Portland-Milwaukie Light Rail Project
Pedestrian and Bicycle Integration
CAC – September 17, 2009
Pedestrian and Bicycle Integration

Integrating the bridge into existing and future networks
Pedestrian and Bicycle Integration

Focus Areas
Pedestrian and Bicycle Integration

Focus Areas- Planning Recommendations
Pedestrian and Bicycle Integration

Focus Areas
Pedestrian and Bicycle Integration
West Segment (Landside)
South Waterfront Station--LPA
Pedestrian and Bicycle Integration

South Waterfront Station

2. center bus/streetcar
one-way cycle tracks
West Segment (Landside)

Pedestrian and Bicycle Integration

South Waterfront Station

Alternative 2 – Center Bus/Streetcar – one-way cycle tracks
Pedestrian and Bicycle Integration

South Waterfront Station

2. Center bus/streetcar one-way cycle tracks

Porter Avenue at Moody Transit Station
South Waterfront (SWF) Station

Alternative 2
Center Bus/Streetcar – one-way cycle tracks

Pros:
- Transit separate from other sidewalk activities
- Transit (bus and LRT) consolidated in one platform zone
- Least ROW of the options developed
- Fewer mode conflicts
- Entries to transit areas defined; opportunity to discourage mid-block crossings

Cons:
- More ROW (all options require more than previously assumed)
- Additional cost (all options cost more than previously assumed)
Pedestrian and Bicycle Integration

SWF Station—Center Bus Recommended
Pedestrian and Bicycle Integration

Focus Areas
Pedestrian and Bicycle Integration  
West Segment (Landside)

South Waterfront Greenway - Clearance
Recommendation - 14’ Minimum (will aspire to 15’ over trails)

greenway west

Constraint - ADA compliant slope
Pedestrian and Bicycle Integration

South Waterfront Greenway Planning Recommendations
South Waterfront
Connect at Bond - **Recommended**

- Less demand for mid-block crossing
- Slightly less greenway paved
- Better transitions
- +/- More urban

Legend:
- Mixed Non-motorized traffic
- Pedestrians Only
- Bicycles Only
- Stair
Pedestrian and Bicycle Integration

South Waterfront – Planning for Future Connections

Recommendations

• “Single Point” bicycle interchange in area under bridge

• Connections to bridge nearer to Bond due to grades and slopes

Note

• These connections are not in PMLR budget
Pedestrian and Bicycle Integration

Focus Areas
Pedestrian and Bicycle Integration

East Greenway

Clearance Recommendation – 12’-6” Min at Grade Beam

Constraint- Match Grade at Caruthers

Constraint- ADA compliant sloped walkway
Pedestrian and Bicycle Integration

East Greenway

Clearance Recommendation – 12’-6” Min at Grade Beam

August 21, 2009
Pedestrian and Bicycle Integration
Focus Areas- Planning Recommendations
Pedestrian and Bicycle Integration

Focus Areas
Pedestrian and Bicycle Integration  
OMSI/Opera Station-LPA 

West Segment (Landside)
Pedestrian and Bicycle Integration

OMSI/Opera Station

Portland-Milwaukie Light Rail Project - East End Channelization
Pedestrian and Bicycle Integration Study
August 19, 2009
Pedestrian and Bicycle Integration

OMSI/Opera Station

2 center bus
one-way cycle tracks

West Segment (Landside)
Pedestrian and Bicycle Integration

OMSI/Opera Station

West Segment (Landside)

Issue: Streetcar

Issue: Bus Queue

Issue: OPRR At-grade Xing
Pedestrian and Bicycle Integration

OMSI/Opera Station

Alternative 2
Center Bus – one-way cycle tracks

Pros:
• Transit separate from other sidewalk activities
• Transit (bus and LRT) consolidated in one platform zone
• Least ROW of the options developed
• Entries to transit areas defined; opportunity to discourage mid-block crossings

Cons:
• More ROW (all options require more than previously assumed)
• Additional cost (all options cost more than previously assumed)
• Wider track centers may not work with OPRR at-grade crossing
• Wider track centers may impact current or future streetcar
• Buses have to cross streetcar separately from LRT in one location
Pedestrian and Bicycle Integration

OMSI/Opera – Center Bus Recommended

West Segment (Landside)
Pedestrian and Bicycle Integration

East Greenway and OMSI Station
Planning Recommendations
OMSI/Opera Platform
Combined platforms – Recommended

- Easier to understand directional platforms
- Better bike/ped segregation at station
- Narrower ROW

Mixed Non-motorized traffic
- Pedestrians Only
- Bicycles Only

On-Street Bike Facility
Alternative Connection Stair

Pedestrian and Bicycle Integration

East Greenway and OMSI/Opera Station Area—Planning for Future Connections

**Recommendations**

- Connection thru station to new Water Avenue
- Connections to Greenway north of alignment
- Stair connection from bridge to Greenway

**Note**

- These connections are not in PMLR budget
Next Steps

- Landside/bridge/greenway integration, September 18, 1-3 p.m.
- Bridge path programming, September 24, 3:30-5:30 p.m.
- Advance Design Recommendations in Preliminary Engineering
- Advance Planning Recommendations as part of Conceptual Design Report
East Segment – Clinton Connection

West Segment (Landside)

NOTES

1. OUTBOUND (O) BUSES WILL LEAVE THE SHARED TRANSITWAY AT OR NEAR SE 7TH, 8TH, 9TH, OR 11TH AVENUES TO ACCESS SE POWELL BOULEVARD. FINAL ROUTING TO BE DETERMINED.

2. INBOUND (I) BUSES WILL BE ROUTED TO THE SHARED TRANSITWAY FROM SE POWELL BOULEVARD VIA SE 9TH AVENUE AND SE DIVISION PLACE.
East Segment – Clinton Connection
East Segment – Kellogg Creek Crossing

West Segment (Landside)