

# Portland Aerial Tram

## City Council Decision Package

City of Portland Office of Transportation  
Portland Aerial Transportation, Inc.  
April 28, 2005



# Overview

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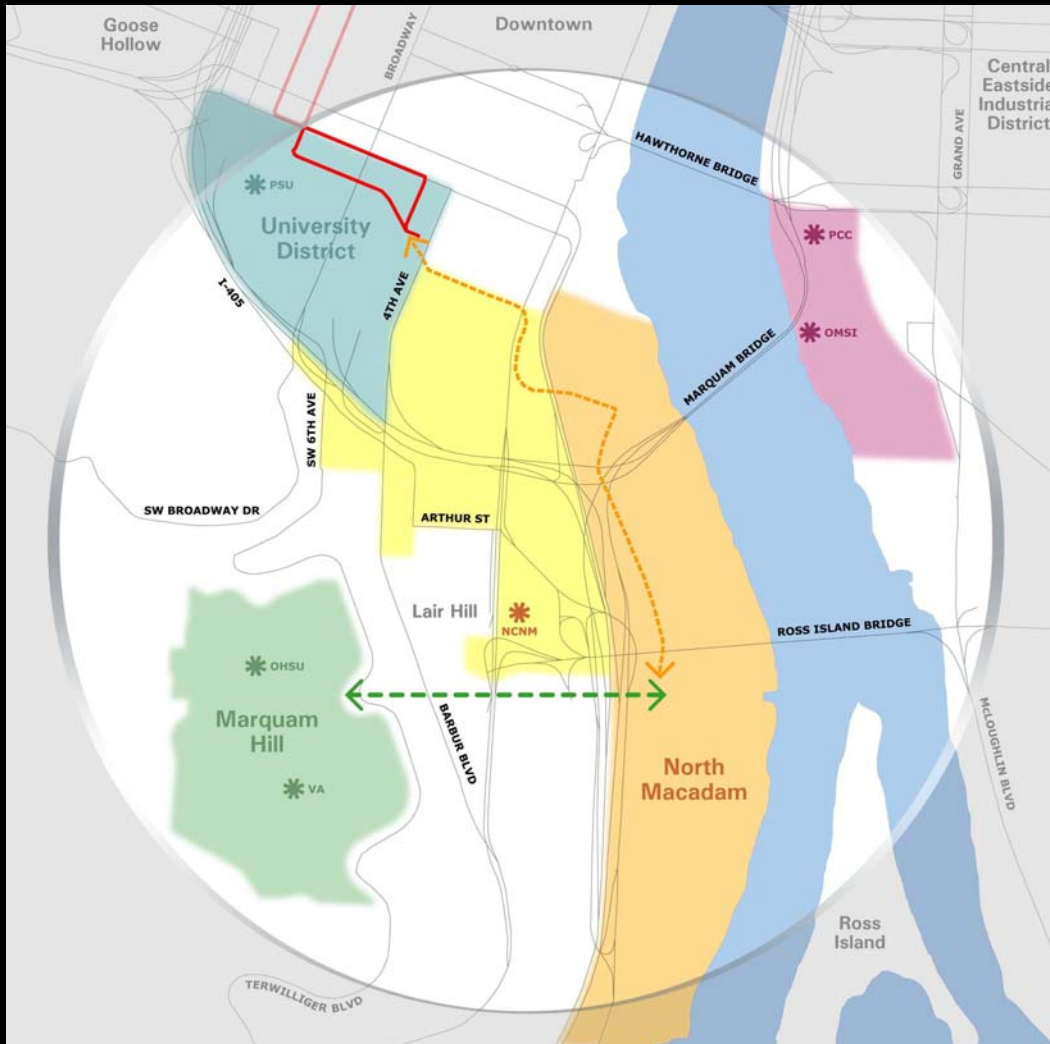
- Project Background
- Current Project Status
- Neighborhood Improvements Report
- Council Actions Requested







# South Waterfront District

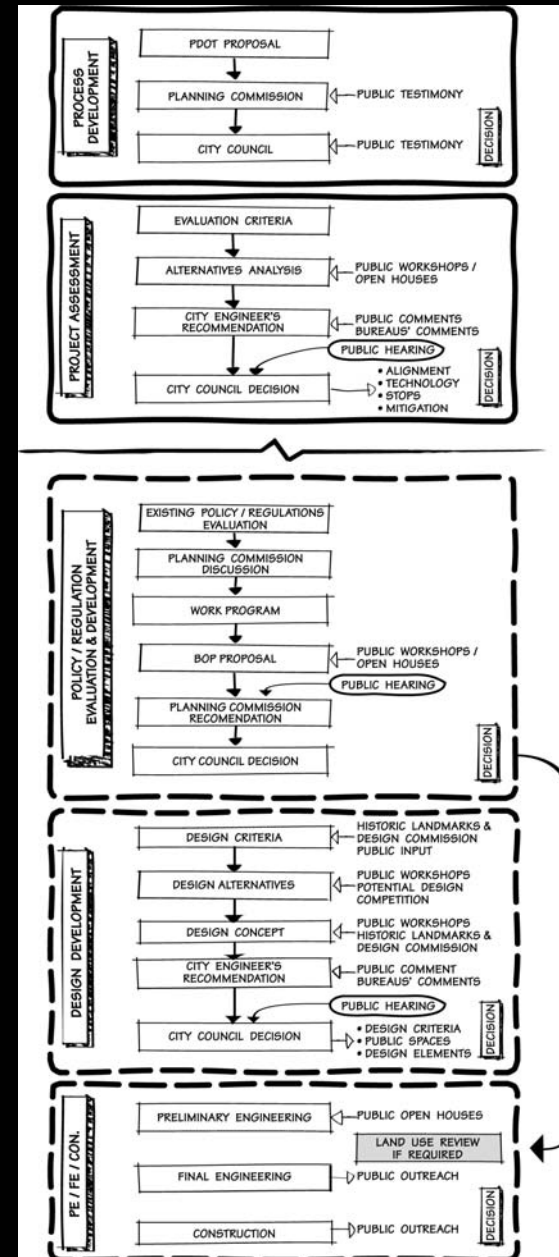


Science &  
Technology  
Quarter



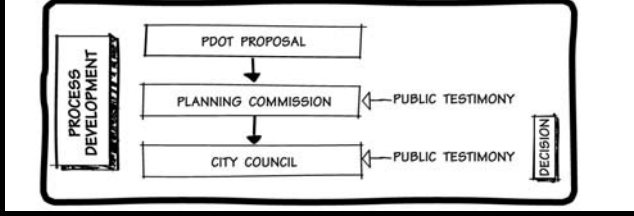
# Tram Evaluation Process

- Public Transportation Project
- City Engineer's (PDOT) Recommendation
- 5 phases
- Currently in last phase - Engineering and Construction



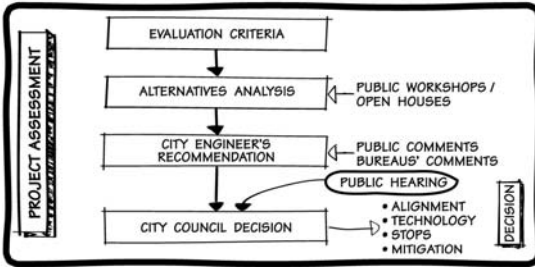
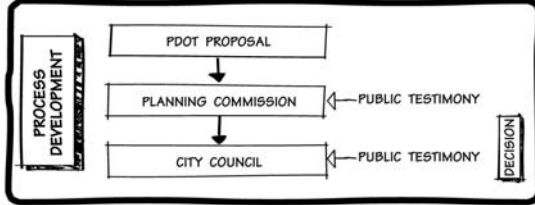


# Tram Evaluation Process



## Phase I - Process Development Resolution 36071- May 23, 2002

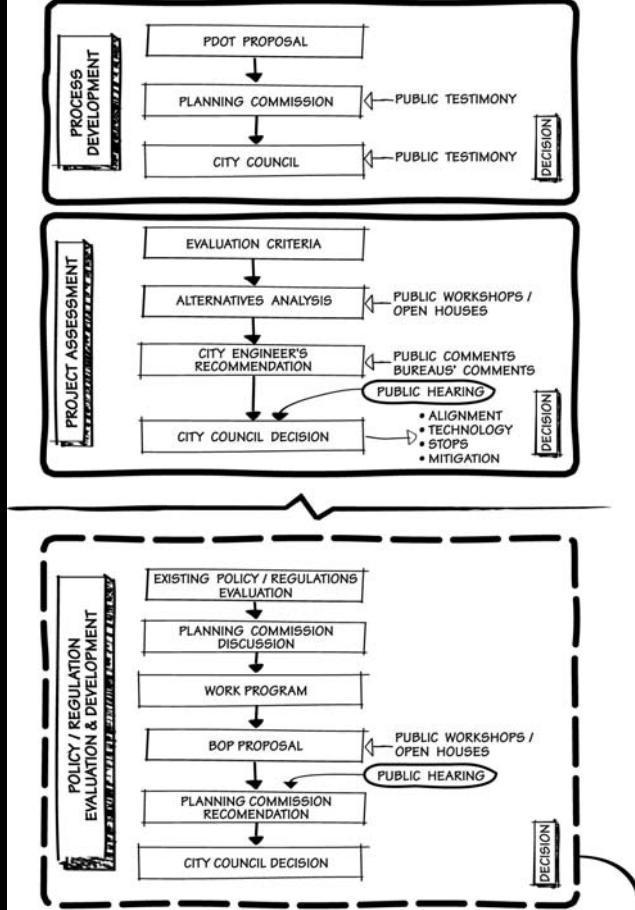
# Tram Evaluation Process



Phase I - Process Development  
Resolution 36071- May 23, 2002

Phase II - Project Assessment  
Resolution 36085 - July 10 2002

# Tram Evaluation Process



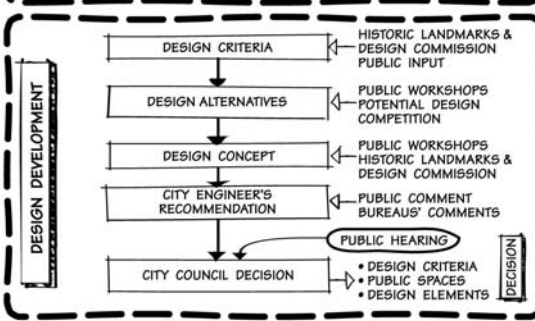
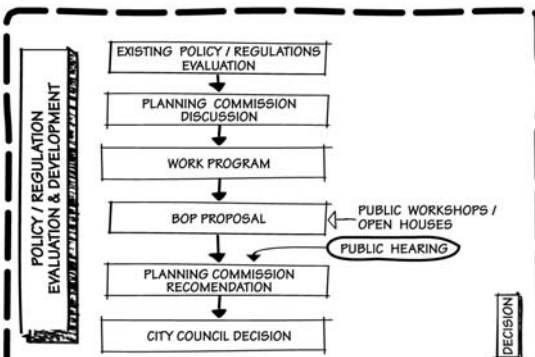
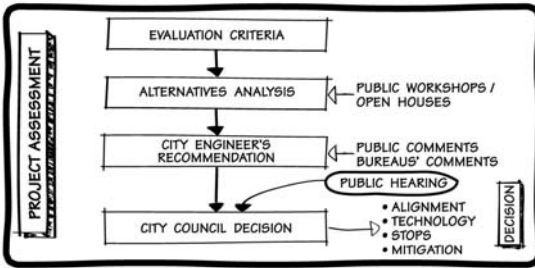
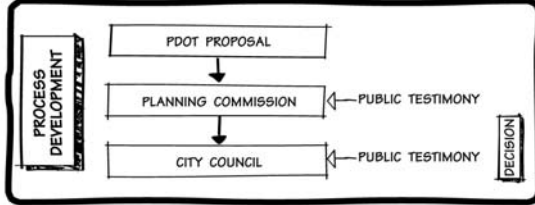
Phase I - Process Development  
Resolution 36071- May 23, 2002

Phase II - Project Assessment  
Resolution 36085 - July 10 2002

Phase III - Policy Evaluation and  
Development

Completed as part of the Marquam Hill  
Plan, July 10, 2002

# Tram Evaluation Process



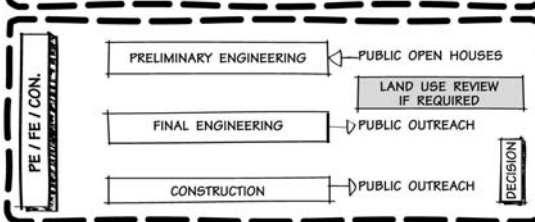
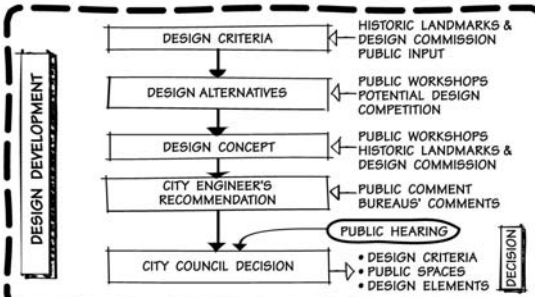
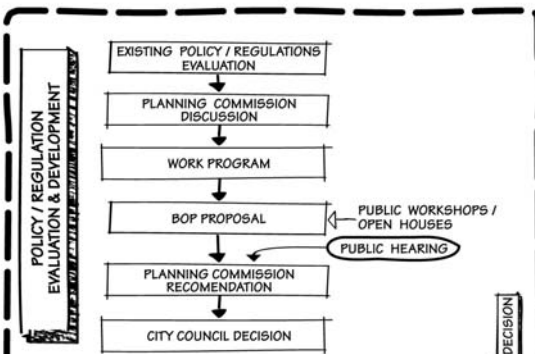
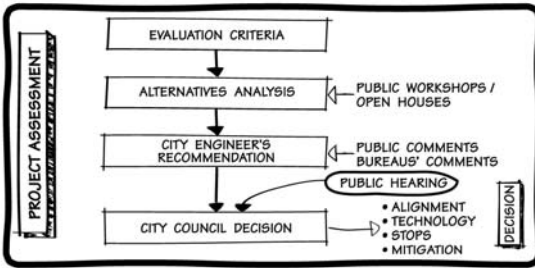
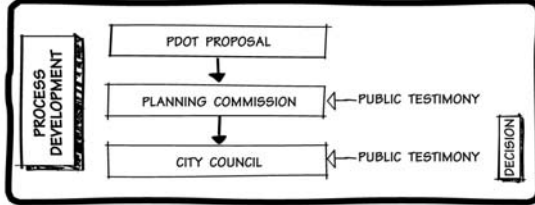
Phase I - Process Development  
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Phase II - Project Assessment  
Resolution 36085 - July 10 2002

Phase III - Policy Evaluation and  
Development  
Completed as part of the Marquam Hill  
Plan, July 10, 2002

Phase IV - Design Development  
Resolution 36224, June 10, 2004

# Tram Evaluation Process



Phase I - Process Development  
Resolution 36071- May 23, 2002

Phase II - Project Assessment  
Resolution 36085 - July 10 2002

Phase III - Policy Evaluation and  
Development  
Completed as part of the Marquam Hill  
Plan, July 10, 2002

Phase IV - Design Development  
Resolution 36224, June 10, 2004

Phase V - Engineering and  
Construction  
Proposed Action - April 28, 2005

# Public Participation

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- Citizens Advisory Committee
- Public Events
- Portland Design Commission
- Neighborhood Outreach



# Alternatives Analysis

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## Alternatives Considered - July 2002

- Shuttle Bus Connections (4 different routes)
- Bicable Aerial Tram
- Aerial Gondola
- Monocable Aerial Tram
- Underground People Mover
- Previous Studies: Funicular Rail, Streetcar





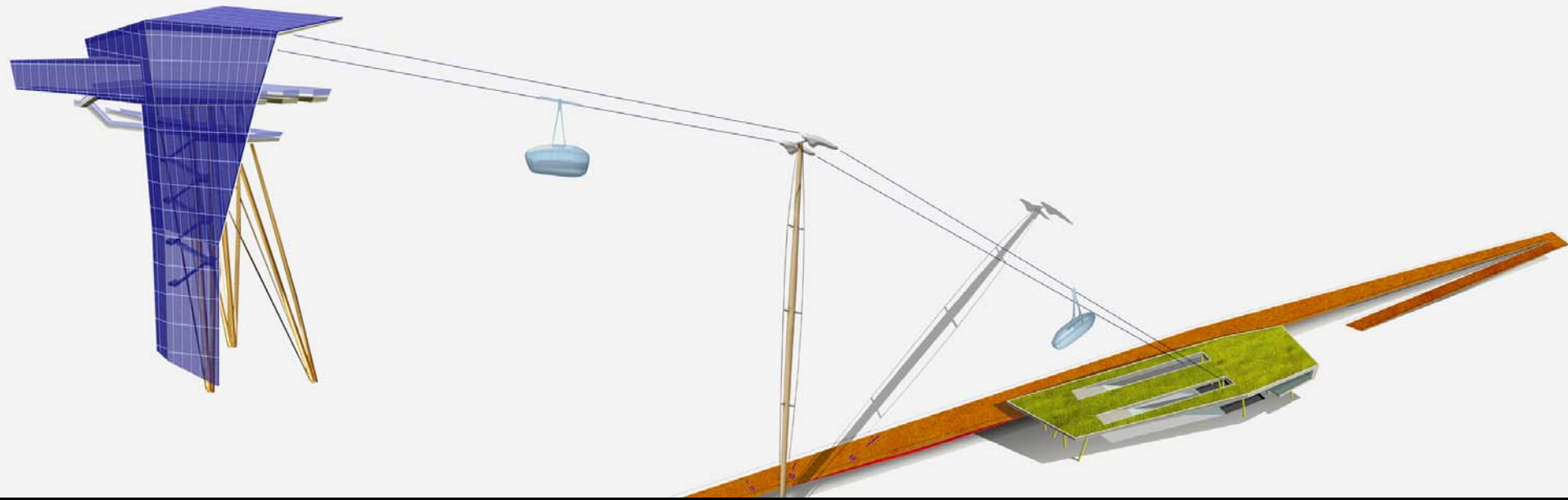


# Design Competition

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## Angeli/Graham Architecture

Los Angeles, CA + Zurich, Switzerland



# Tram Design

## Project Vision



*The creation of connections, linking communities through transportation infrastructure, public space, landscape and sustainable design.*

**Upper Station**



marquam hill

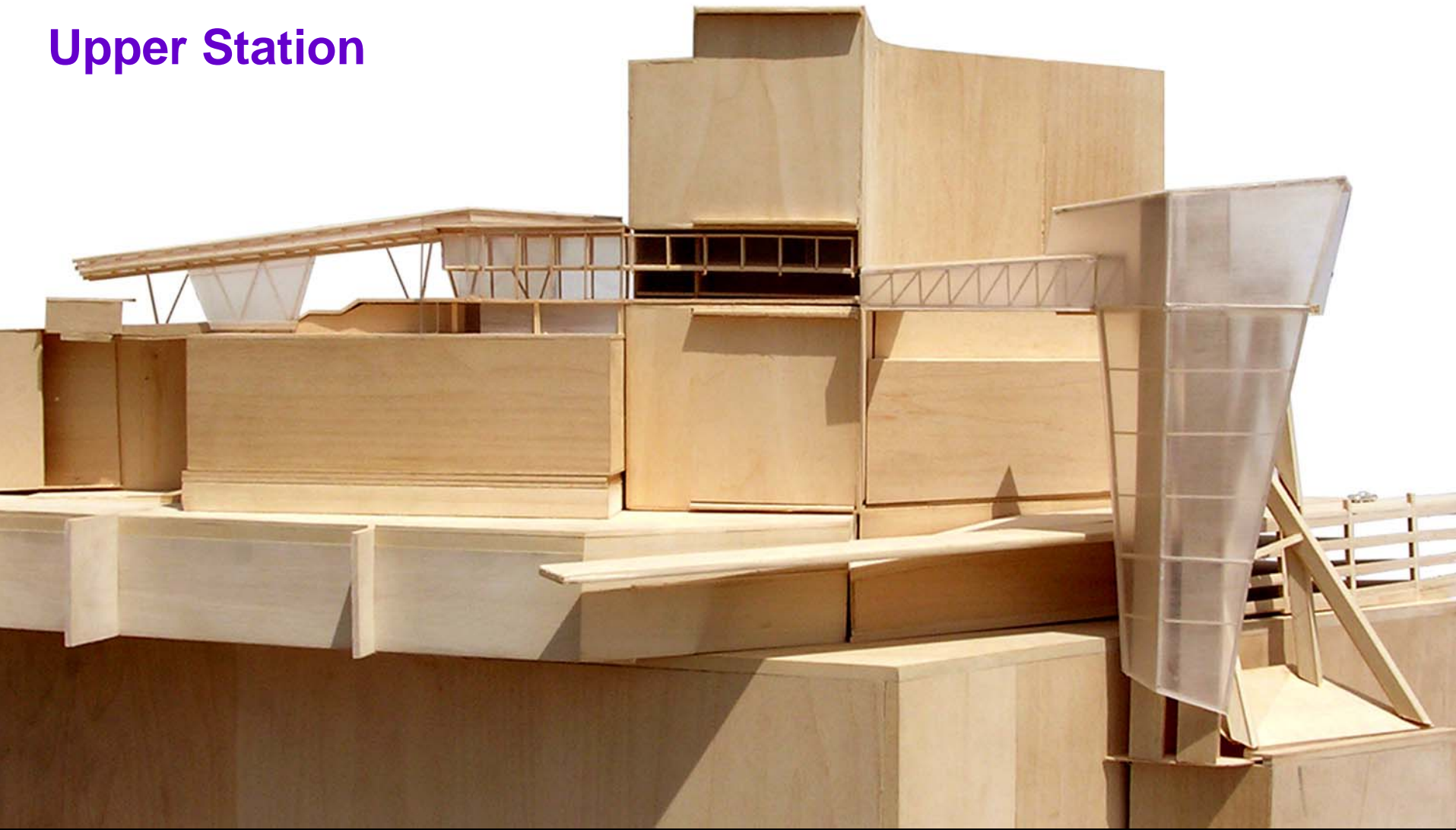
**Tower**



south waterfront

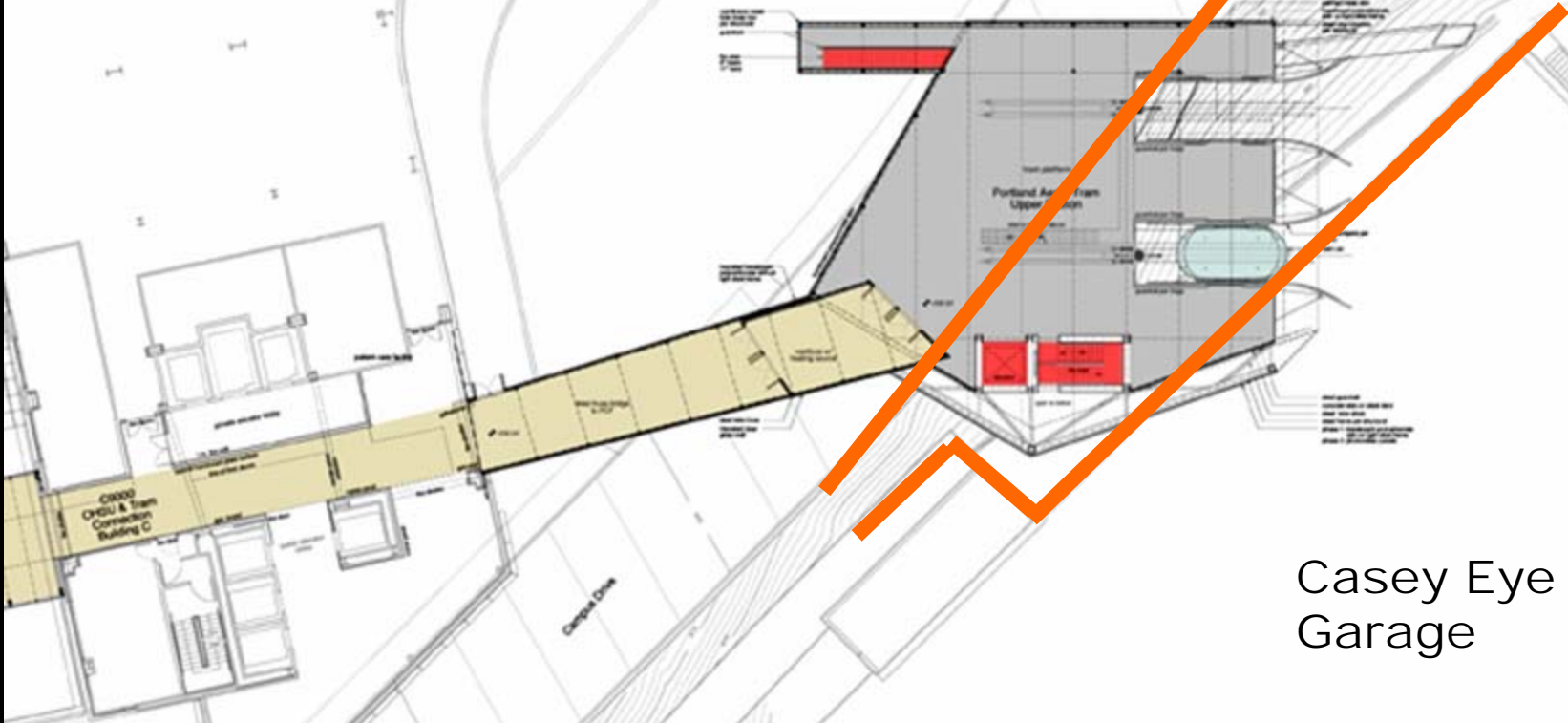
**Lower Station**

# Upper Station



Patient Care Facility  
(under construction)

Campus Drive



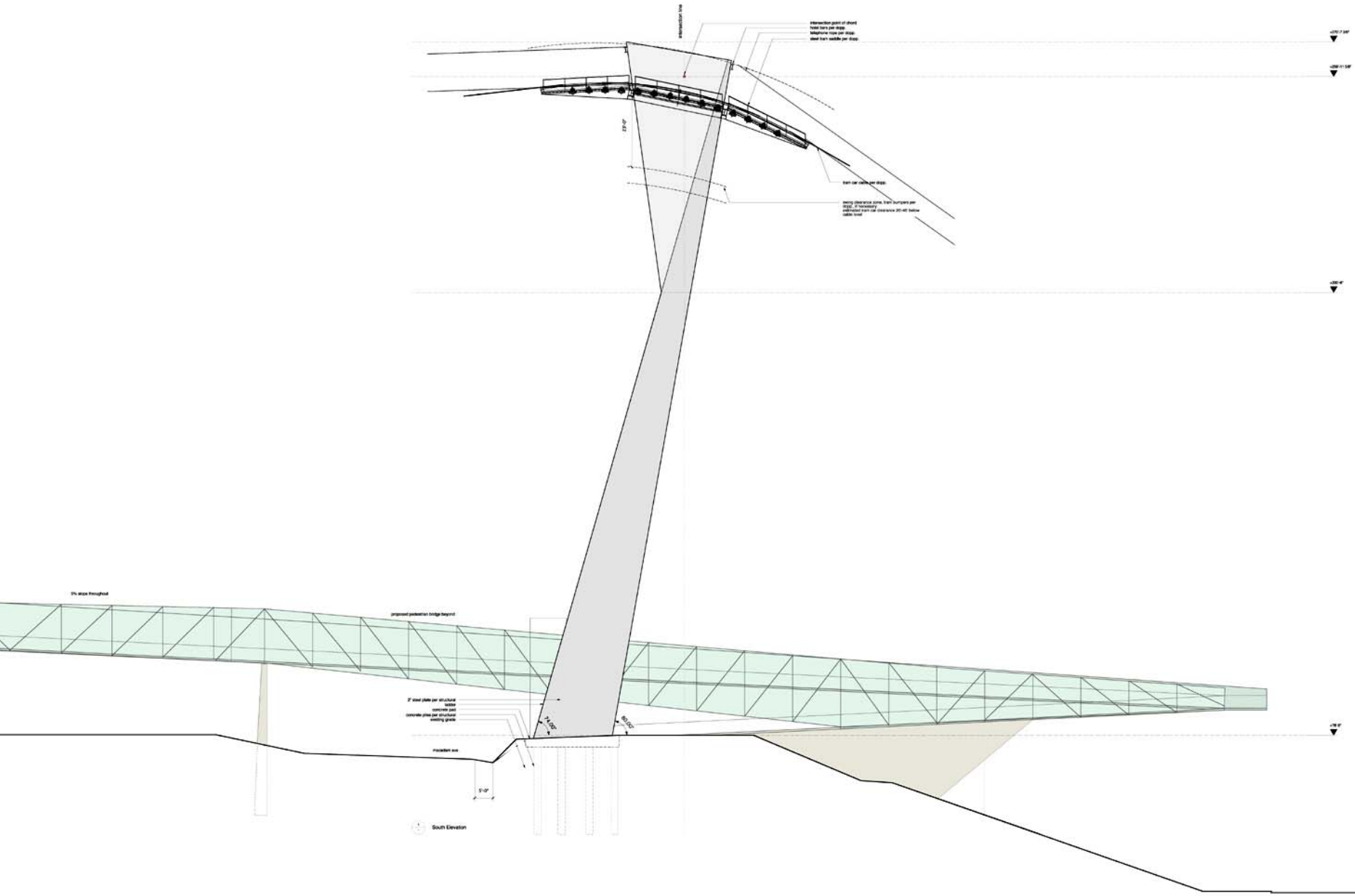






# Intermediate Tower





interconnection line

interconnection point of sheet  
 holes cut per design  
 minimum 1/2" per edge  
 steel trim visible per design

2 1/2" Ø

trim cut visible per design

heavy clearance zone, trim 2" depth per design. If necessary, additional trim cut clearance 20" aft visible level

120' ±

120' ±

120' ±

3% slope throughout

proposed pedestrian bridge layout

2" steel plate per structural member  
 concrete pour per structural safety grade

foundation line

9'-0"

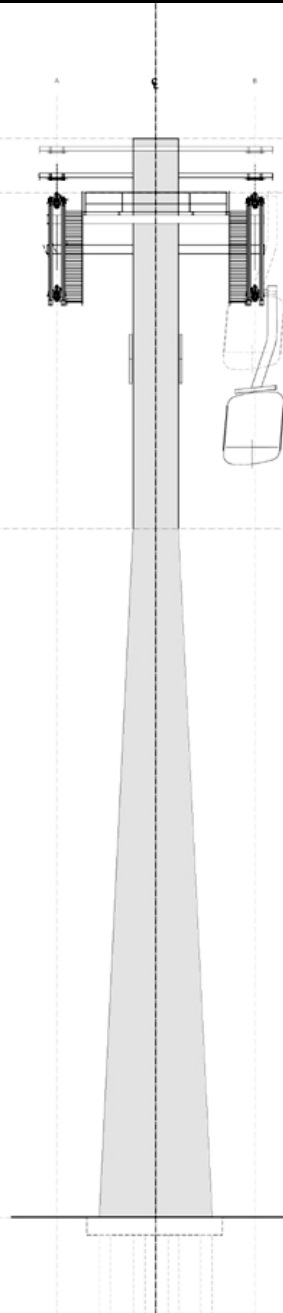
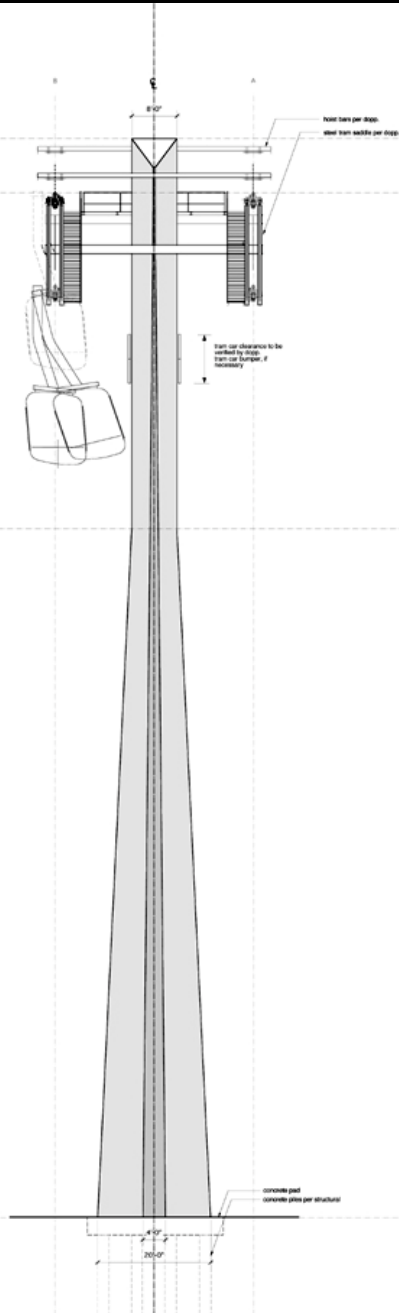
1'-0"

8'-0"

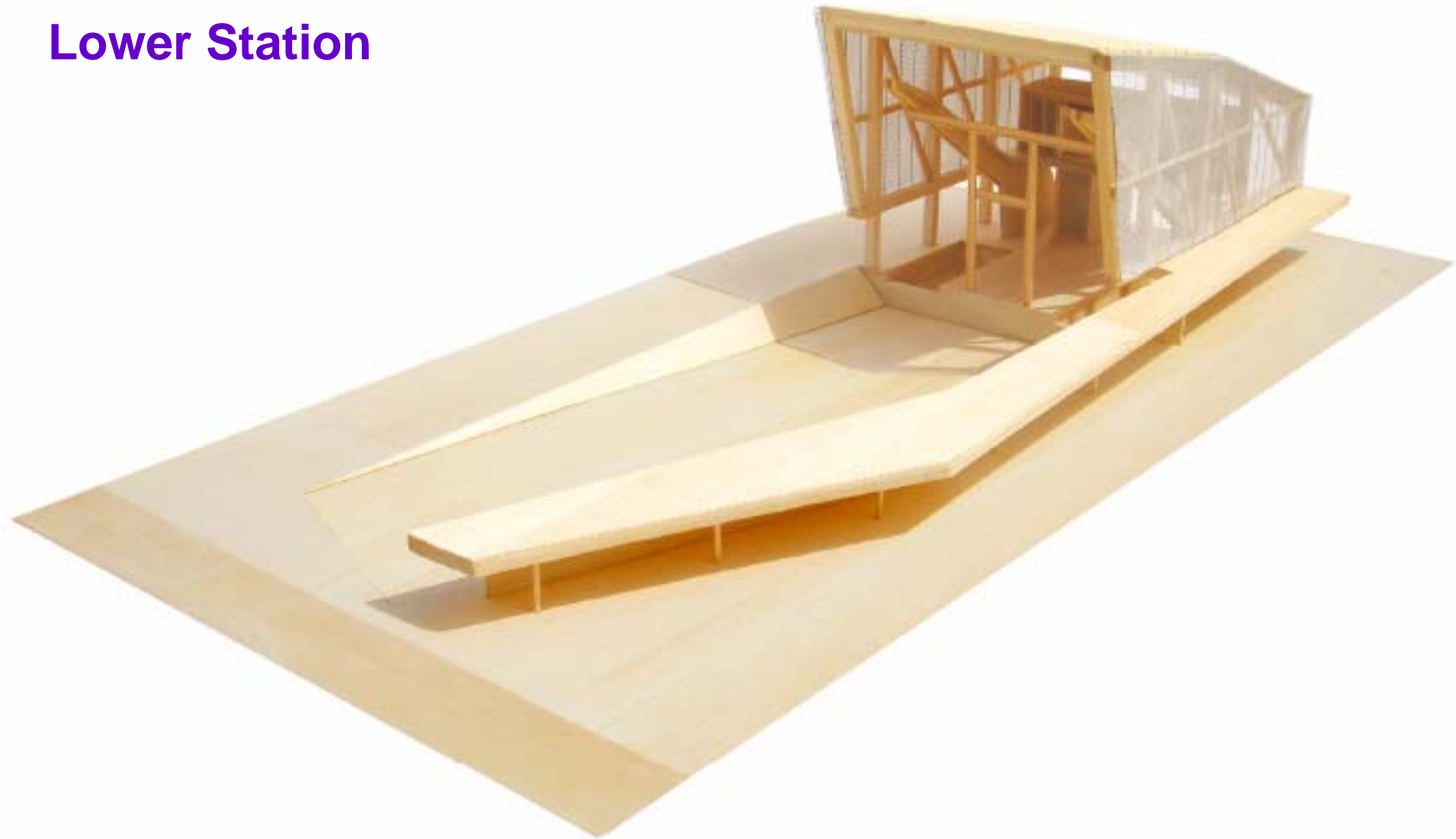


South Elevation

120' ±



## Lower Station







# Tram Design

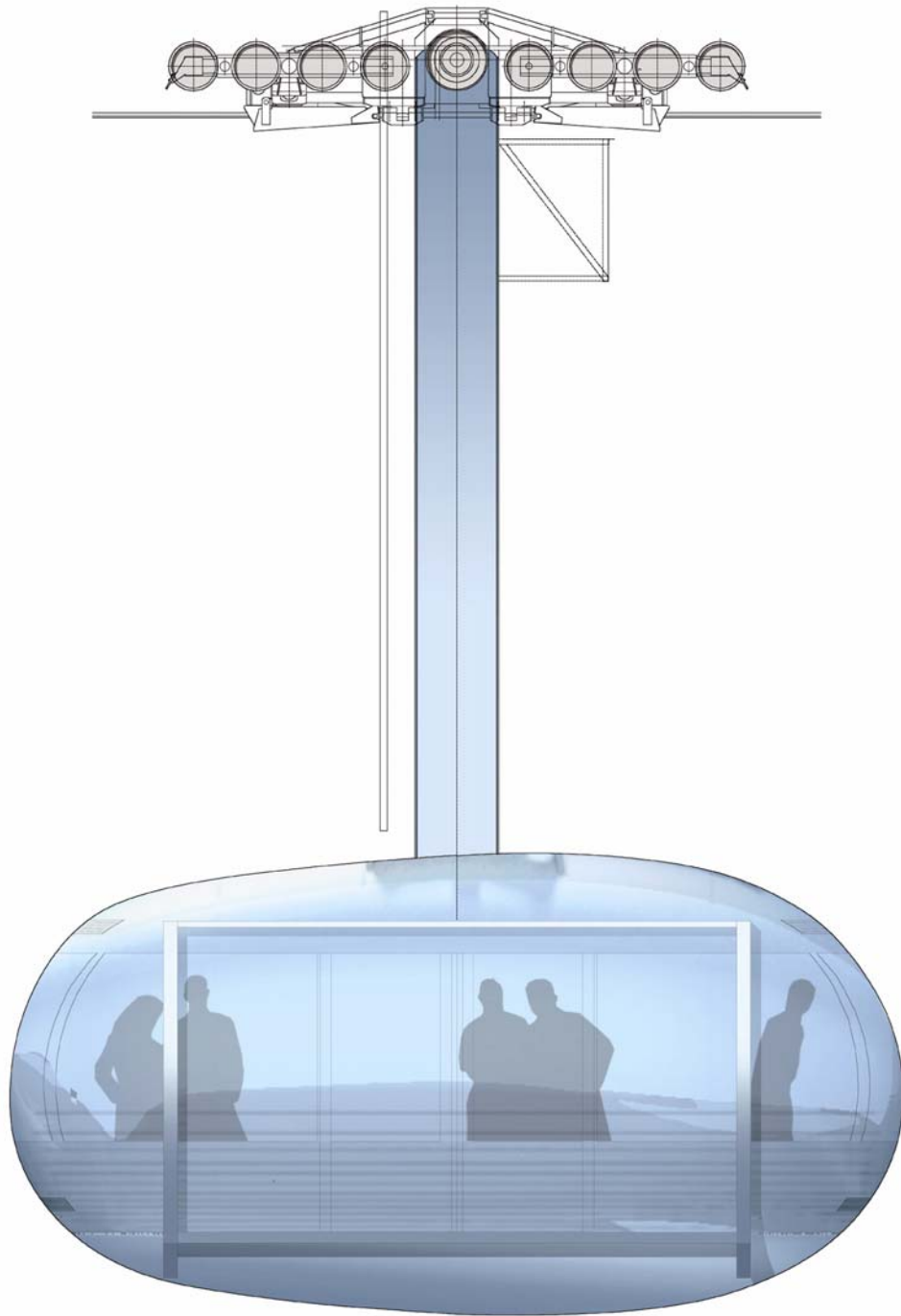
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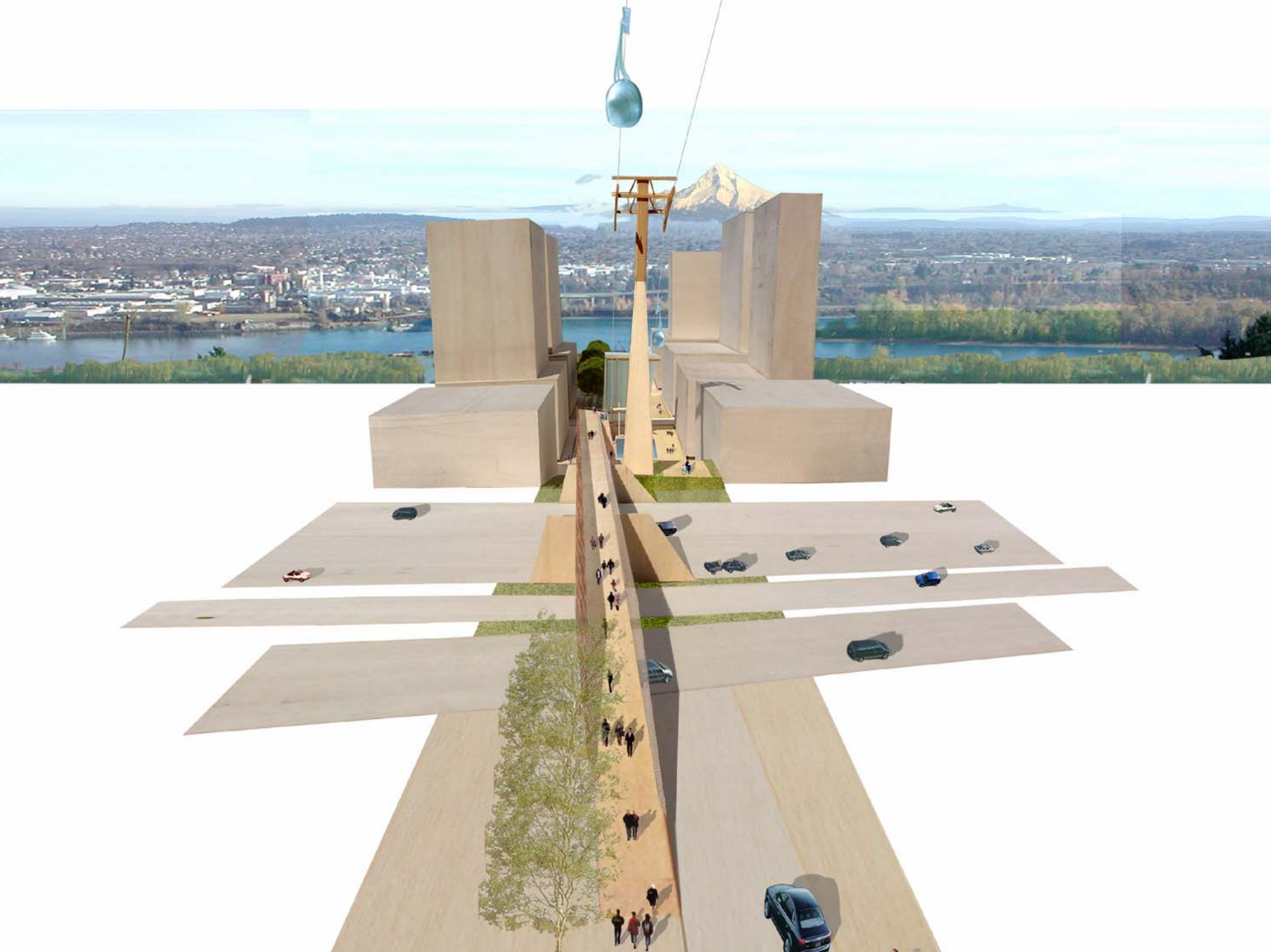
## Tram Cabins











# Portland Aerial Tram

## City Council Decision Package

- **Current Project Budget: \$40,000,000**
- **Budget Includes:**
  - \$ 34,205,722 Portland Aerial Tram Improvements
  - \$ 2,169,278 Neighborhood Improvements
  - \$ 3,625,000 Project Contingency
- **Project Funding:**
  - \$ 3,500,000 Tax Increment Financing (PDC)
  - \$ 4,000,000 OHSU Cash Contribution
  - \$ 2,000,000 State Energy Tax Credits
  - \$ 31,500,000 Local Improvement District (\$7.0M South Waterfront, \$24.5M Marquam Hill)

# Portland Aerial Tram

## City Council Decision Package

### Risk Management

- **Enhanced Safety Programs - Strenuous Review Process and Project Requirements**
- **Budget Management:**
  - Lock in Exchange Rate (Contract Execution)
  - Lock in Steel Prices (early steel packages)
  - Establish Project Contingency - \$3,625,000
- **Schedule:**
  - Early bid packages - Excavation, Foundations
  - September 30, 2006 goal (OHSU Building One opens)

# Tram Design

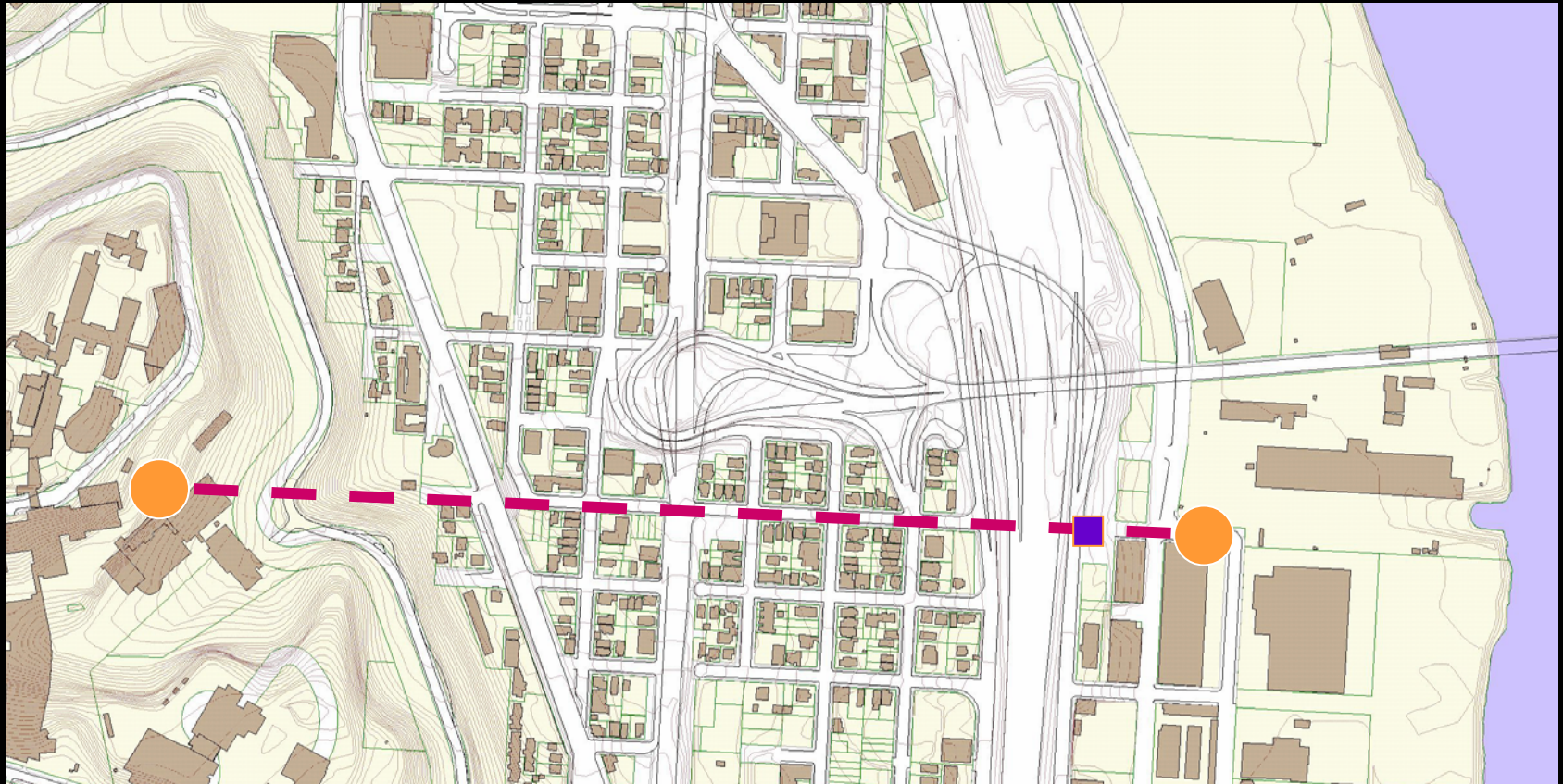
## Project Vision



*The creation of connections, linking communities through transportation infrastructure, public space, landscape and sustainable design.*

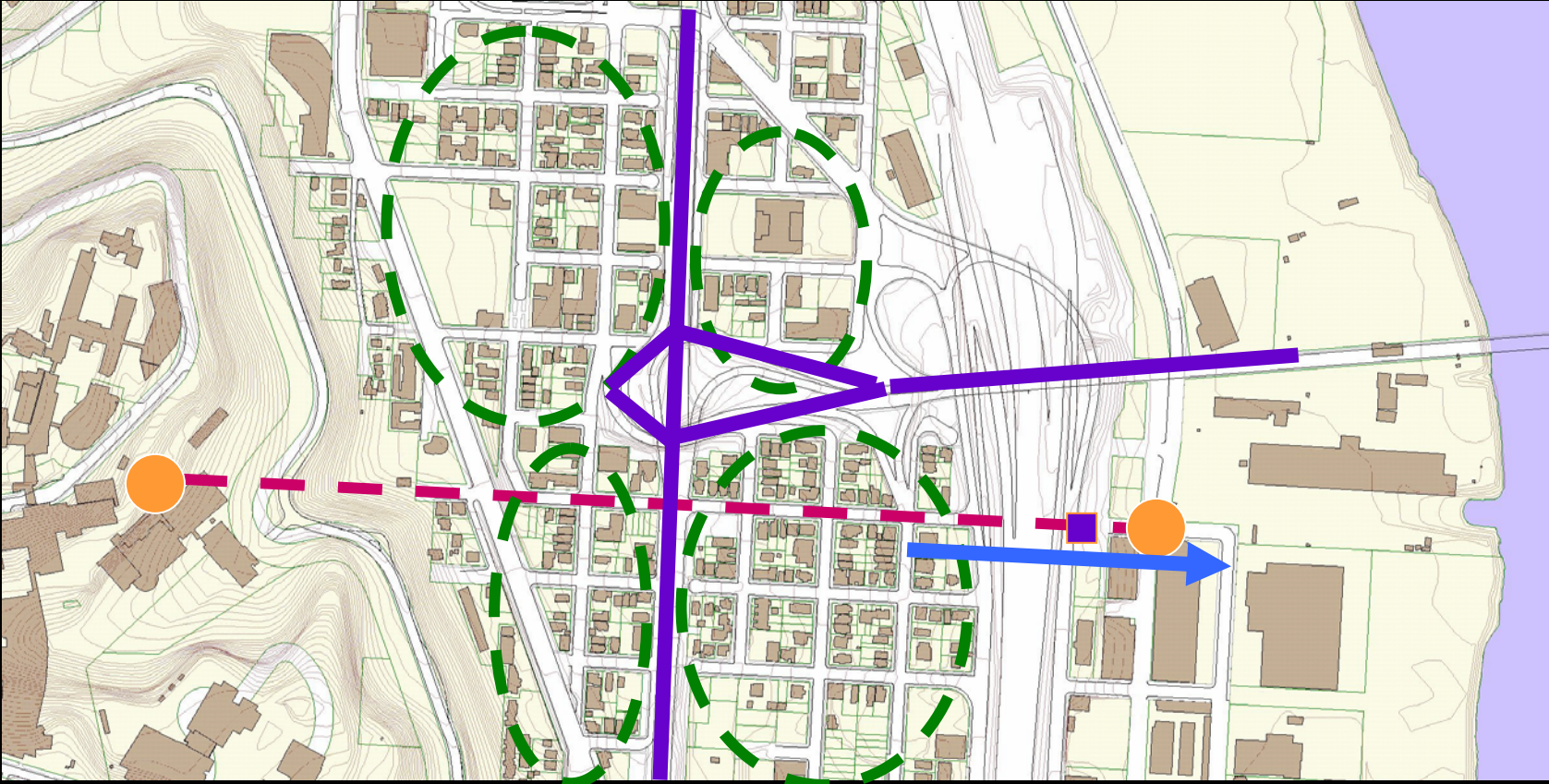
# Tram “Mitigation”

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# Neighborhood Improvements

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# AERIAL TRAM CONCEPT MAP

## Regional Recommendations

Marquam Hill Area

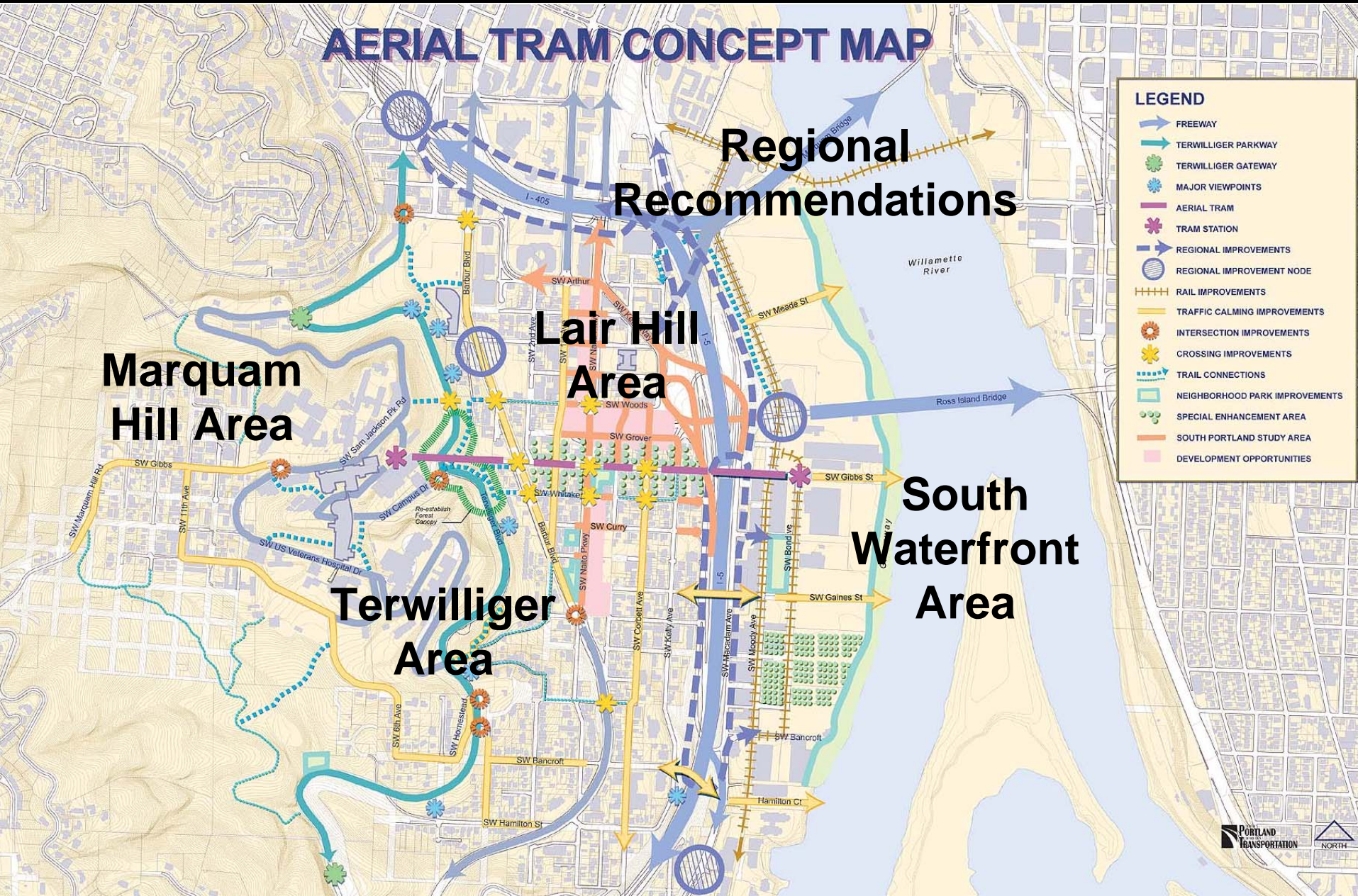
Lair Hill Area

Terwilliger Area

South Waterfront Area

**LEGEND**

- FREEWAY
- TERWILLIGER PARKWAY
- TERWILLIGER GATEWAY
- MAJOR VIEWPOINTS
- AERIAL TRAM
- TRAM STATION
- REGIONAL IMPROVEMENTS
- REGIONAL IMPROVEMENT NODE
- RAIL IMPROVEMENTS
- TRAFFIC CALMING IMPROVEMENTS
- INTERSECTION IMPROVEMENTS
- CROSSING IMPROVEMENTS
- TRAIL CONNECTIONS
- NEIGHBORHOOD PARK IMPROVEMENTS
- SPECIAL ENHANCEMENT AREA
- SOUTH PORTLAND STUDY AREA
- DEVELOPMENT OPPORTUNITIES



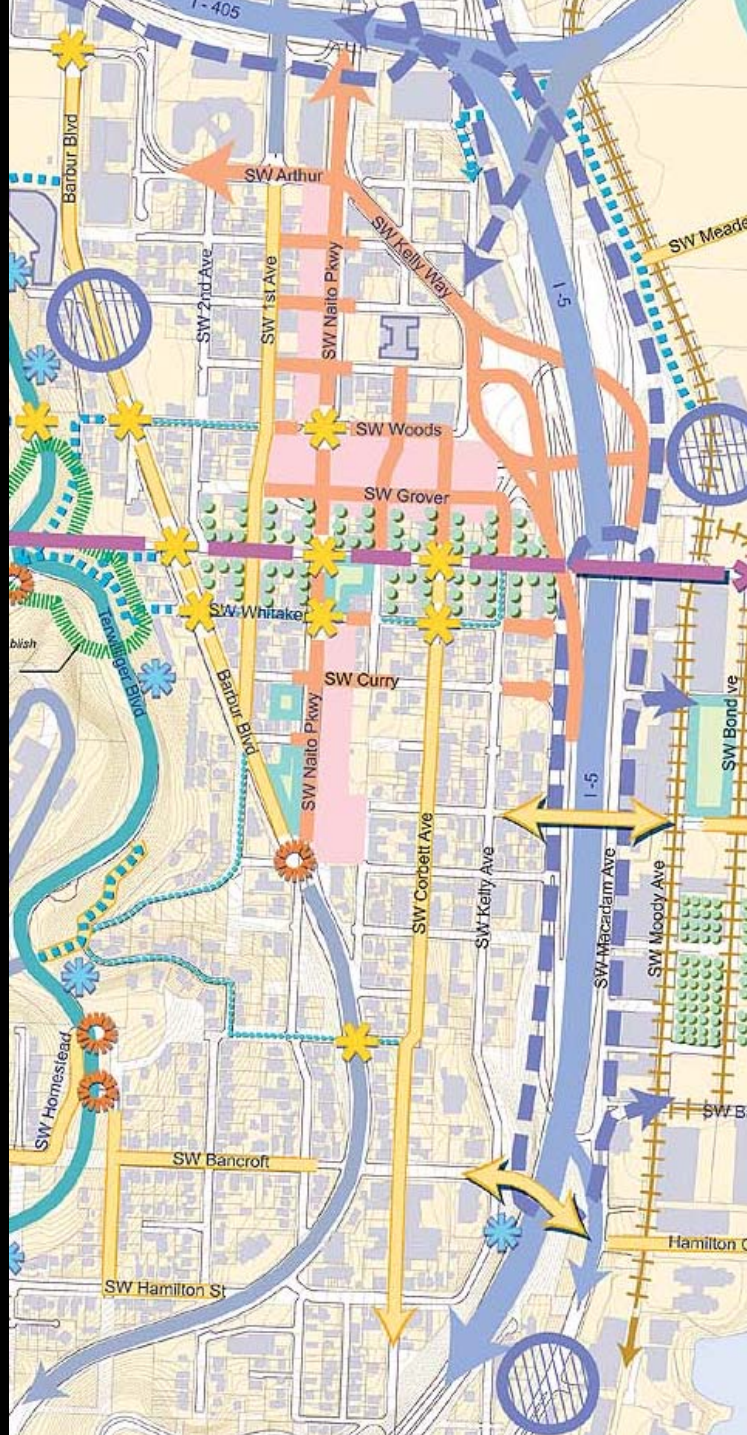


# South Portland Circulation Study

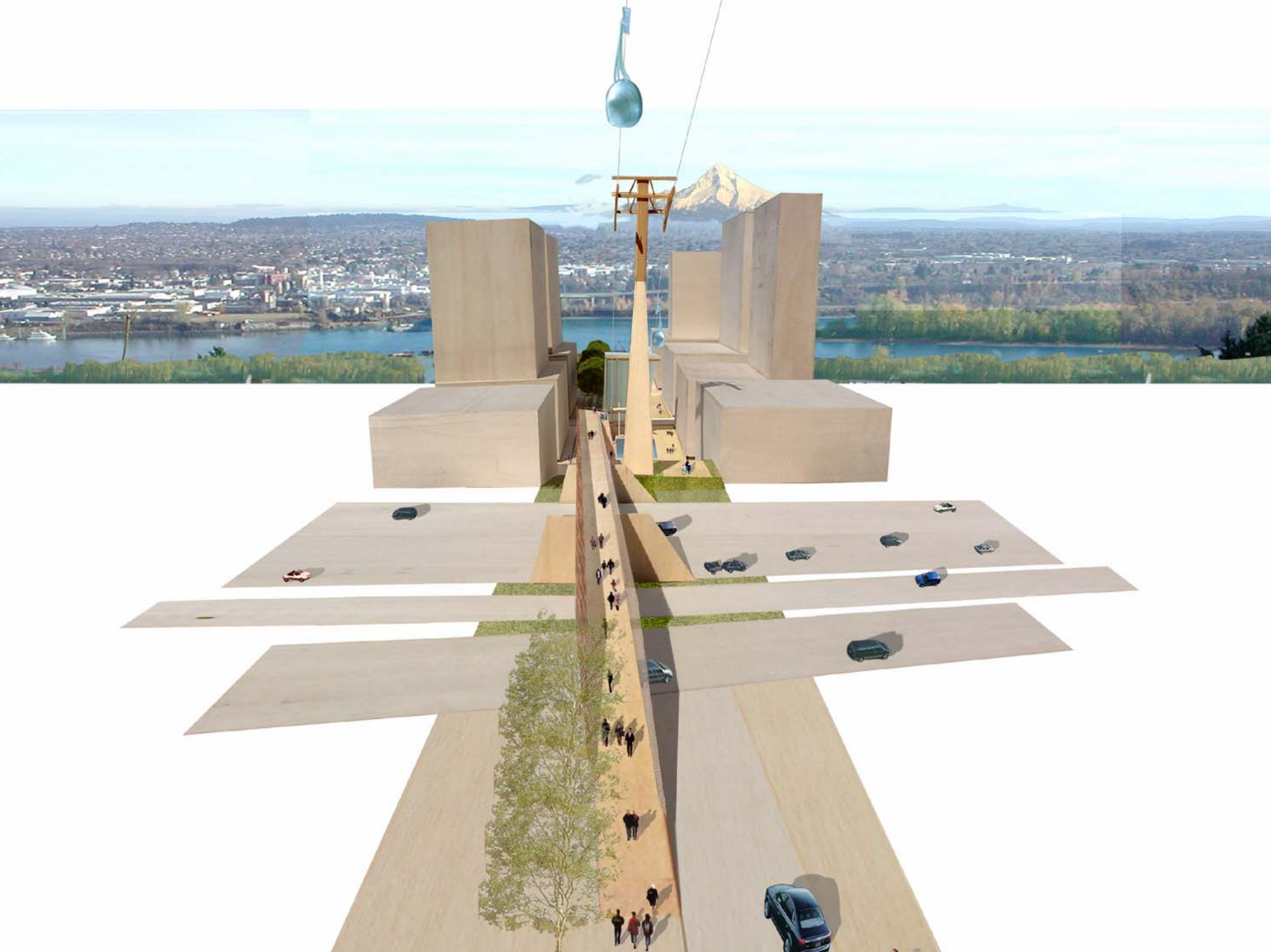
Gibbs Street  
Improvements

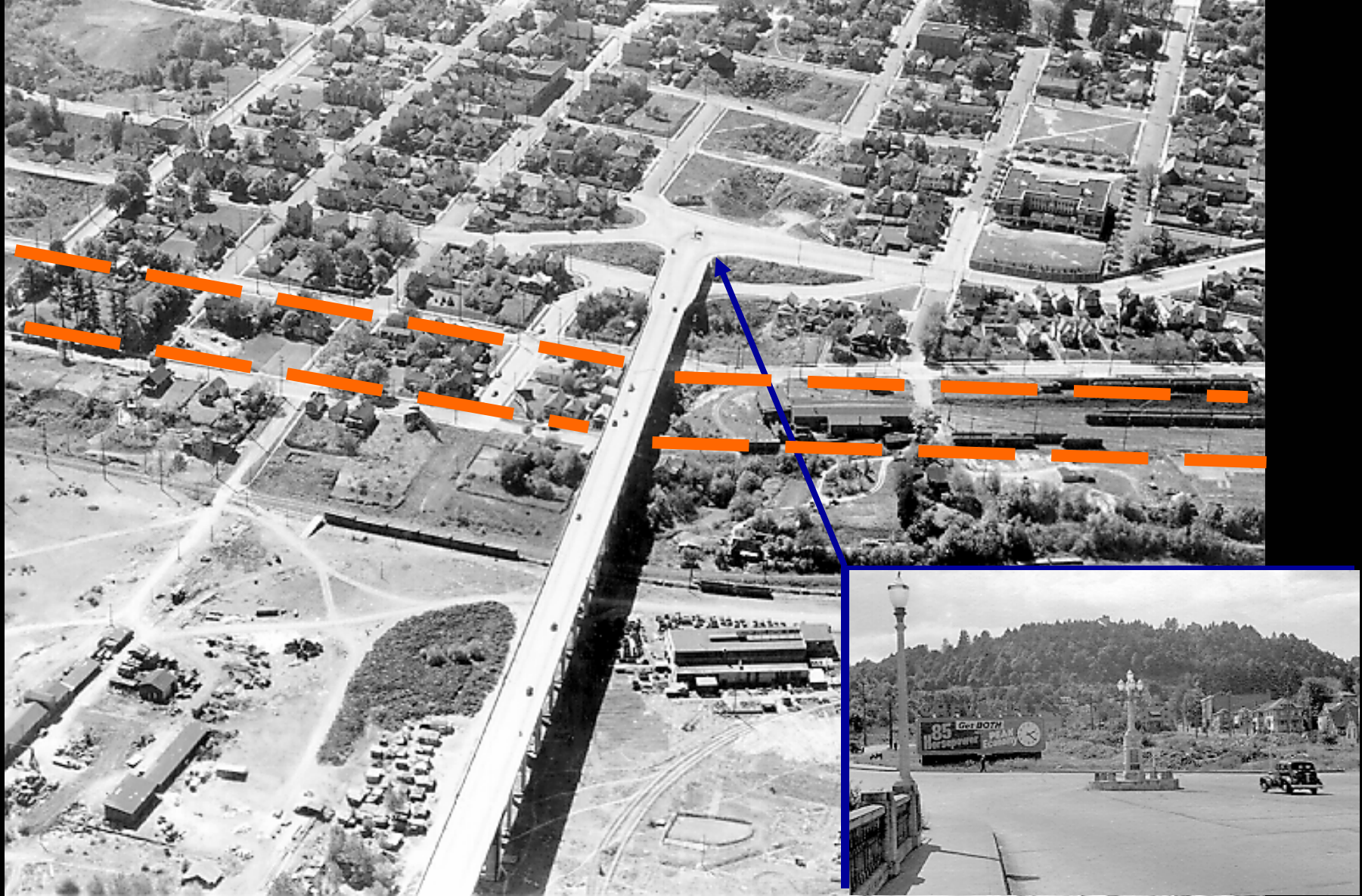
Pedestrian  
Connections

Traffic Calming  
and Mitigation



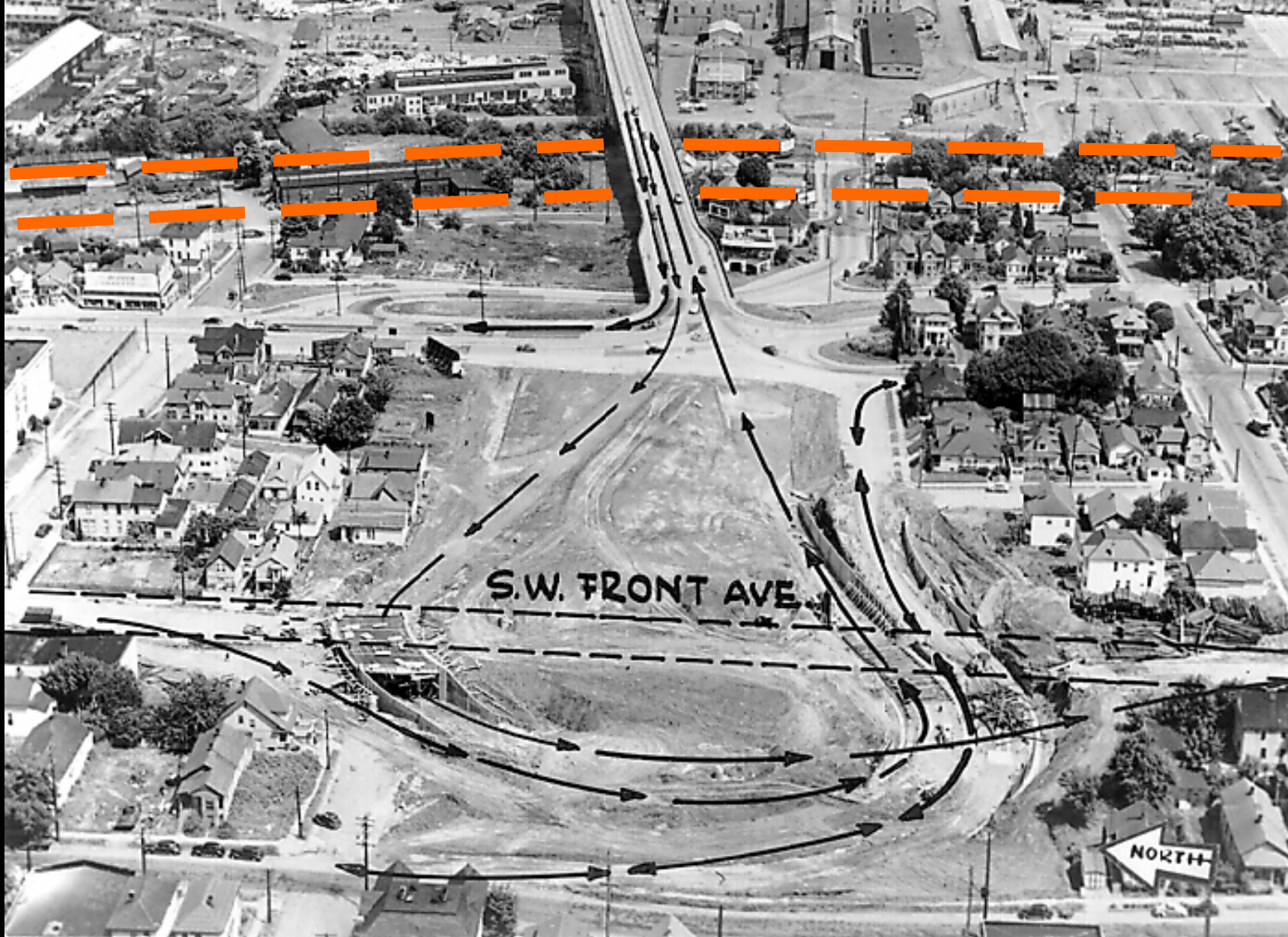
# Lair Hill Area





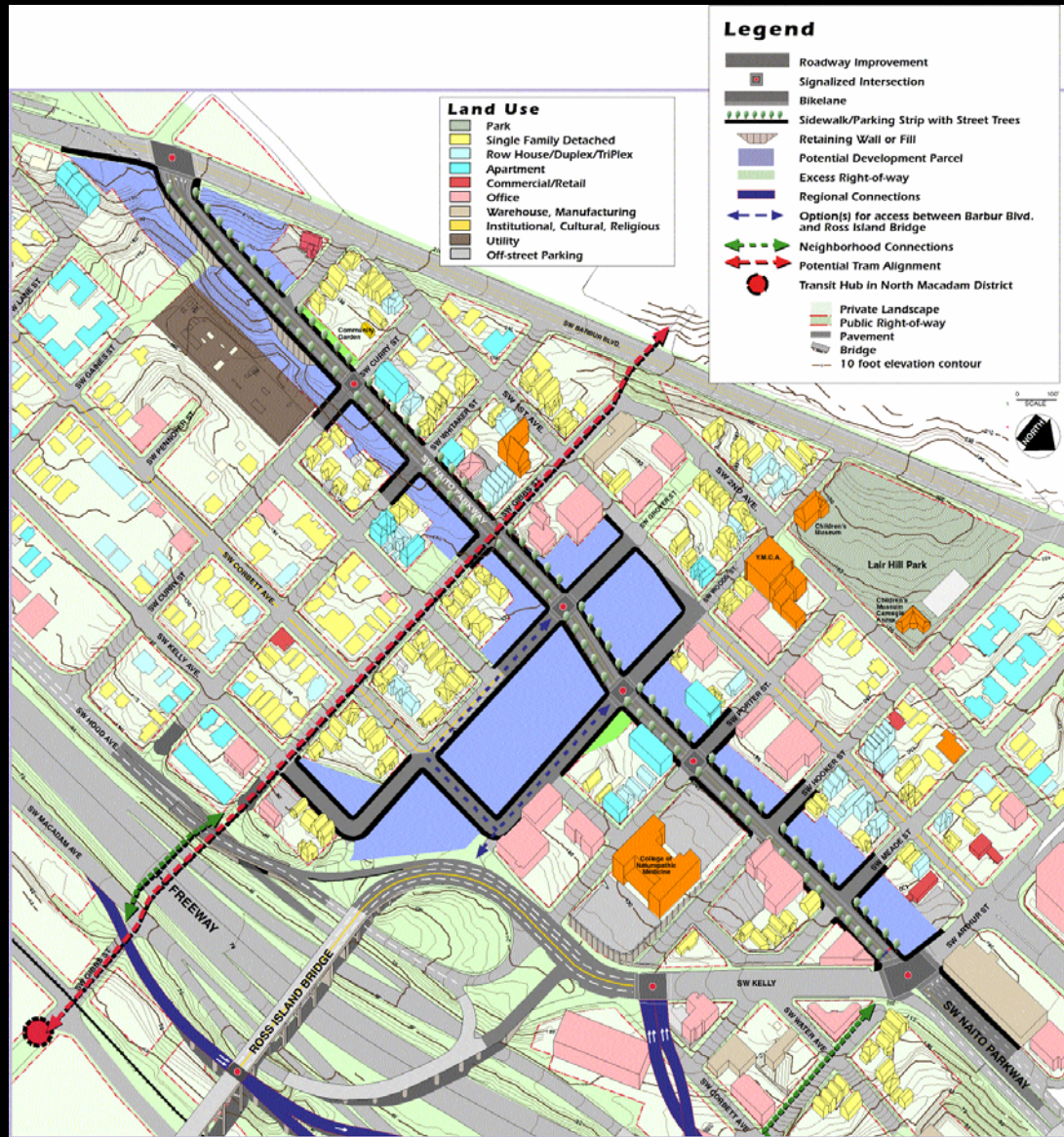
West end of the Ross Island Bridge, early 1930's.

Oregon Historical Society

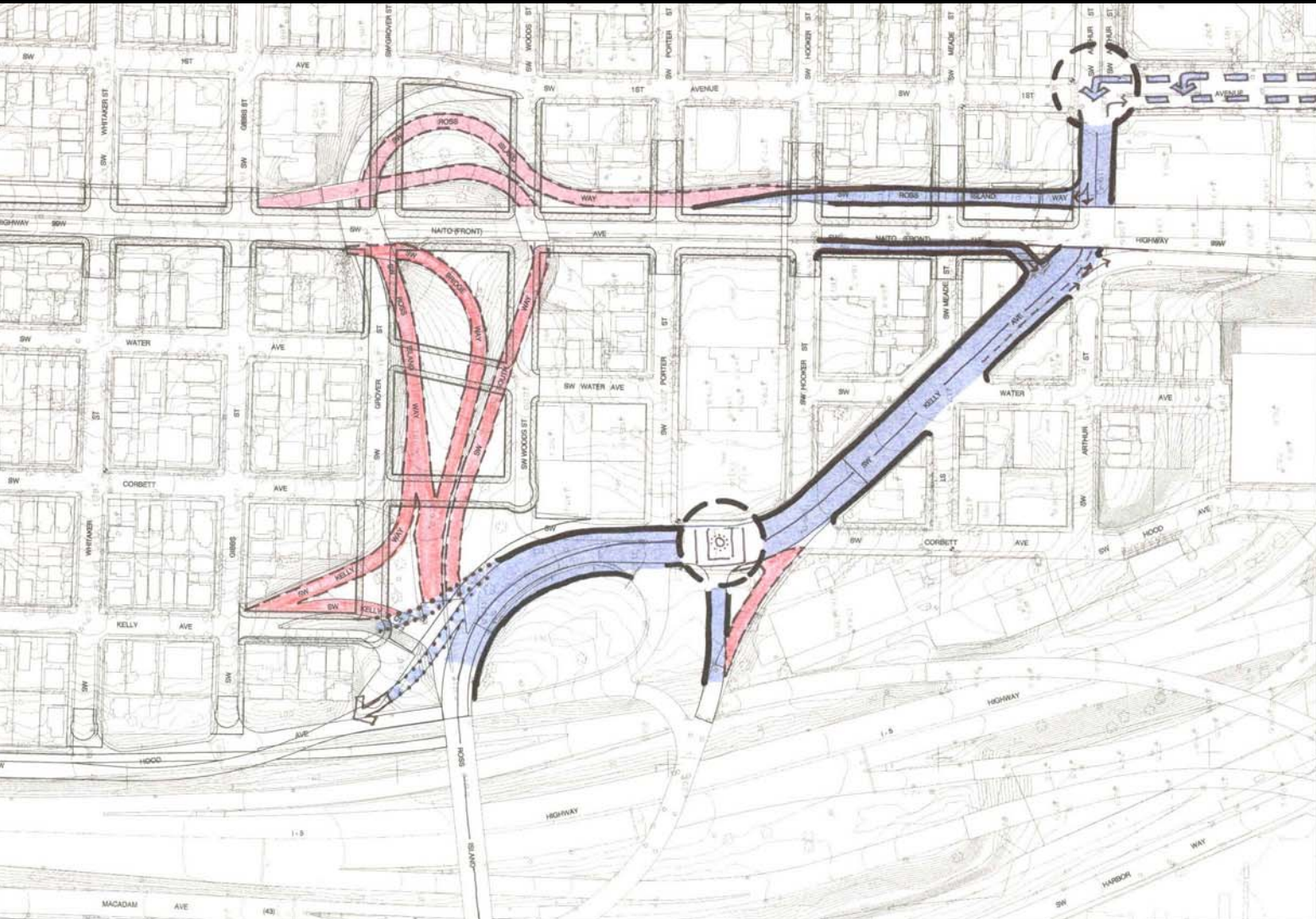


Ross Island Bridge ramps under construction, 1947.

# South Portland Circulation Study



# South Portland Circulation Study



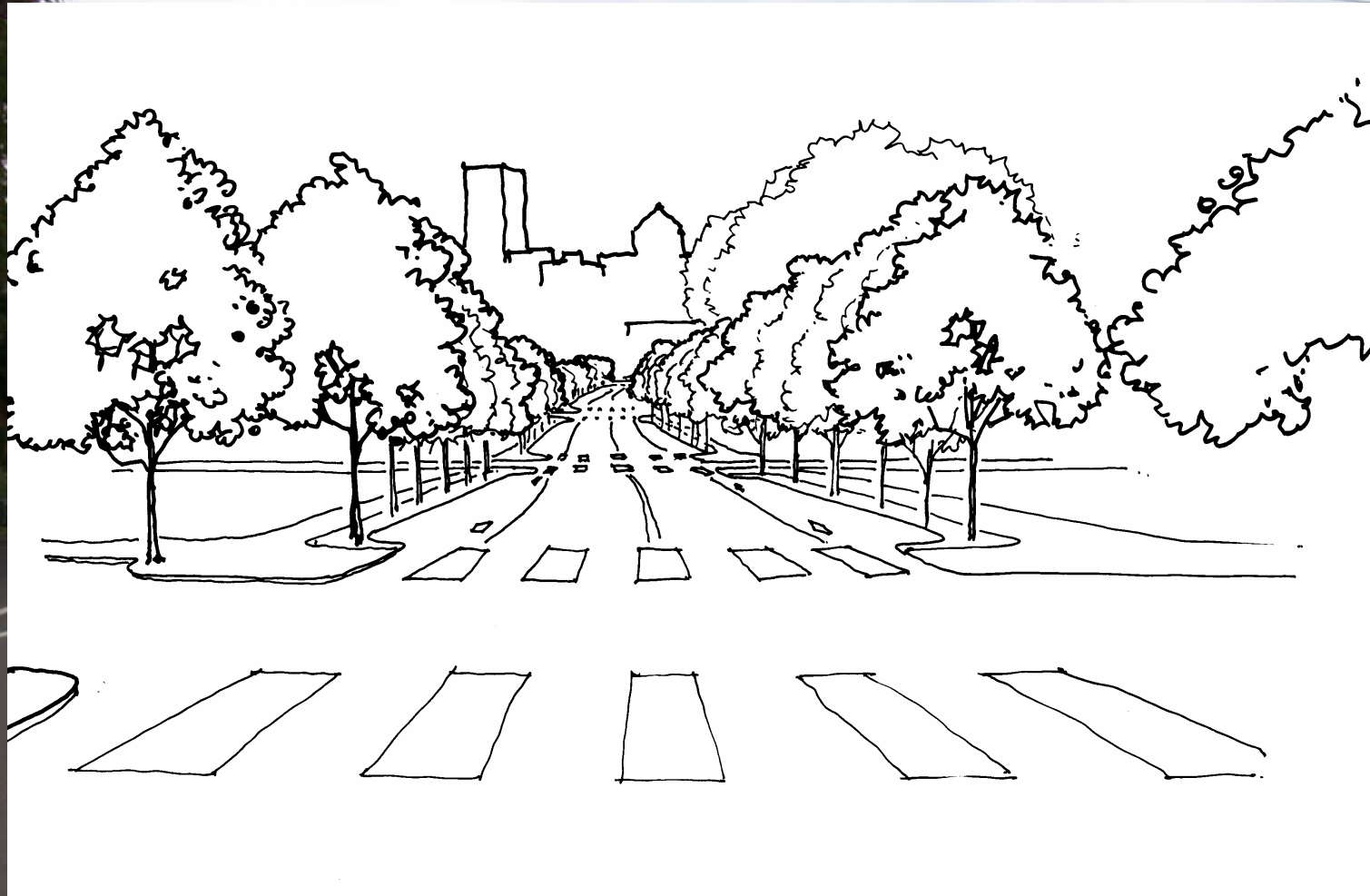
## SOUTH PORTLAND CIRCULATION STUDY

PRELIMINARY PLAN - BASE MAP  
S.W. NAITO PARKWAY

LOCATED IN THE  
W 1/2 OF SECTION 10, T1S, R1E W.M.

CITY OF PORTLAND  
MULTNOMAH COUNTY, OREGON  
June 2003





# Neighborhood Projects

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## Implementation Plan

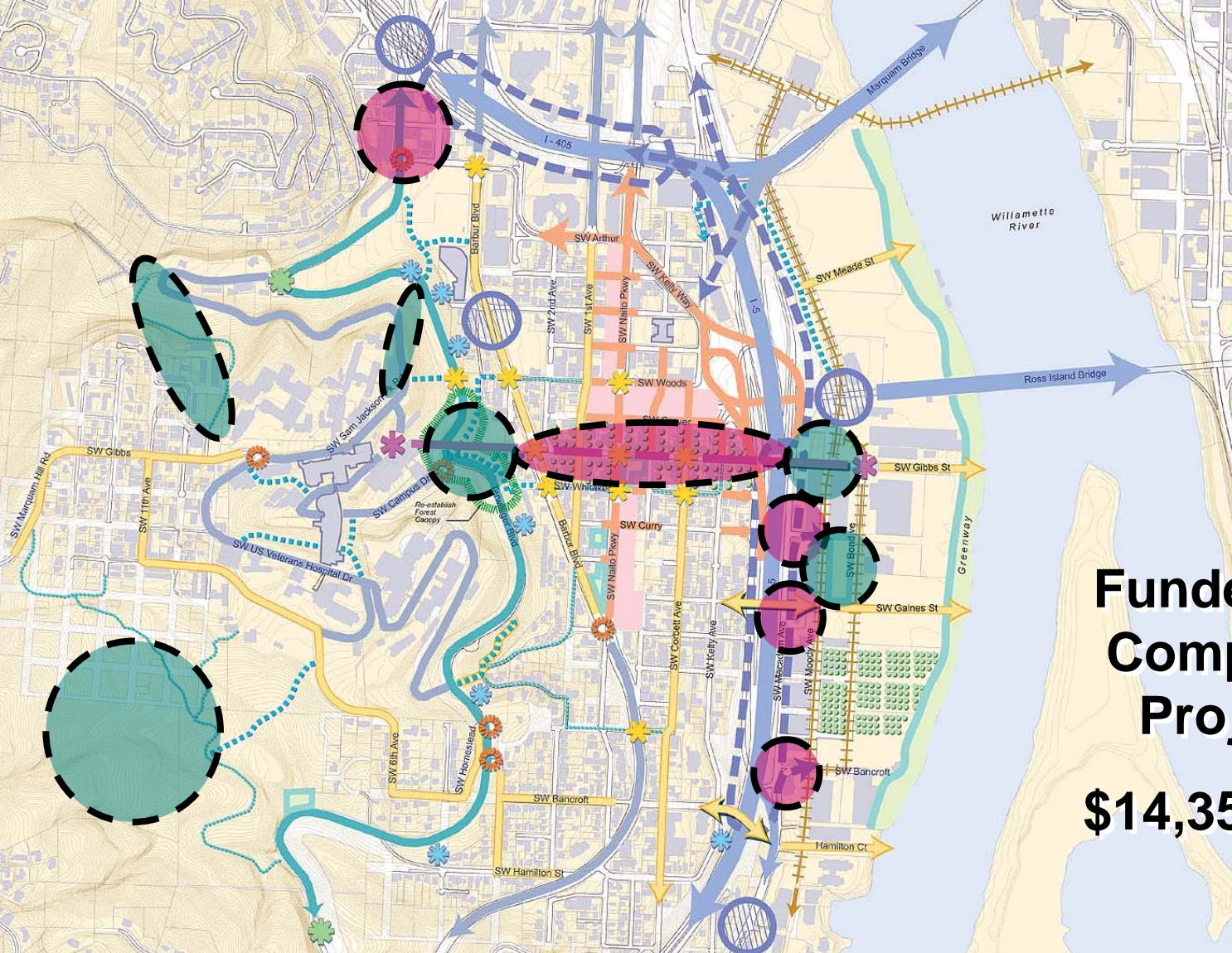
- Three Tiers of Priority - Endorsed unanimously by CAC, accepted by Council June, 2004
- Opportunistic Approach - Not a numbered list
- Initial Focus - Tier One Projects - \$40,000,000
- Within Tier One - CAC desired an initial emphasis on Gibbs Street area
- Total Project List value: \$150,000,000



# AERIAL TRAM CONCEPT MAP

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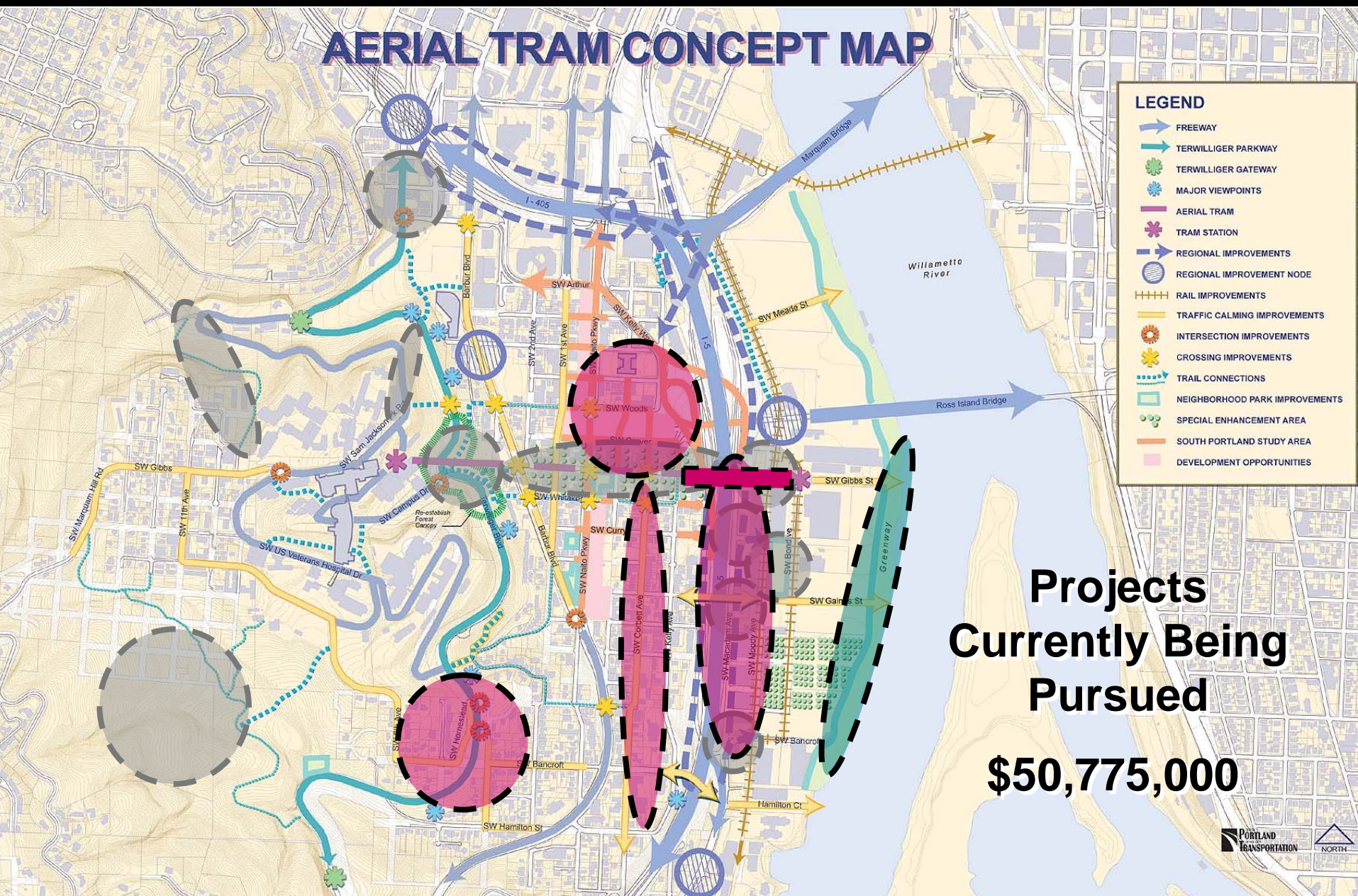


**Funded and Completed Projects**  
**\$14,350,000**

# AERIAL TRAM CONCEPT MAP

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**Projects  
Currently Being  
Pursued**

**\$50,775,000**

# Gibbs Street Improvements



# **Gibbs Street Voluntary Property Buy Out Program**

## **Portland City Council Direction - Resolution #36224**

- Fair market value,
- One-time, limited term
- Based on an independent professional appraisal
- Owner occupied, residentially zoned properties,
- Along the Gibbs Street alignment

## **Program Goal**

- Enable eligible property owners to obtain a fair price for their property - potentially exceed owners' expectations
- Market effects of tram will not be considered by independent appraiser.
- Voluntary Program - not subject to Eminent Domain statutes
- Match sellers to private buyers, if possible.

# Gibbs Street Voluntary Property Buy Out Program

Five basic steps:

(1) Determine interest.

(2) Inspect and appraise participating properties.

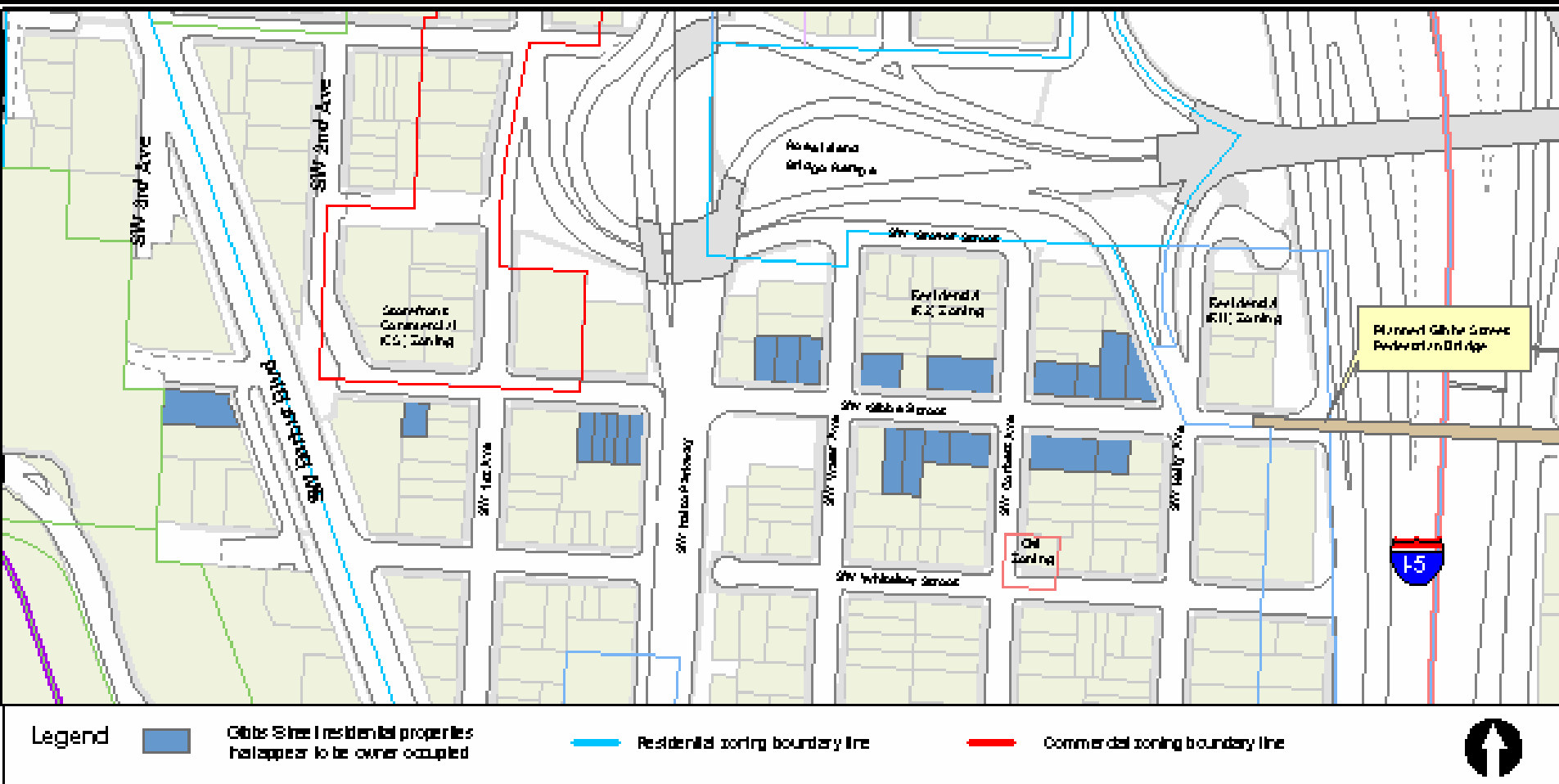
(3) Make fair offer and, if accepted, enter into a binding purchase and sale agreement.

(4) Facilitate the sale of properties to private buyers (broker) or through sealed bid auction.

(5) If properties are not sold to a private buyer, then the city will purchase the property and resell it at a later date.

# Gibbs Street Voluntary Property Buy Out Program

## Eligible Properties (22)



# Gibbs Street Voluntary Property Buy Out Program

## Program Cost

Costs Vary - Dependent on Number of Properties

- Administrative Cost of \$5,000 Per Home
- Cost Risk of 10% of Assessed Value - \$30,000 per home
  - 5 Houses - Potential Cost - \$25,000 - \$175,000
  - 10 Houses - Potential Cost - \$50,000 - \$350,000
  - 22 Houses - Potential Cost - \$110,000 - \$770,000

# Gibbs Street Voluntary Property Buy Out Program

## Direction Needed

### Scope of the Project

- Physical Boundaries - Gibbs Street or Beyond?
- Timing
  - One Time or Multiple Times?
  - After Letting of Tram Contracts? or
  - After Construction of Tram?
- Funding
  - PDOT resources will be used to cover costs

Staff Recommendation - Maintain Previous Council Direction



# **Portland Aerial Tram**

## **City Council Decision Package**

- **Approve Contract with Doppelmayr-CTEC - Tram Equipment**
  - **Approve Contract with Kiewit Pacific Co. - CM/GC**
  - **Approve Contract Amendment with PATI - Project Design**
  - **Approve Neighborhood Improvements Resolution and Direct Implementation**
- 

# Portland Aerial Tram

## Next Steps

### AERIAL TRAM

- **Execute Contracts - by May 12th**
- **Order tram equipment, plate steel**
- **Solicit early bid packages**
- **Begin Construction early June**
- **Project Complete, open for use 9/30/06**
  
- **May 25 - Update Local Improvement District  
(formalize OHSU financing)**
- **Returning late summer with updated  
Operating Plan**

# Portland Aerial Tram

## Next Steps

### NEIGHBORHOOD IMPROVEMENTS

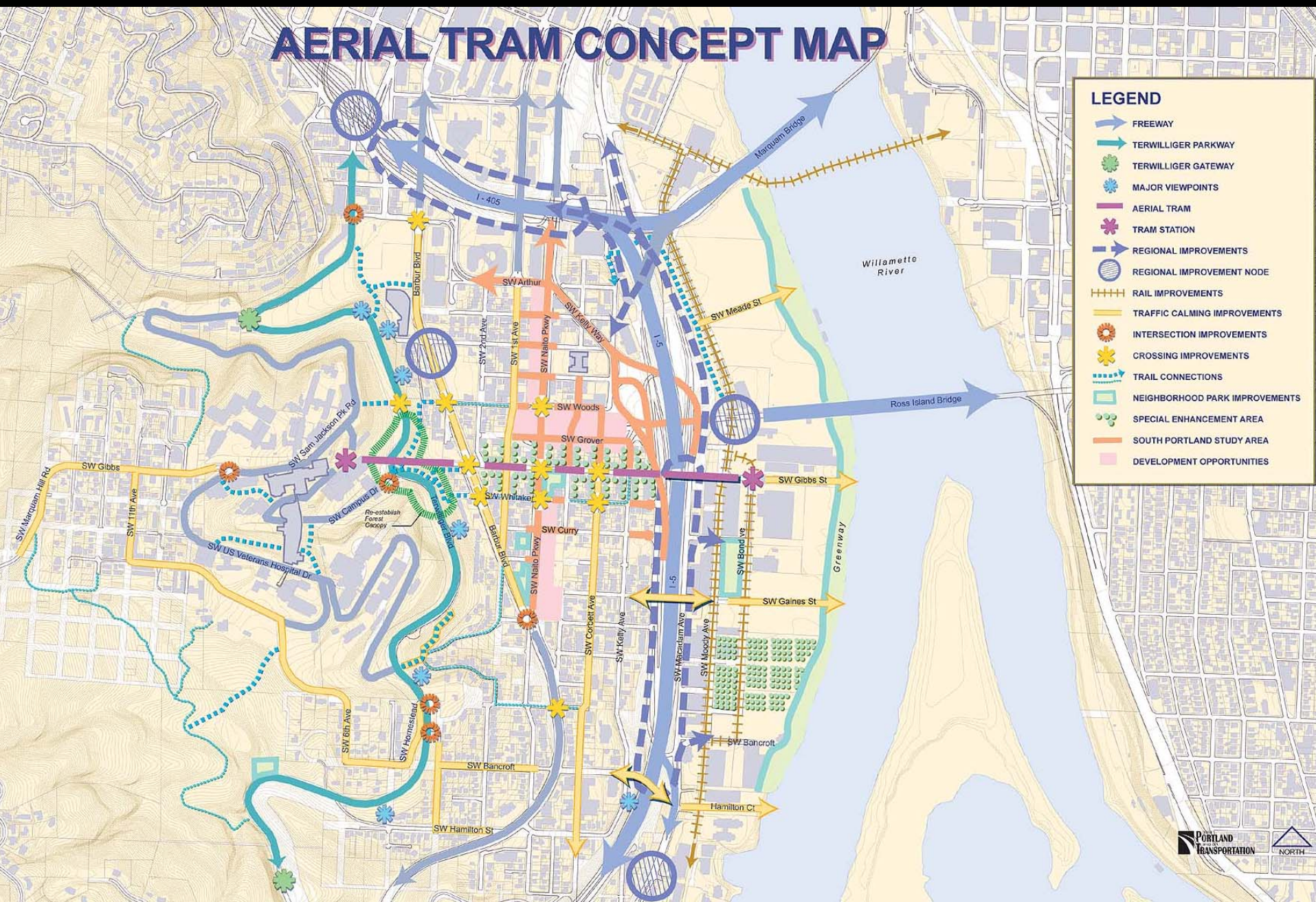
- Return within 60 days with contract for pedestrian bridge design, formalized Gibbs Buy-out Program
- Return within 90 days with Marquam Hill Traffic Calming Study IGA
- Work with Gibbs Street Residents to Implement Gibbs Street Improvements (Tram Project)
- Continue pursuit of federal earmarks - Pedestrian Bridge, South Portland Circulation Plan, South Waterfront Access
- Work with CTLH on use of Corbett Traffic Calming funds



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Portland Office of Transportation  
Portland Aerial Transportation, Inc.

April 28, 2005







