lower cost than other fixed rail options. Fit the scale and traffic patterns of existing neighborhoods.
- Reduce short inner-city auto trips, parking demand, traffic congestion and air pollution.

Development Density and Concentration

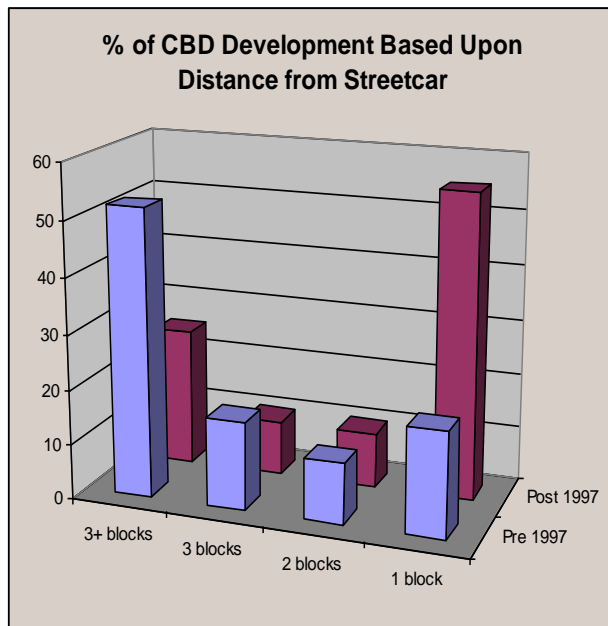
The Streetcar investment has become the centerpiece of a significant shift in the density and location of new development within Portland's Central Business District. In a 2005 study, E.D. Hovee & Company found that the "properties located closest to the streetcar line have experienced the largest share of development – and at Floor Area Ratios (FARs) that more closely approach the properties' zoned density potential – than properties situated further from the streetcar alignment."



Prior to 1997, new projects were built to less than half of the allowable density allowed on a site in the CBD.

Since the streetcar alignment was chosen in 1997, new development achieved an average of 90% of the FAR potential within one block of the streetcar line. This percentage steadily drops to 43% at three or more blocks from the alignment.

Source: ED Hovee & Company, *Portland Streetcar Development Impacts*, October 2005



Prior to 1997, land located within one block of the streetcar alignment captured 19% of all development.

Since the streetcar alignment was identified, 55% of all new development within the CBD has occurred within one block of the streetcar.

Source: ED Hovee & Company, *Portland Streetcar Development Impacts*, October 2005

Development Impacts

The River District/Pearl District. Where once there was a contaminated railyard, a new neighborhood has emerged. New grocery stores, restaurants, galleries, shops and banks now line the streets. Portland Streetcar goes through the heart of this area, stopping every two or three blocks and providing high quality transit access for business and residents.



New Urban Neighborhoods. The streetcar, limited parking and excellent pedestrian amenities have combined to create a new urban living option in Portland. It serves not only those living and working along the alignment, it brings new people into parts of the central city they may not have experienced before. It has served as an economic boost to businesses along the alignment while preserving much-needed auto access. It provides direct access to employment, educational facilities and health care for residents with a mix of incomes. The Streetcar has been seamlessly integrated into TriMet's regional transit system, further enhancing its effectiveness.



South Waterfront. At full build-out by 2015, South Waterfront development will bring a minimum of 5,000 housing units and 10,000 jobs into the Central City along with a major river greenway and park, parking, emerging Oregon Health & Sciences University development, educational facilities and supporting retail goods and services.



The Brewery Blocks. One of Portland's most significant building renovations has been the redevelopment of the historic and abandoned Blitz Weinhard Brewery. This five-block project on the Streetcar line is Portland's largest single development involving commercial, residential and retail uses.

Development Lessons Learned

Public and Private Responsibilities. The enormous success of linking transportation investments with development can be replicated in municipalities that have one or more large development sites with owners who are willing to work together to advance a common vision. The City's obligation has been to provide a stable source of funding to build public improvements. The developers' obligation has been to contribute to the infrastructure costs and commit to build high-density, mixed-income housing meeting the City's housing targets. From a political standpoint, the ability to point to an agreement with joint obligations of the respective public and private partners carries substantial clout and provides dependability and flexibility that both parties can rely upon.



Development Agreements. The Portland Development Commission (PDC) negotiated a Master Development Agreement with Hoyt Street Properties, owners of a 40-acre brownfield in the heart of the River District. The Agreement tied development densities to public improvements with the minimum required housing density increased incrementally from 15 to 87 units per acre when the Lovejoy Viaduct was deconstructed, to 109 units/acre when the streetcar construction commenced and 131 units/acre when the first neighborhood park was built. The developer has stated that without the Streetcar and the accessibility it provides, these densities would not have been possible. The agreement was a unique and essential piece of the public/private partnership that catalyzed development of the River District and serves as a model for the agreement established for in South Waterfront.

Local Improvement District. The innovative \$19.4 million Streetcar Local Improvement District (LID) has been a useful tool and includes those property owners that stand to receive the greatest financial benefit from their proximity to the Streetcar. This, coupled with other public and private resources, helped fund both the Streetcar and the critical investments in the urban environment that complement the higher density vision for the area.

Stakeholder Involvement. Involving stakeholders in the Streetcar project design has been absolutely critical to its success and expansion. Without public support, projects of this magnitude can get bogged down to the degree that the public investment cannot move in tandem with development. The individuals and agencies that make up Portland Streetcar, Inc. are nimble and astute individuals that make the Streetcar a development investment that you can count on. In addition, a whole new interest group is emerging composed of those devoted to high-density urban living—a perspective that didn't exist before.

Reduced Parking. The success of early projects in the River District demonstrated a market demand for a new type of higher density community—one that supports living with or without a car. Due in part of the high quality transit service provided by Streetcar, developers are able to construct mixed use projects with parking ratios lower than found elsewhere in the city. Reducing the amount of parking that a developer must build makes a building more financially feasible. Now, with a full understanding of the role that Streetcar can play in affecting the urban environment and market confidence in urban living, developers have begun construction on larger, higher-risk projects in South Waterfront. The first River District projects were six stories—South Waterfront has started with 21 to 35-story condominium towers.

Underlying Values

Improving Livability. Development oriented transit supports improved livability for high density environments that support public goals for urban containment, sustainable living and reduced dependence on an automobile. But higher density development does not always mean a more “livable” community. In the case of development near Streetcar; however, the package includes parallel public and private efforts to ensure that affordable housing, public open spaces, brownfield redevelopment, high quality urban design and public art occur in unison.



Fit Within the Urban Environment. Design tradeoffs were made to better fit the Portland Streetcar into the scale and traffic patterns of the neighborhoods through which it travels. Streetcar vehicles, manufactured in the Czech Republic, are 8 feet wide and 66 feet long. They run in mixed traffic and, except at stops, accommodate existing curbside parking and loading. Streetcar stops occur every few blocks and shelters are smaller to fit within the neighborhood’s architecture.

Economical Construction and Operation. The Streetcar technology is less expensive than other forms of fixed-rail transportation. The project is designed so that the system is economical to build and operate. There were four critical design principles: 1) use available rights-of-way; 2) limit the investment in facilities to essentials, 3) to the extent possible, use off-the-shelf equipment, 4) operate the system on a safe, no-frills basis, and 5) use construction methods that minimize costs. The project was also designed to avoid costly expenses associated with relocating utilities and the stations were developed similar to bus stops to reduce system costs.

Partnerships Matter. The City of Portland owns the Streetcar while Portland Streetcar Inc (PSI), a nonprofit corporation, is responsible for designing, managing construction and operating the system. The PSI Board is made up of individuals representing the perspectives of citizens, city agencies and property owners along the Streetcar alignment. The trade-offs made in this type of decision-making body have continued to make the Portland Streetcar a better project by serving the needs of a diverse community.



Minimize Disruption to Businesses and Residents. Project design and construction methods were designed to build the Streetcar quickly and efficiently to minimize construction impacts on adjacent businesses and residents. In addition, design decisions were made with implications for the ultimate Streetcar operations by preserving on-street parking, keeping construction within the existing right-of-way and sharing the streetcar lane with autos. The project also placed a very high priority on responsiveness to inquiries received from adjacent property owners throughout the construction process.

System Description

Key Milestones: In 1990, the City of Portland initiated a feasibility study for the Streetcar, hired a project manager, established a Citizen Advisory Committee (CAC) and began hosting a series of public meetings with a plan emerging at the end of that year. Key project milestones include:

1992	City of Portland secures \$900,000 federal HUD grant and matches with local funds
1995	May, City issues RFP to design, build, operate and maintain Streetcar. The nonprofit corporation, Portland Streetcar Inc is selected
1999	May, Construction begins from Legacy Good Samaritan Hospital to Portland State University
2001	January, Project Substantial Completion
2001	July, Begin passenger service
2005	March, Streetcar service to RiverPlace begins
2006	October, Service to South Waterfront & Portland Aerial Tram Connection
2006	Loop Extension alignment selected
2007	August, Service into South Waterfront begins

Financing. Locally funding the \$56.9 million, 2.4 mile first phase made the Streetcar a unique transportation project. The total Phase 1 project cost was under \$25 million per alignment mile and included purchase of seven vehicles. Total capital construction costs for the .6 mile extension to RiverPlace was \$16 million or \$13 million per track mile and included a new roadway on a retained structure to provide access to properties along the riverfront in preparation for an extension to South Waterfront. The capital budget for the .6 mile single-track extension from RiverPlace to Gibbs Street was \$15.8 million, or \$13 million per track mile, and included purchase of three vehicles. The .4 mile extension from Gibbs to Lowell cost \$14.45 million, or \$12 million per track mile, and included roadway work. Total capital cost was \$103,150,000 for 4.0 mile alignment averaging \$12.9 million per track mile.

Funding sources for these phases of the project (in millions) include:

- \$ 28.60 Bonds backed by revenues from a \$.20/hour short-term parking rate increase in City-owned parking garages
- \$ 21.50 Tax increment financing from the City's urban renewal agency (PDC)
- \$ 19.40 Property owner contribution through an LID on non-owner occupied residences
- \$ 10.00 Regional transportation funds
- \$ 8.75 City funds
- \$ 2.10 Connect Oregon
- \$ 5.00 Reallocated transit funds from TriMet
- \$ 3.10 Transportation land sale
- \$ 4.70 Other sources
- **\$103.15 million total construction costs**

Ridership. When Streetcar initially opened in 2001, the projected ridership target was 3,500 weekday rides. Not only was that target immediately exceeded, ridership by the fall of 2005 grew to over 9,000 riders each week day. Saturday ridership has demonstrated the greatest percentage growth from 3,200 to 9,000 in the past six years. Weekday ridership in the winter of 2007/08 is 11,900 per day.

Management. The City of Portland has contracted with Portland Streetcar, Inc (PSI) for professional services related to the design, construction and operation of the streetcar system. PSI is a private non-profit corporation formed for the single purpose of implementing the Portland Streetcar as a project that will benefit the livability and economic vitality of Portland and its central city. It is governed by a Board of Directors, the members of which come from both the public and private sectors and who represent institutions, businesses and other constituents along the alignment.

For more information, visit the Portland Streetcar website at www.portlandstreetcar.org.