

# Portland Streetcar

## What's Next?

TPAC Presentation  
June 1, 2007



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**Deputy Planning Director**  
**Metro**  
**Portland, OR**

# Downtown Portland



Photo courtesy of Portland Development Commission

# Streetcar Facts

## Service began in 2001

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

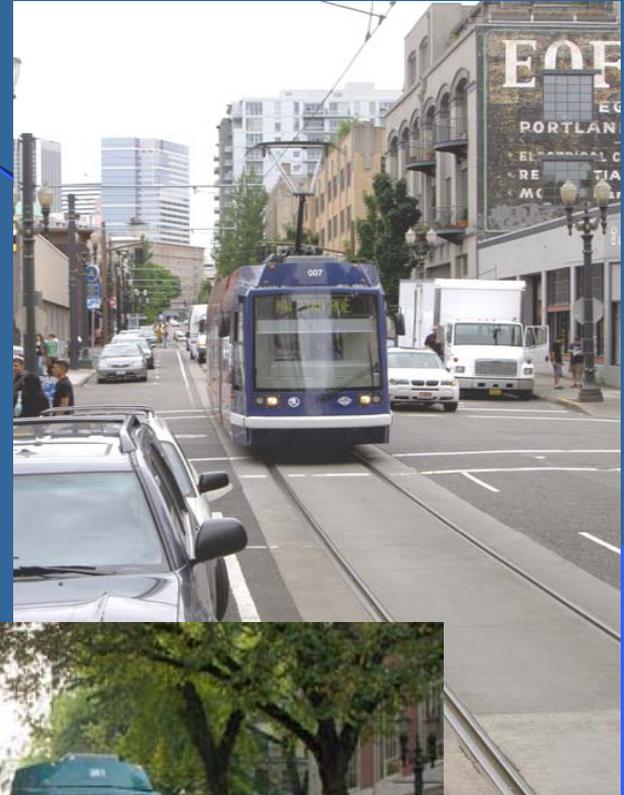


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# Streetcar Details

- ❖ 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



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# Portland Streetcar Costs

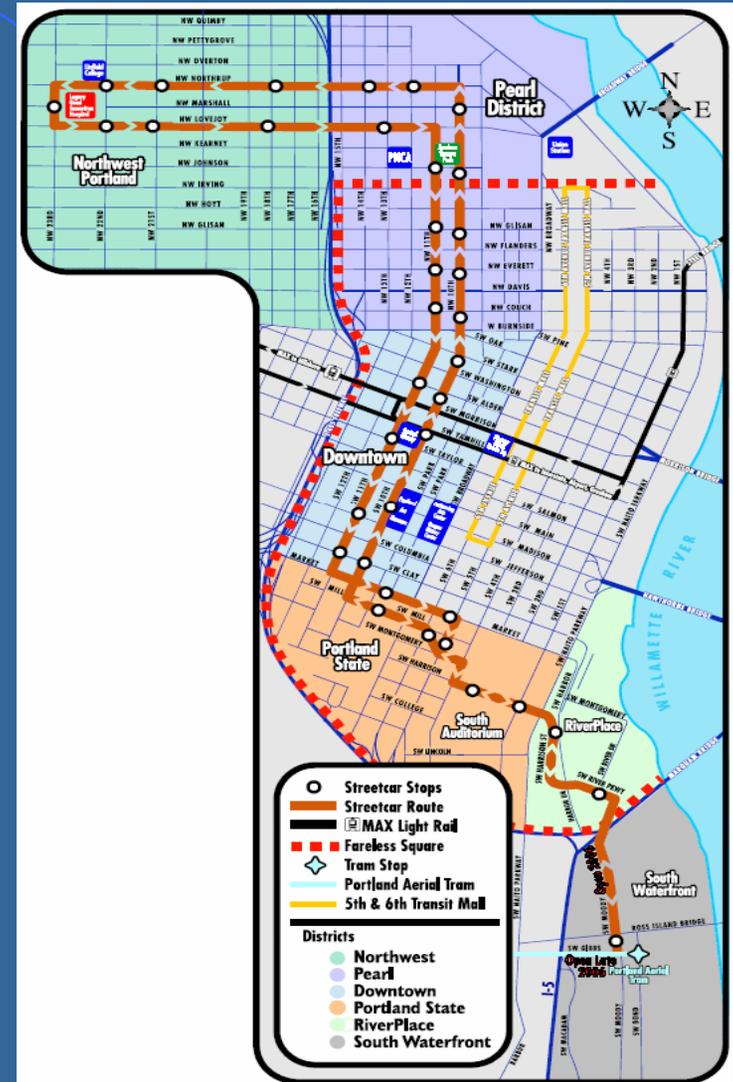
## Capital Costs (Westside, to date)

\$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



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# 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%.)



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# 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.



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# Vibrant New Mixed Use Neighborhood



Photo courtesy of Portland Development Commission

- ❖ 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.



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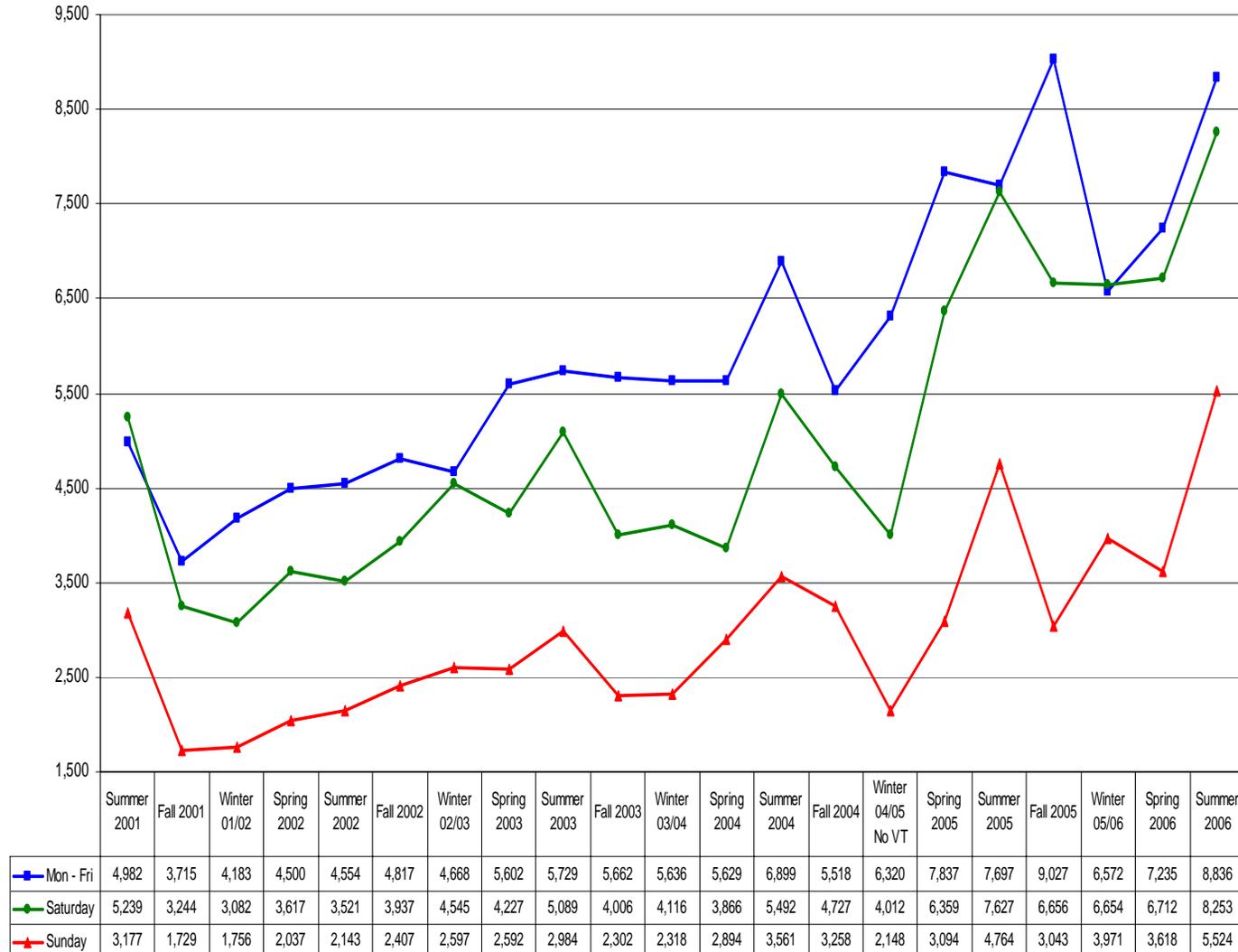
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# Streetcar Ridership

Ridership has grown since 2001 year opening with highest ridership tending to occur in summer.

STREETCAR RIDERSHIP 01 - 06



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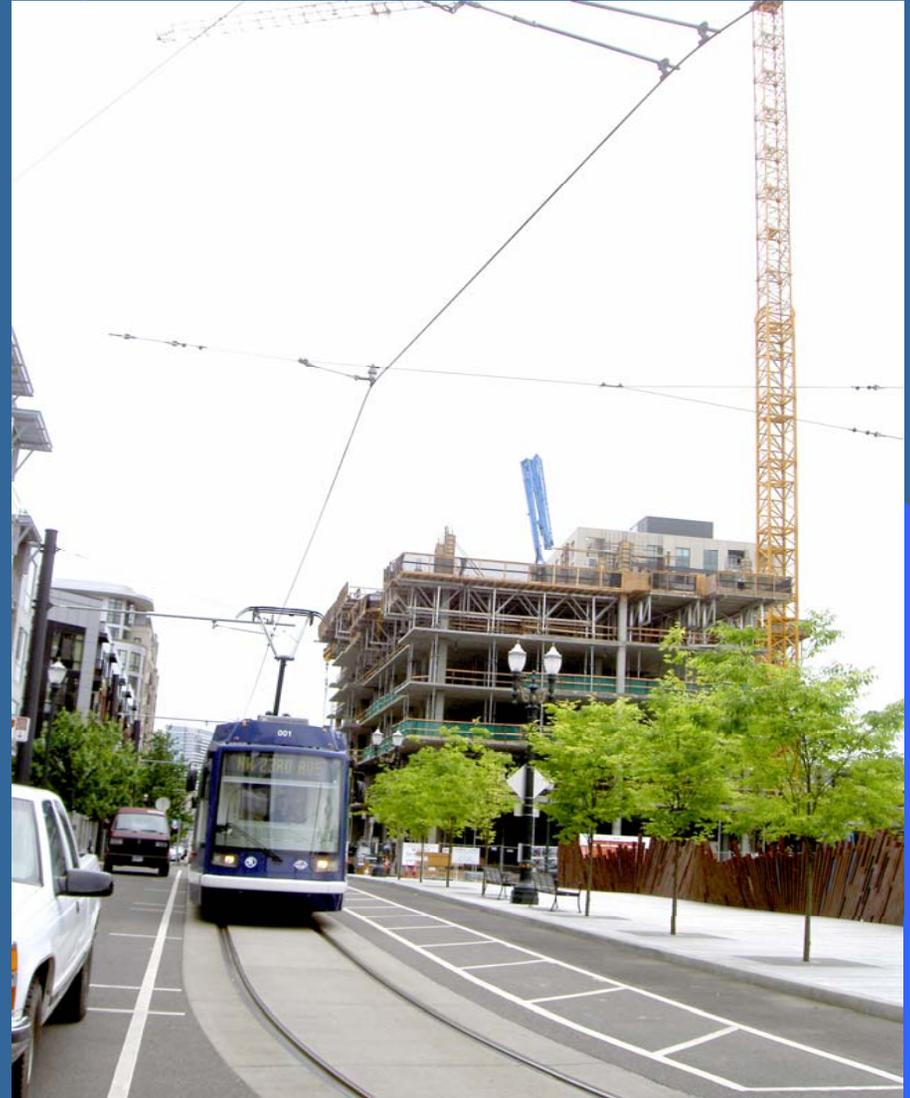
# Streetcar Hypothesis

## 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.



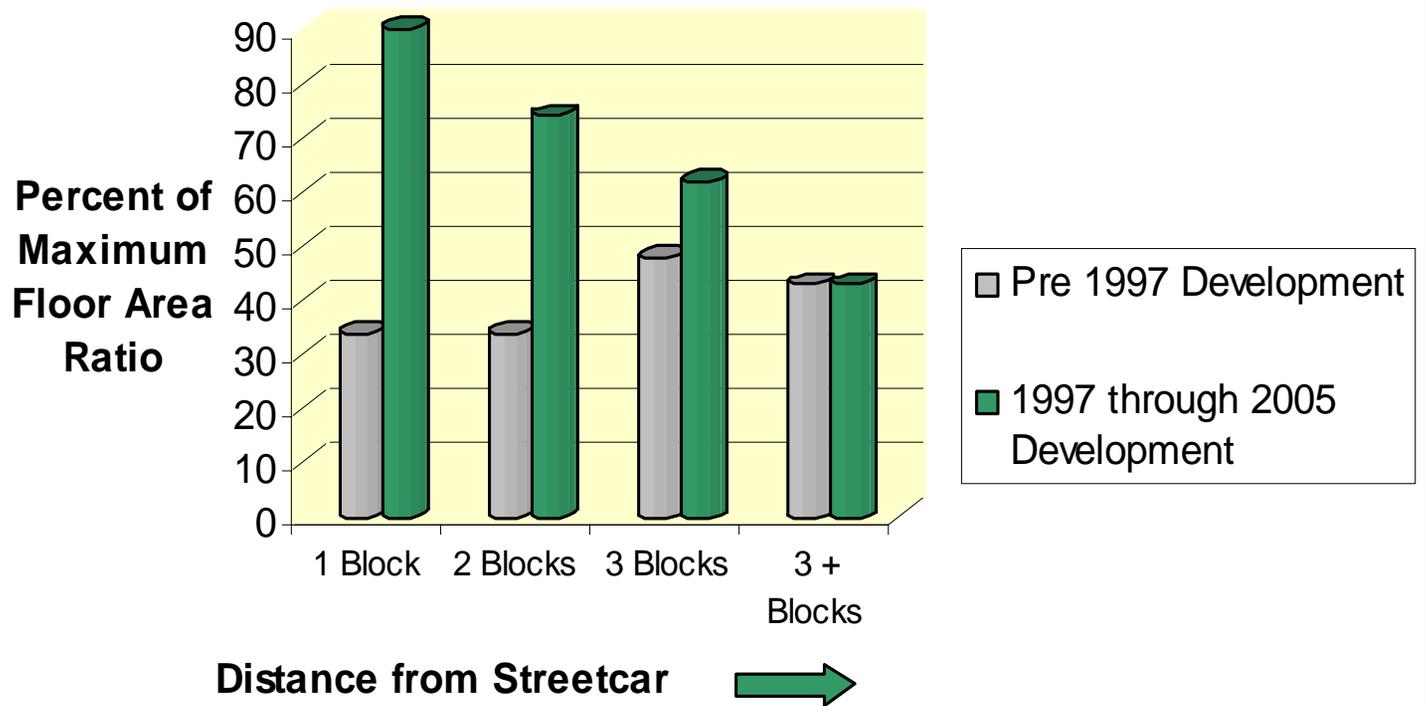
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# The Closer to Streetcar, the More Development

**Development Potential Achieved in Westside  
(By Distance from Streetcar)**

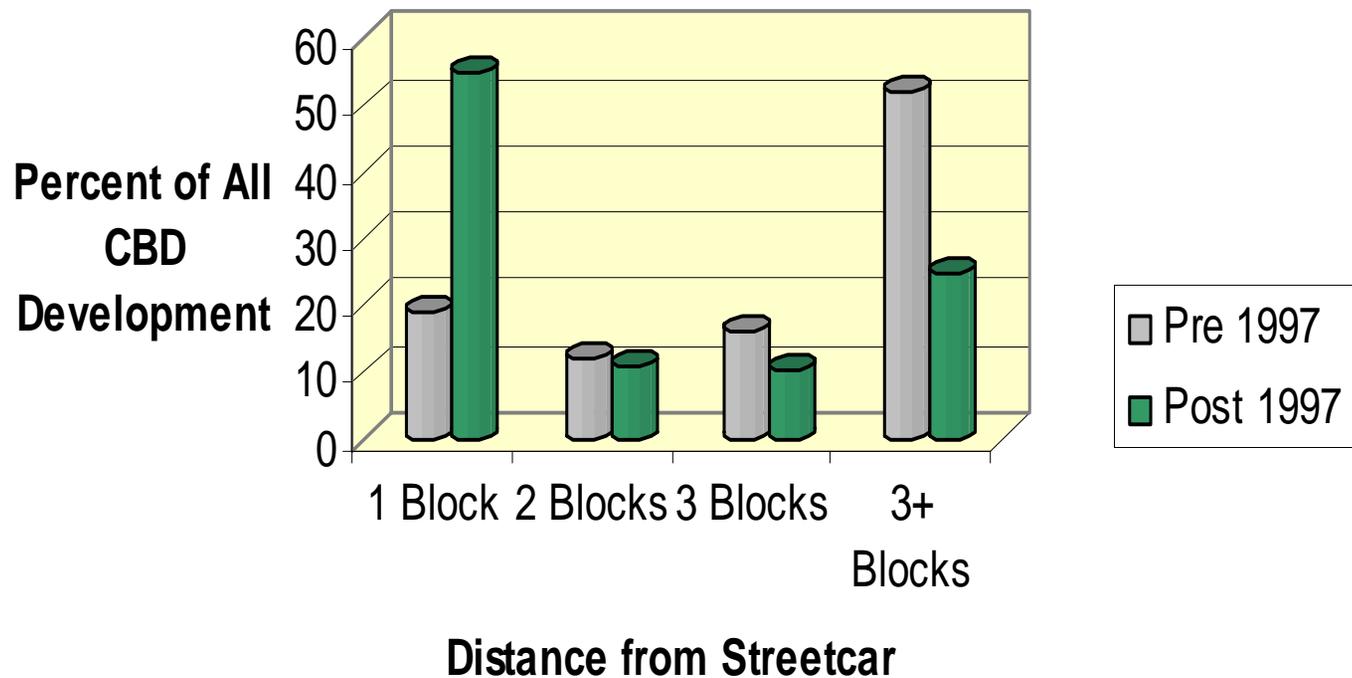


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# Percent of Downtown Development

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



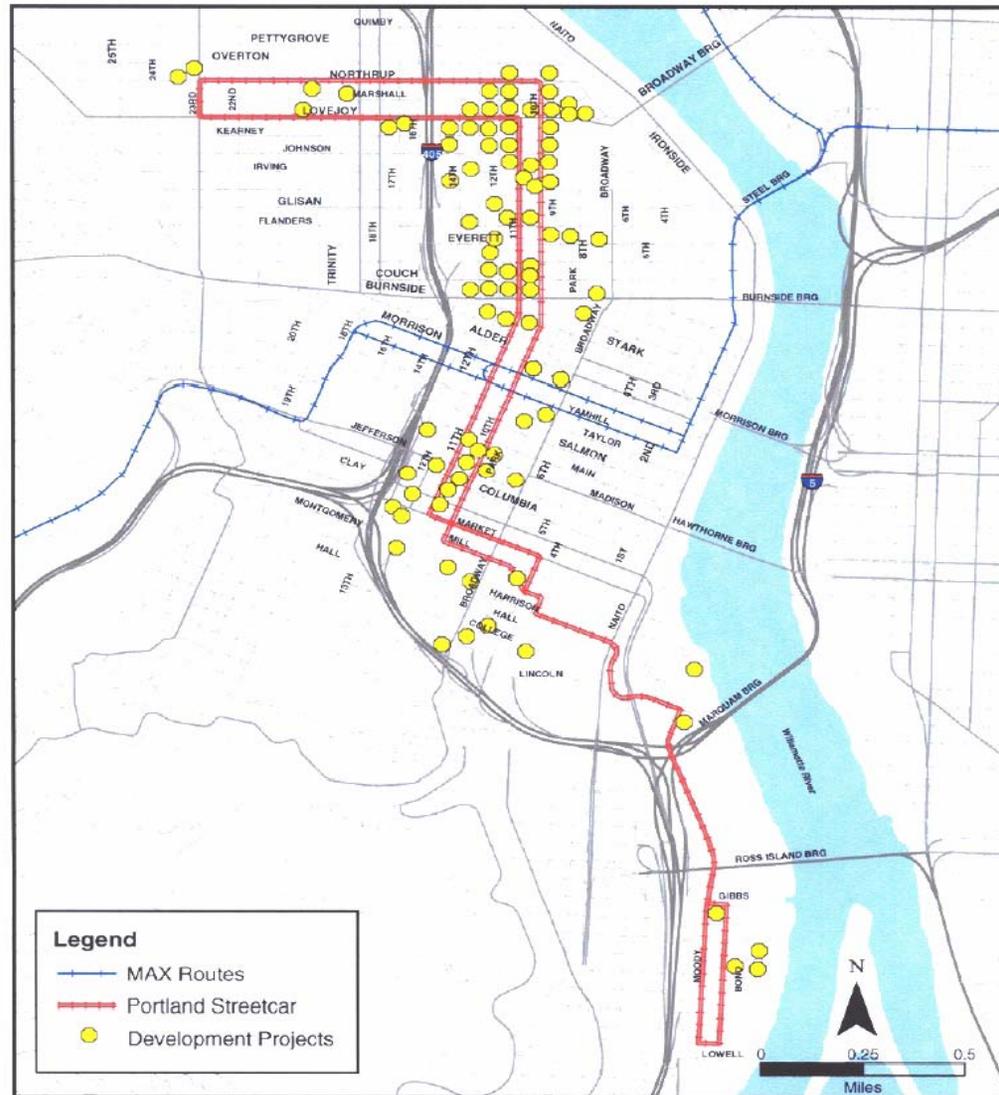
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# Development Activity within the Portland Streetcar Local Improvement Districts

January 2006



Location of new development shows proximity to streetcar service.



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# The \$64,000 Questions

- ❖ Do streetcar projects have development impacts?
- ❖ Can those impacts be quantified?
- ❖ Why do they matter?



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# Eastside Streetcar

- ❖ Proposed inner city circulator
- ❖ 12,400 new streetcar riders in 2025.
- ❖ Small Starts Proposal



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# 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

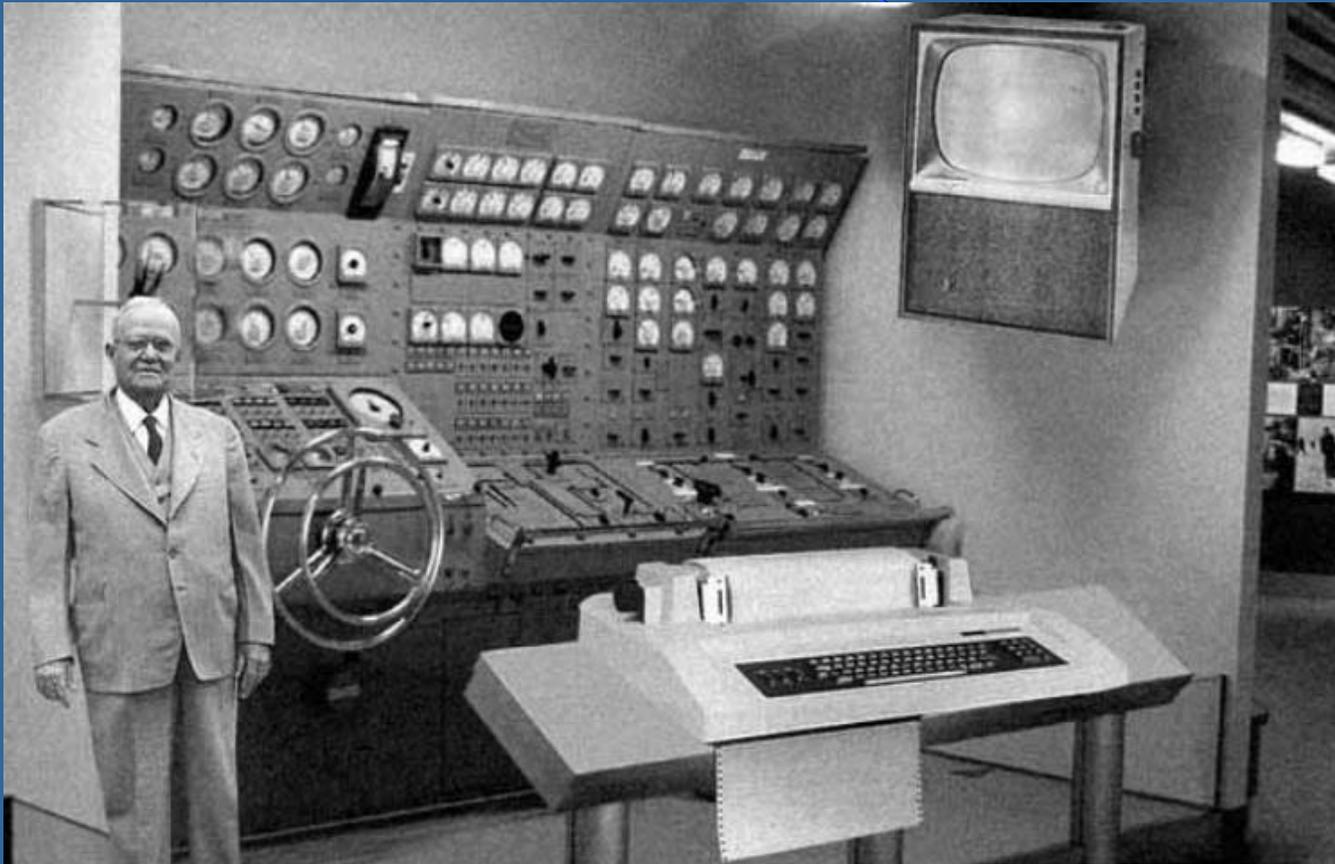


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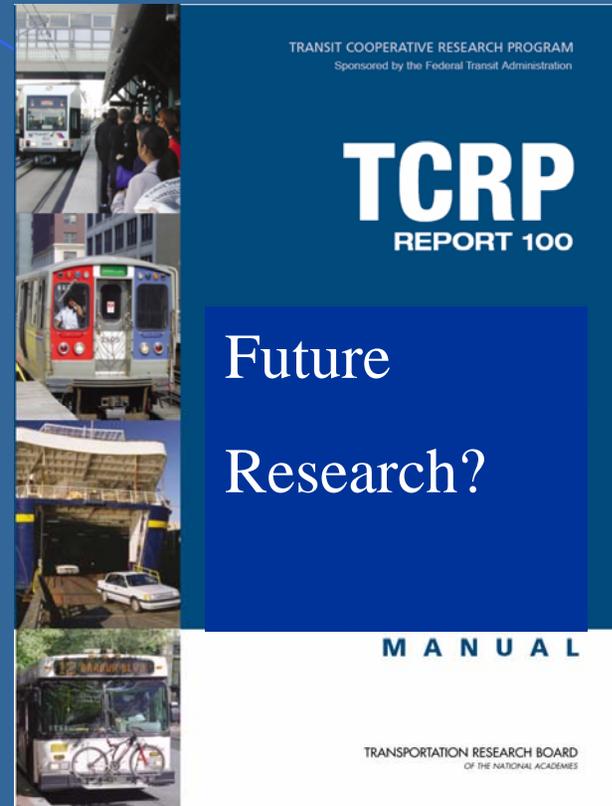
# Technical Methods



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- ❖ 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



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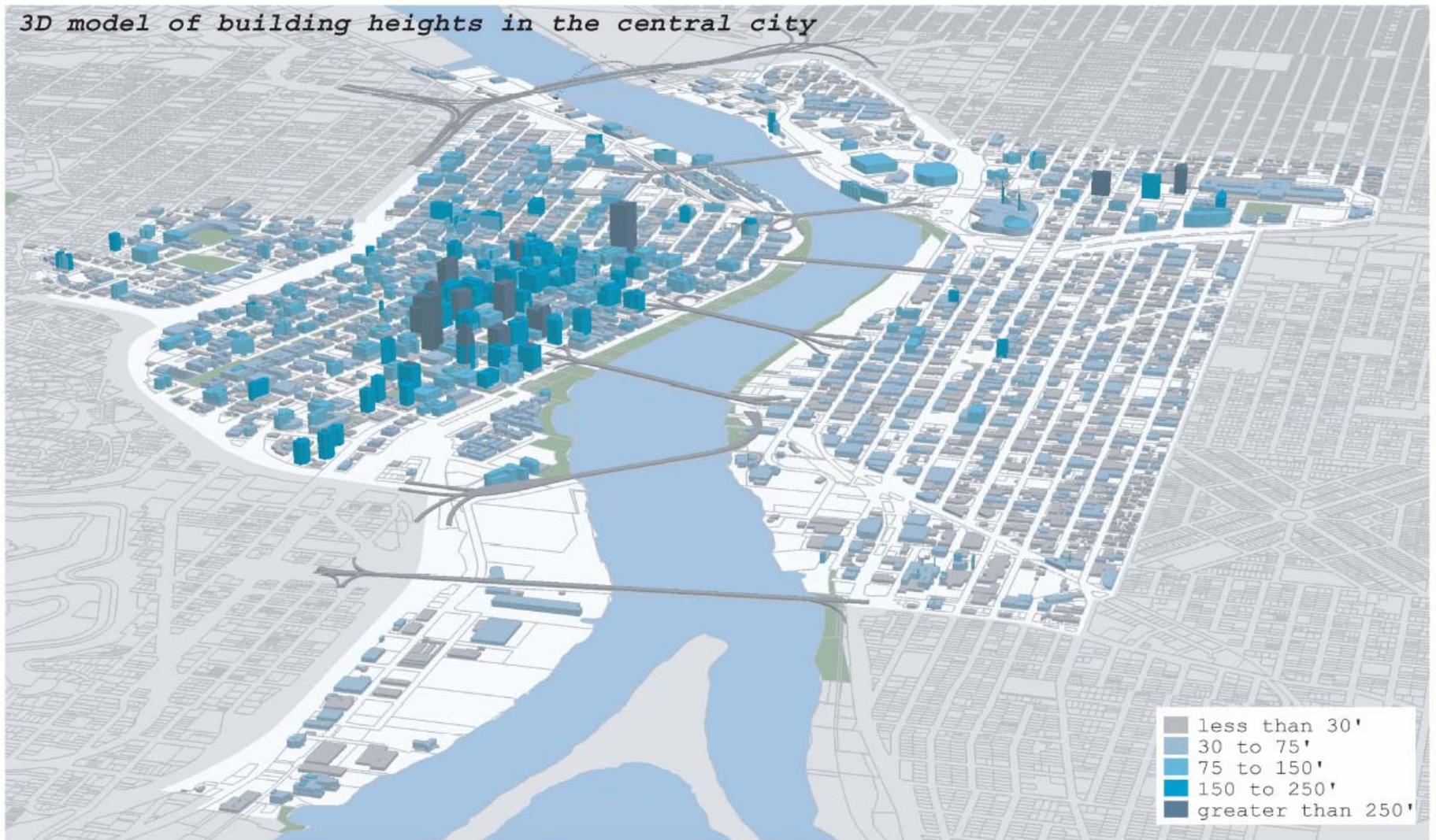
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# Variety of Techniques are Available

Projections of housing and commercial space

## Existing eastside and westside development

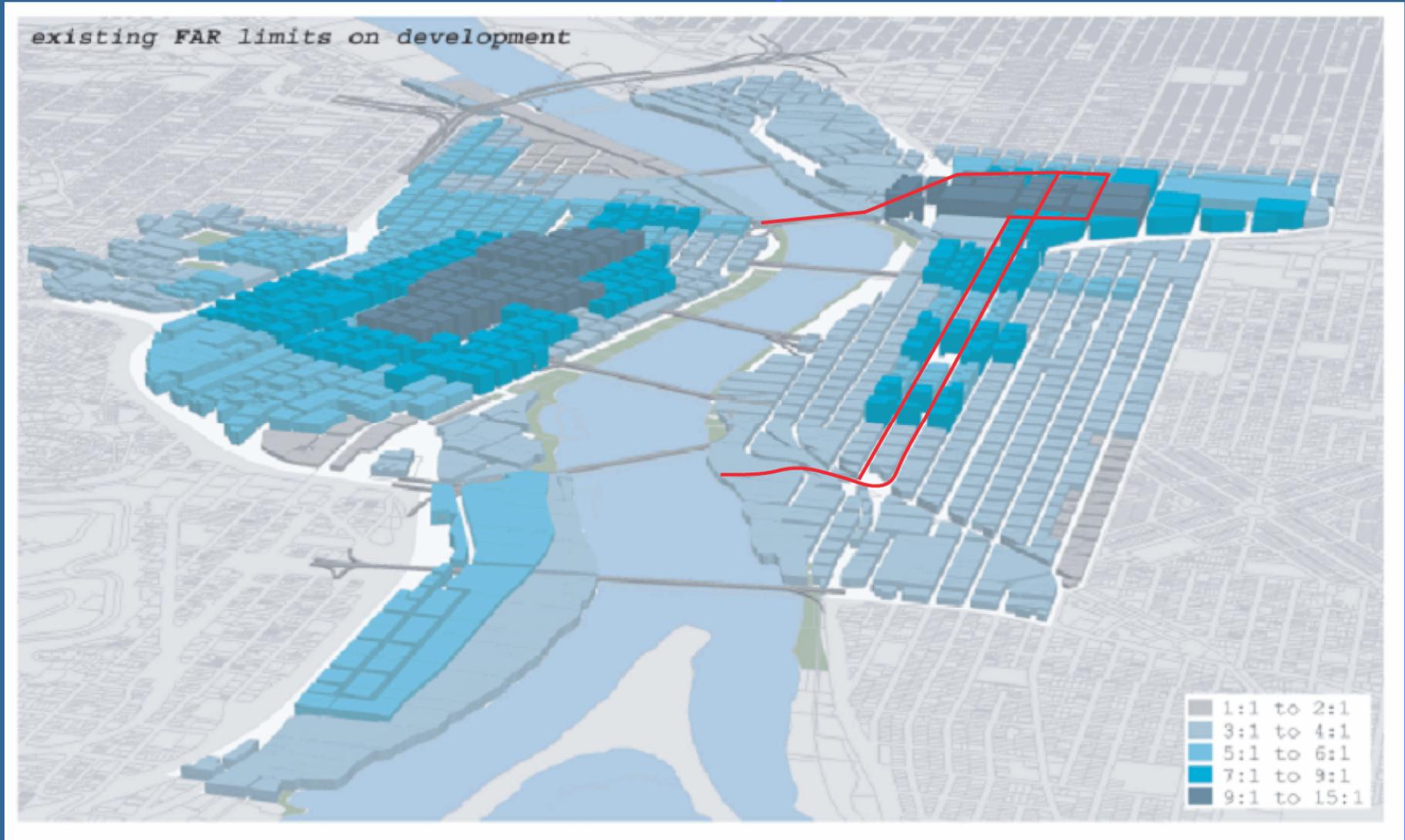
3D model of building heights in the central city



# Variety of Techniques are Available

Projections of housing and commercial space

## FAR potential

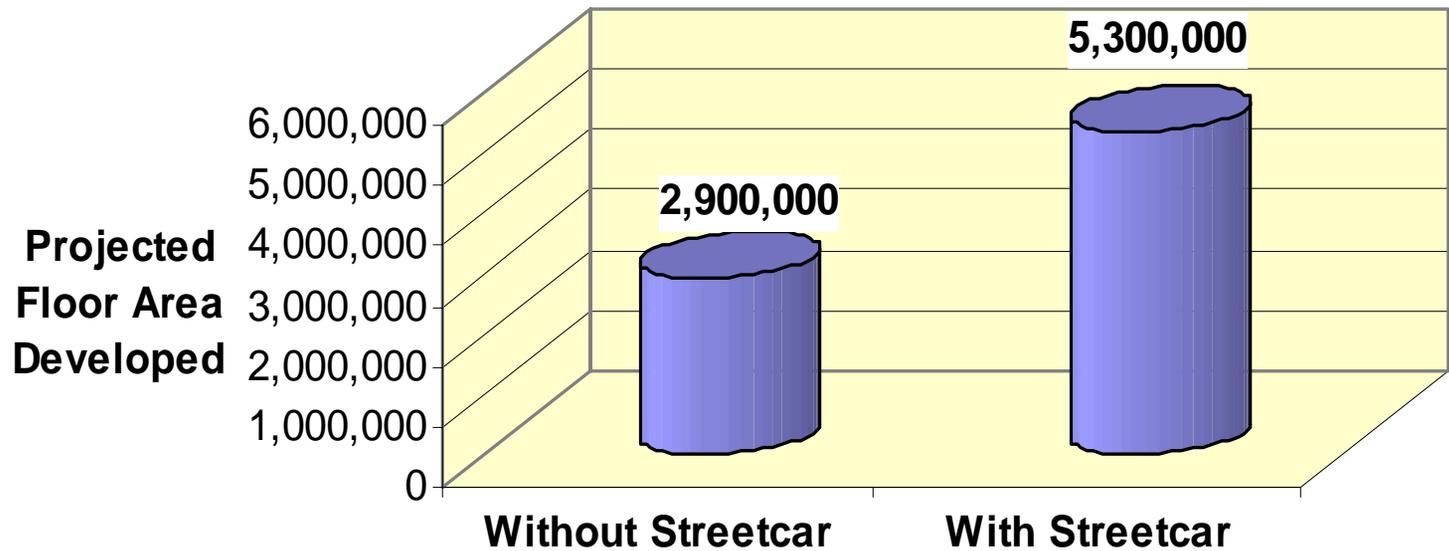


# Variety of Techniques are Available

Projections of housing and commercial space

Projects with streetcar extension will develop almost twice the floor area than with a bus.

**Eastside Year 2025 Projected Development**  
(additional housing and jobs)



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# Variety of Techniques are Available

## Development Agreements

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.

**SOUTH WATERFRONT CENTRAL DISTRICT PROJECT  
DEVELOPMENT AGREEMENT**

Among:

**The Portland Development Commission  
Oregon Health & Science University  
River Campus Investors, LLC  
North Macadam Investors, I.T.C.  
Block 39, LLC**

August 22, 2003



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### 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*



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### 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*



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## South Waterfront



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

Six more towers announced mid April.

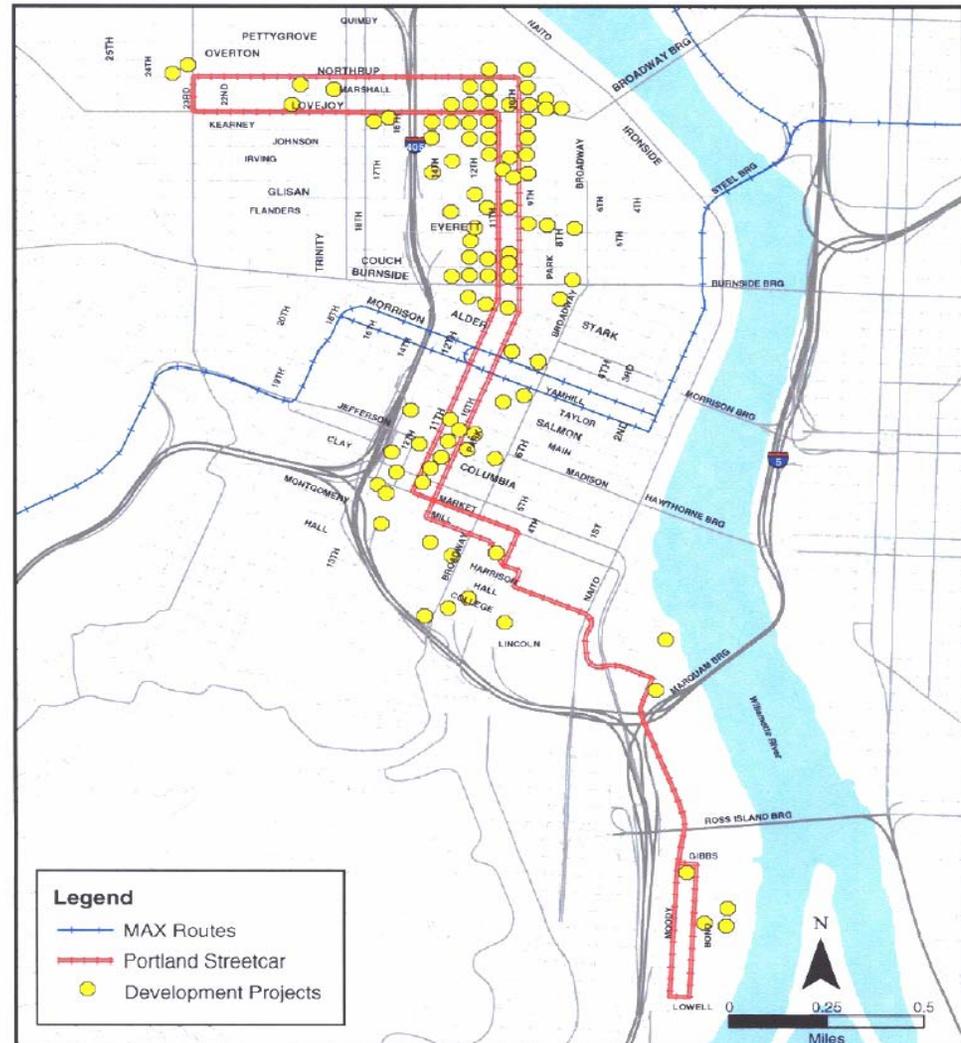


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Location of new development shows proximity to streetcar service.

### Development Activity within the Portland Streetcar Local Improvement Districts January 2006



# Variety of Techniques are Available

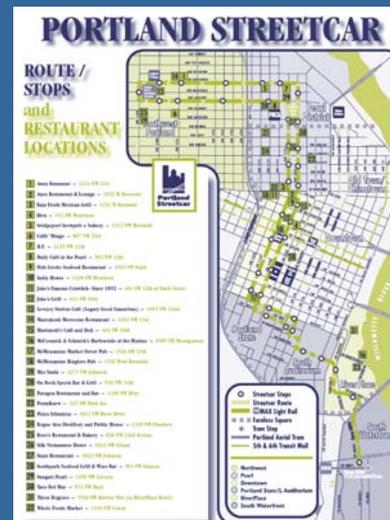
Direct Cash Contributions

## 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

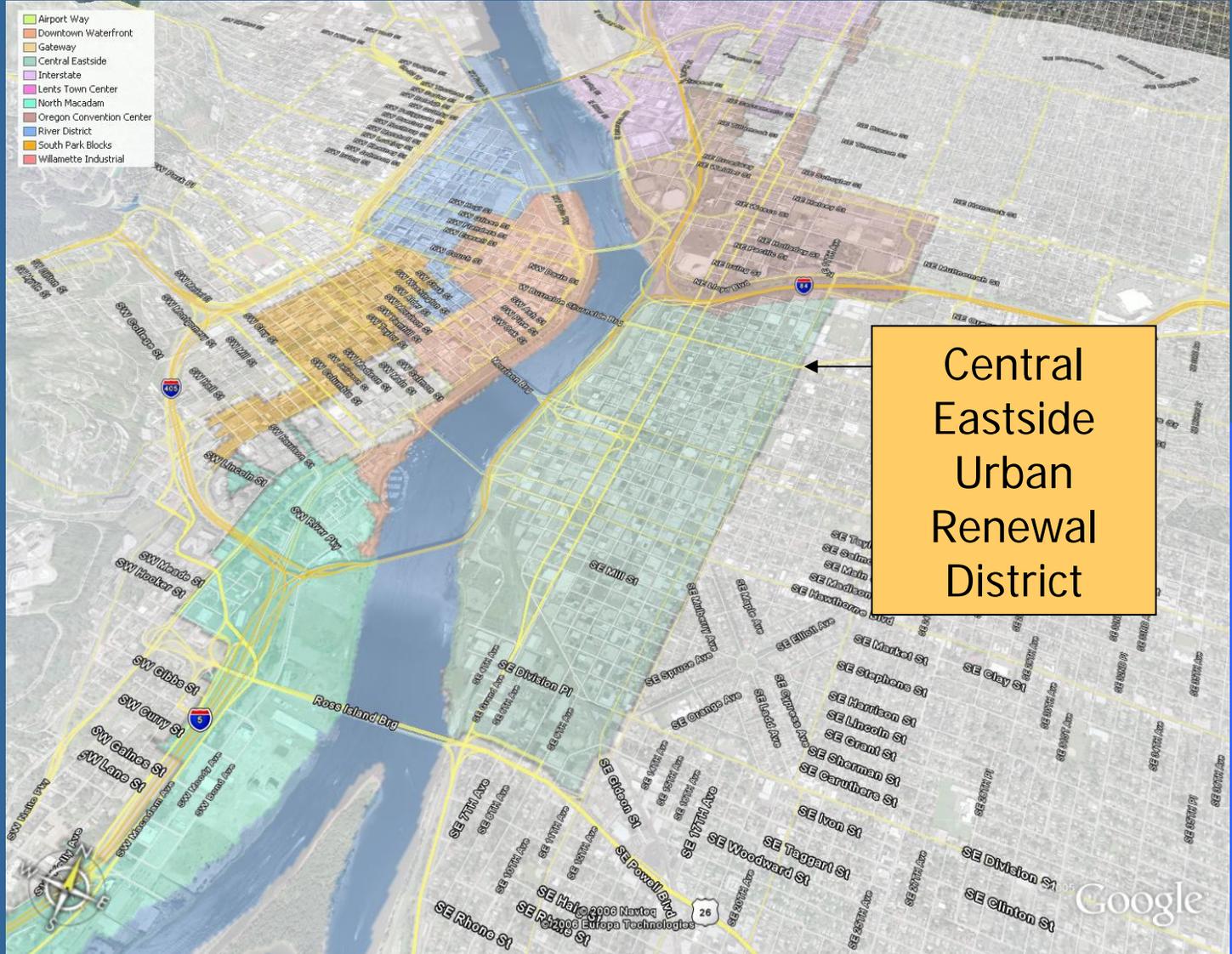


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# Variety of Techniques are Available

## Urban Renewal Districts

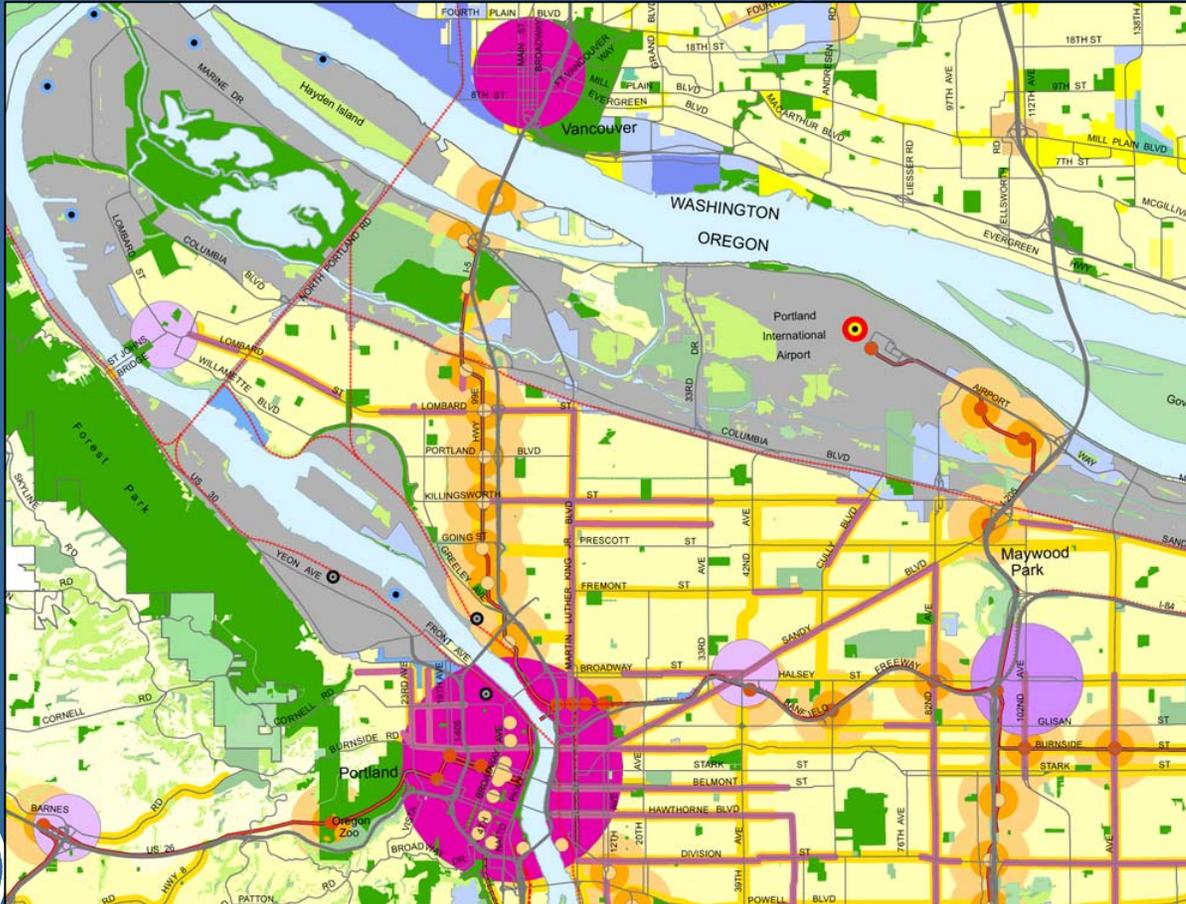


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# Variety of Techniques are Available

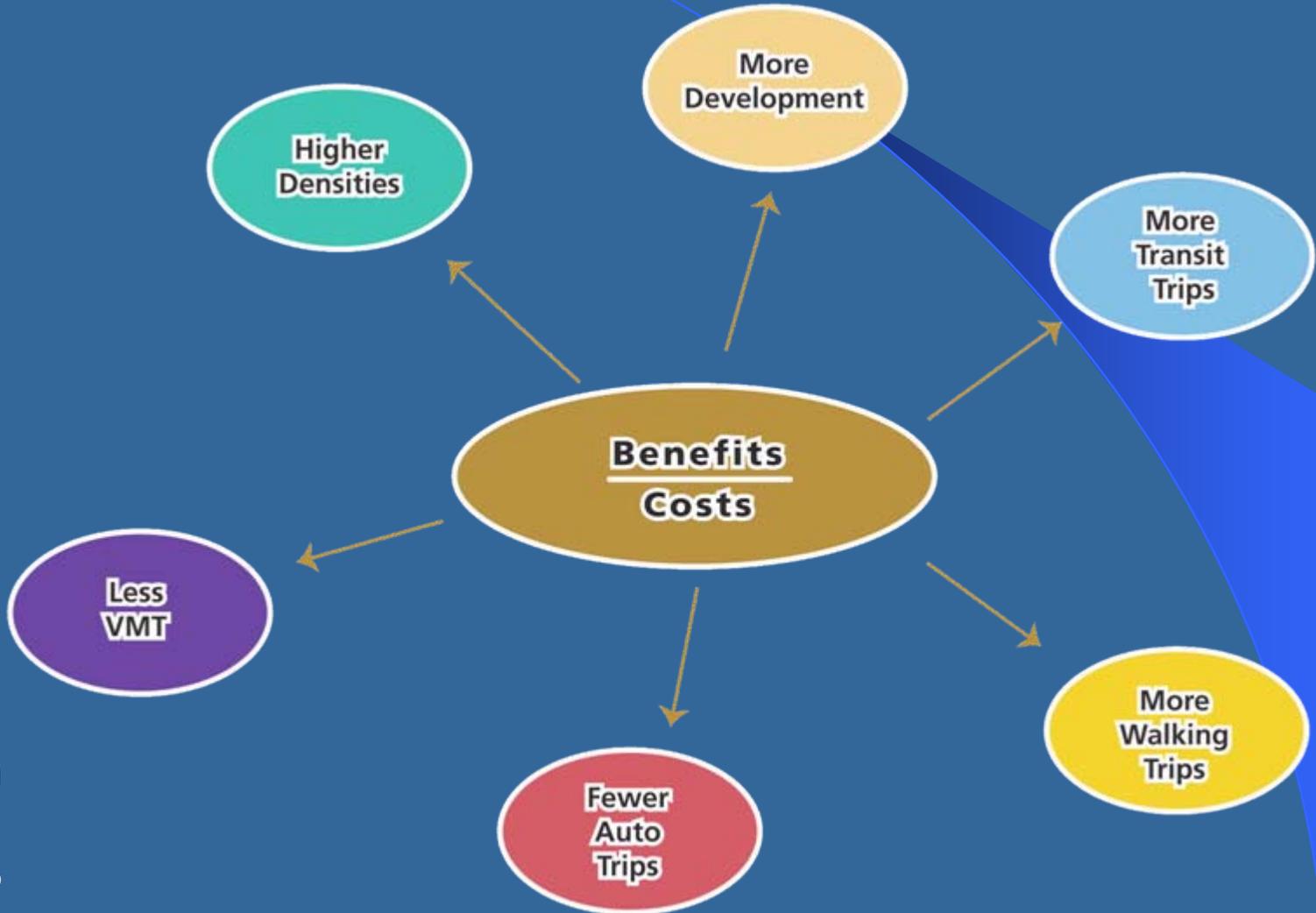
Comprehensive Plan  
Amendments

## Up-zoning of station areas



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# Cost-Effectiveness Options



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# Benefits

- ❖ Over 3,500 additional 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.



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# Benefits

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



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# 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!



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# Cost Effectiveness



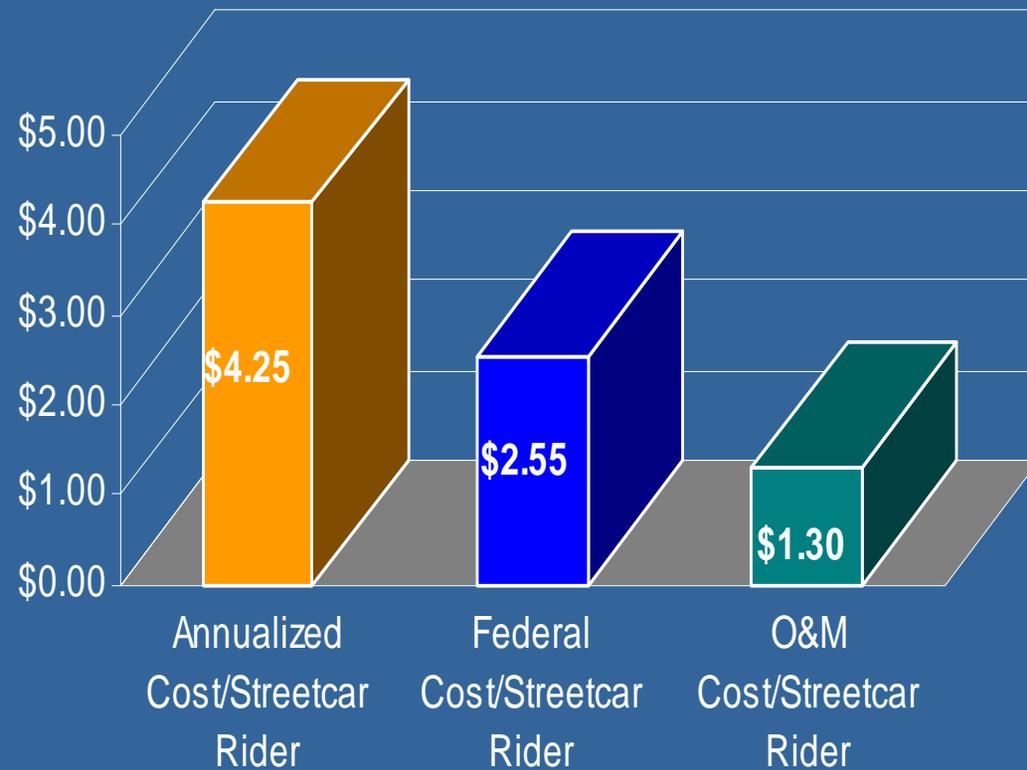
- ❖ Streetcars are not built to save travel time.
- ❖ TSUB inherently favors longer trips.
- ❖ Simpler measures are available.



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# Simple Cost-Effectiveness Measure



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# Comprehensive Cost-Effectiveness Measure

$$\frac{\text{Riders + Development Potential + Land Use}}{\text{Annualized Cost}}$$

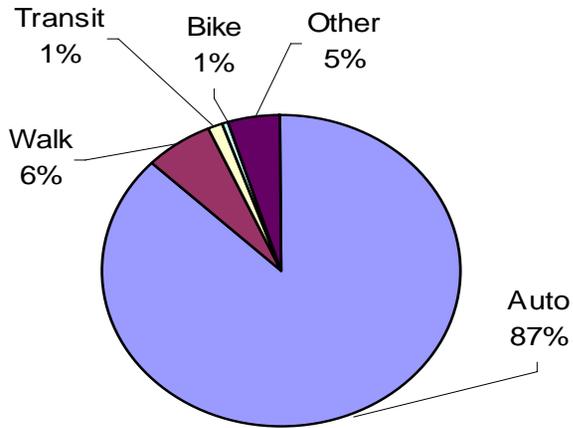


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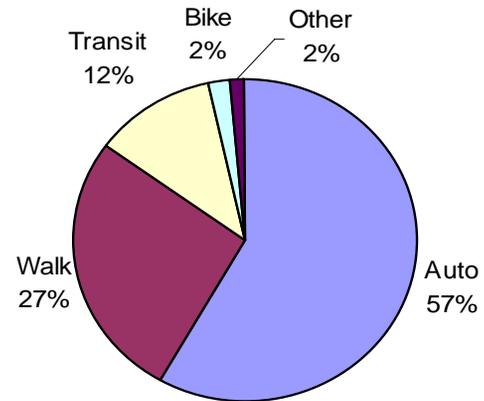
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# Travel Modes in Portland by Area



Poor Transit, No Mixed Use



Good Transit, Good Mixed Use



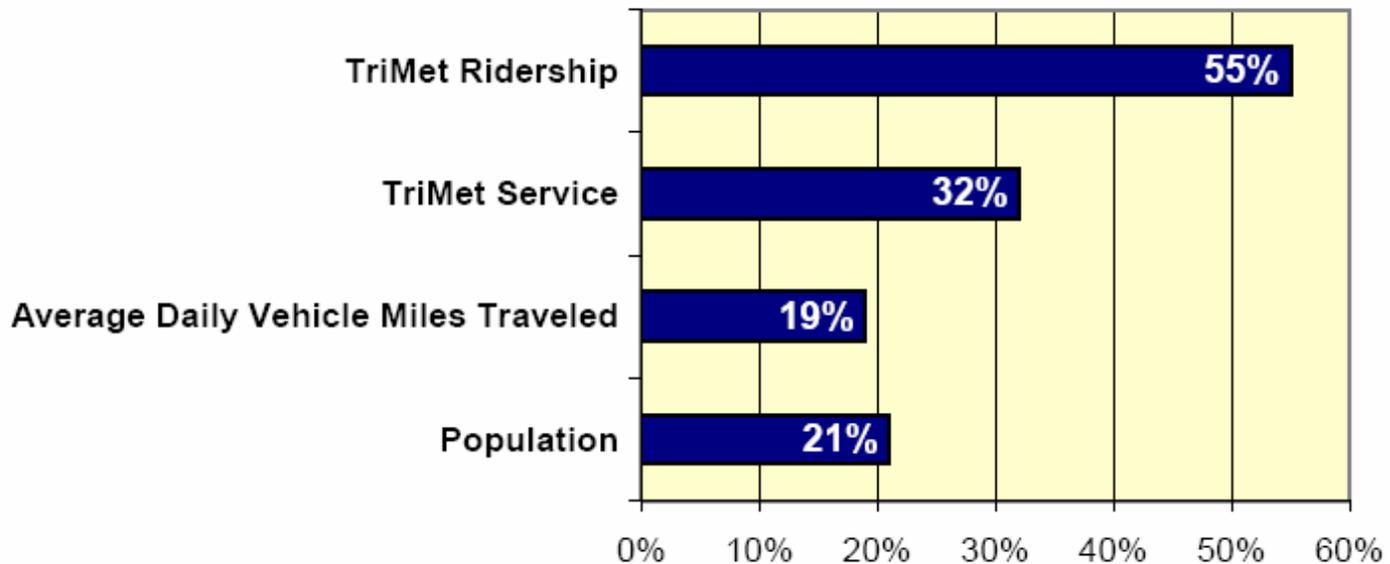
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# Transit Ridership Growth



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