Corridor Planning:
Seattle’s First Hill Streetcar Project

Rail~Volution
October 22, 2013
REGIONAL CONTEXT
The Sound Transit district
Link light rail expansion

- 16 miles of light rail with 13 stations currently in service
- First Hill Streetcar – 2014
- University Link – 2016 (Capitol Hill & UW)
- South Link – 2016 (Angle Lake)
- North Link – 2021 (U-District, Roosevelt, Northgate)
- Lynnwood Link – 2023 (Shoreline, Mountlake Terrace, Lynnwood)
- East Link – 2023 (Seattle, Mercer Island, Bellevue, Redmond)
- New Operations and Maintenance Satellite Facility
1996 Sound Move Plan:
First Hill Link Light Rail Tunnel Station
2008 Sound Move Plan:
First Hill Link Connector
CENTER CITY CONTEXT
First Hill Streetcar Corridor Planning-Alternatives
Seattle Streetcar
Center City Network
NEIGHBORHOOD CONTEXT
Corridor Planning—Key Choices for First Hill Streetcar

Neighborhood Connections
  Yesler Terrace Station
  Little Saigon Station
  Pioneer Square Station

Complete Streets Design
  Broadway Cycle Track

Sustainability
  Maintenance Facility @ City Service Center
Lessons Learned—South Lake Union Line
Key Features

2’ Separation from traffic lane
Key Features

Streetcar platform with railing
Key Features

Pedestrian crosswalks
Key Features

Bicycle signals
Key Features

- Bicycle crossing & turn box
Key Features

Driveway crossing
Yesler Terrace
Yesler Terrace
Yesler Terrace - Amenities

- Community Center
- Neighborhood Park
- Streetcar Stop
- Pedestrian Pathway
- Steam Plant
- 10th Avenue Hillclimb
- E. Fir St.
- E. Spruce St.
- E. Yesler Way
- S. Main St.
- S. Jackson St.
- 12th Ave.
- 14th Ave.
Yesler Terrace: Illustrative Site Plan

City of Seattle
Planning and Development
Chinatown/International District
Pioneer Square
Sustainability

• Corridor Opportunities
• Facility Opportunities
Operations & Maintenance Facility

first hill streetcar - charles street concept
8th ave perspective
Operations & Maintenance Facility - Site
### Sustainability Features STUDIED

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<th>ERV</th>
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<tr>
<td>VRF</td>
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Sustainability Features IMPLEMENTED

ERV
VRF
Radiant Flooring

High Efficiency Natural Gas Boilers (DHW + hydronic heating)
Bike racks & showers
Natural Ventilation
Photovoltaic Panels (solar)
Green Roof
Daylighting – skylights + translucent wall, clerestory

Pervious Paving
Bioretention – stormwater mitigation
LED lighting
Lighting occupancy/daylighting sensors

FSC Wood
Electric vehicle charging
Low VOC materials
Low-flow plumbing fixtures
No permanent irrigation system
1. Full vegetated (Green Roof) to maximize stormwater retention and mitigate heat island effect
2. Pervious concrete pavers to maximize stormwater infiltration and reduce heat island effect
4. Outdoor patio
5. Renewable energy 6.3 KW photovoltaic array
6. Radiant in-floor heating
7. High efficiency LED and fluorescent interior and exterior lighting with lighting timers and occupancy / daylighting sensors
8. Abundant daylighting (north clerestory, east & west translucent wall system and skylights)
9. Passive ventilation of the maintenance shop utilizing stack ventilation
10. Operable windows and skylights provide natural ventilation and cooling
11. No irrigation system installed – i.e. no potable water use for irrigation (because of native and adaptive species used)
12. Third party certified lumber (FSC – Forest Stewardship Council), ensuring responsible management of forests
Option 1:
Groundsource + 4 Pipe Fan Coils + Radiant Flooring

Option 2:
Groundsource + Water-to-Air Heatpumps + Radiant Flooring

Option 3:
VRF + Radiant Flooring
LEED Silver, maybe Gold
Seattle rocks
Seattle rocks