Portland Streetcar
Development Impacts

Rail~Volution
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Photo courtesy of Portland Development Commission
Service began in 2001

- Locally funded
- Seven mile loop
- Runs in mixed traffic
- Accommodates existing curbside parking and loading except at platform stops
Streetcar Details

- 13 minute headways.
- Capacity of up to 140 passengers
- Vehicles by Skoda-Inekon are 2.46 meters (about 8 feet) wide and 20 meters long (about 66 feet)
- Low floor design, air conditioned
Capital Costs (Westside, to date)

$88.7 million for in the first three phases totaling:

- 3.0 miles double track, 0.6 additional single track
- Average $25 million per mile of double track
- Ten vehicles
Portland Streetcar Revenues

Capital Revenue Sources:

- Parking meter revenues ($28.6 million - 32%)
- Tax increment financing ($19.7 million - 22%)
- Streetcar improvement district ($14.6 million - 16%)
- MPO, transit agency and local funds ($25.8 Million - 30%.)
Reuse of Rail Yards & Vacant Lands

- Recycling land: more efficient use of land in the central city.
- Public/private partnership – public investments with developers agreeing to more density.
Vibrant New Mixed Use Neighborhood

- Between 1997 and 2005, over $2.8 billion has been invested within three blocks of streetcar service.
- Over 7,200 residential units built.
- More than 4.6 million square feet of commercial.

Photo courtesy of Portland Development Commission
Ridership has grown since 2001 year opening with highest ridership tending to occur in summer.
**Hypothesis**

The streetcar provides a spark to economic development to land parcels along its route.

**Metric**

Percent of maximum Floor Area Ratio (FAR) as measure.
The Closer to Streetcar, the More Development

Development Potential Achieved in Westside
(By Distance from Streetcar)

Percent of Maximum Floor Area Ratio

Distance from Streetcar

- Pre 1997 Development
- 1997 through 2005 Development
Percent of Downtown Development

Percent of Building Square Footage Built by Distance from Streetcar, Pre vs. Post 1997

- Percent of All CBD Development
- Distance from Streetcar

Pre 1997

Post 1997
The $64,000 Question

How do projects account for development impacts?
Eastside Streetcar

- Proposed inner city circulator
- 12,400 new streetcar riders in 2025.
- Small Starts Proposal
Variety of Techniques are Available

- Economic Analyses
- Projections of Housing and Commercial Space
- Development Agreements
- Local Improvement Districts
- Direct Cash Contributions
- Urban Renewal Districts
- Comprehensive Plan Amendments
- Others
Variety of Techniques are Available

- Hedonic Pricing model analysis or other analysis in several cities with streetcar experience could further document streetcars economic development potential.

- Predictive Model for Transit and Economic Development
Variety of Techniques are Available

Existing eastside and westside development

3D model of building heights in the central city
Variety of Techniques are Available

FAR potential

Projections of housing and commercial space
Projects with streetcar extension will develop almost twice the floor area than with a bus.

Variety of Techniques are Available

Eastside Year 2025 Projected Development
(additional housing and jobs)

Projected Floor Area Developed

<table>
<thead>
<tr>
<th>Without Streetcar</th>
<th>With Streetcar</th>
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<tbody>
<tr>
<td>2,900,000</td>
<td>5,300,000</td>
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Portland, through its development agency (PDC) has pioneered the concept of agreements to make public improvements, such as a streetcar, in return for private investment.
Development Agreement with Hoyt Street Properties, 1998

Public-private agreement where the City would provide infrastructure to support new development and Hoyt Street Properties would provide identified amenities. These included increased minimum densities:

- At agreement’s onset, 15 dwelling units per acre must be built.
- Upon the demolition and replacement of the Lovejoy Viaduct, 87 dwelling units per acre must be built.
- Upon completion of the Portland Streetcar, 109 dwelling units per acre must be built.
- Upon completion of the area’s first park (Jamison Square) 131 dwelling units must be built.
Development Agreement with Hoyt Street Properties, 1998

The development agreement also included requirements that addressed housing affordability:

• 15% of housing units must be affordable to households earning 0-50% of the Portland region’s median family income (MFI)
• 20% of housing units must be affordable to households earning 51-80% of Portland’s MFI
South Waterfront

Four towers under construction – OHSU medical offices and research in addition to residential.

Six more towers announced mid April.
Variety of Techniques are Available

Location of new development shows proximity to streetcar service.
Variety of Techniques are Available

Types of Sponsorship Agreements

- Streetcar: $20k per year for company name on streetcar
- Stop: $500 per month for names on station shelters
- Tickets: $50 per book of tickets and Portland Streetcar logo for business window
- Restaurant/Retail: $50 per month for business name on official route map

[Maps and Logos]
Variety of Techniques are Available

Central Eastside Urban Renewal District
Variety of Techniques are Available

Up-zoning of station areas
Cost-Effectiveness Options

- Higher Densities
- More Development
- More Transit Trips
- Less VMT
- Fewer Auto Trips
- More Walking Trips

Benefits Costs
Benefits

- Over 4,000 housing units would be built around Eastside Streetcar.

- Over 7,200 new housing units have been constructed near existing streetcar.

- Development community does not respond to bus routes.
Benefits

- Streetcar has 30% higher ridership than a bus.
- Streetcar has much higher level of community support.
Benefits

- Streetcars change development patterns
- Development patterns change travel modes and travel options
- The Trip Not Taken - Existing streetcar saves over 27 million miles/year of auto travel in Portland!
Travel Modes in Portland by Area

Poor Transit, No Mixed Use
- Auto: 87%
- Walk: 6%
- Bike: 1%
- Other: 5%

Good Transit, Good Mixed Use
- Auto: 57%
- Walk: 27%
- Bike: 12%
- Other: 2%
Cost Effectiveness

- Streetcars are not built to save travel time.
- TSUB inherently favors longer trips.
- Simpler measures are available.
Simple Cost-Effectiveness Measure

- Annualized Cost/Streetcar Rider: $4.25
- Federal Cost/Streetcar Rider: $2.55
- O&M Cost/Streetcar Rider: $1.30
Comprehensive Cost-Effectiveness Measure

Riders + Development Potential + Land Use

Annualized Cost
Transit Ridership Growth

- TriMet Ridership: 55%
- TriMet Service: 32%
- Average Daily Vehicle Miles Traveled: 19%
- Population: 21%