Preliminary Engineering Issues List
January 16, 2009

During the adoption of the Locally Preferred Alternative, a number of policy and design issues were identified by local jurisdictions. The list below highlights some of the key issues that need either policy and/or public involvement input for decisions in order to keep the Project on schedule and within budget. This is not a complete, nor a final list of all design issues, but is meant to be a tool to help the Project make timely decisions.

**West Issues**

W-1 Determine if a multi-use path should be added on the structure over SW Harbor Drive
W-2 Finalize the Lincoln/Harbor station location
W-3 Confirm scope of Project investment in streetcar connections (east and west)
W-4 Define SW Moody Street modifications and street elevations
W-5 Confirm the vertical clearance for the Willamette River bridge
W-6 Determine if width should be added to the two multi-use paths on Willamette River Bridge
W-7 Define the storm water treatment on Willamette Bridge (water quality planters)
W-8 Confirm if clearance for oversize freight loads is needed at SE Water Avenue
W-9 Determine if a multi-use path should be provided between SE Clinton to OMSI
W-10 Confirm the Project should assume SE Water Avenue is relocated by others.

**Combined Issues**

C-1 Define project wide stormwater approach
C-2 Define project wide urban design approach to public elements

**East Issues**

E Confirm the location of the SE Clinton Street Station
E-1 Define the approach to supplemental safety measure for SE 7th, 9th and 11th/12th
E-2 Confirm whether to expand the SE Powell overpass – add 2nd track, bike lanes sidewalk

**E-3 Confirm location for SE 17th Avenue stations**

E-4 Investigate alternative to SE 17th Avenue bike lanes (SE 16th Avenue)
E-5 Confirm SE 17th Avenue streetscape and track treatment
E-6 Confirm strategy for TriMet right-of-way (ROW) remnant parcels.
E-7 Define triggers for the implementation of the SE Harold station
E-8 Determine if a multi use path should be added between SE Harold and SE Tacoma/Springwater trail
E-9 Confirm if a bus stop could be located on the Bybee Bridge
E-10 Confirm whether crossing at SE McLoughlin Blvd. should be elevated or at-grade

**E-11 Confirm whether SE Park Avenue Park & Ride should be a surface parking and/or structured**

E-12 Define environmental mitigation
E 12.1. Willamette River
E 12.2. Crystal Springs
E 12.3. Johnson Creek
E 12.4. Spring and Crystal creeks
E 12.5. Kellogg Lake
E-13 Resolve Union Pacific design issues
E-14 Define Lake Road Station design treatments
E-15 Define Milwaukie bus circulation and layover facilities
E-16 Confirm size of Tacoma park and ride and associated traffic mitigation
Sample outline for a one-page plan

1. **Describe the issue and policy question**

2. **Identify information needed to make informed decisions**
   1.1 Cost implications
   2.1 Project budget implications
   3.1 Design issues/tradeoffs
   4.1 Schedule impacts
   5.1 FEIS implications
   6.1 Public involvement

3. **Define communication/approval process for external and internal partners**
   1.1 Local jurisdictions
   2.1 Other agencies
   3.1 Public involvement

4. **Determine level at which the decision needs to be made**
   1.1 Design level
   2.1 TAC, PTL, PMG, Steering Committee
   3.1 Project Cost Control Board review

5. **Determine priority decision**
   1.1 Timeliness – Early, middle or late in PE process
   2.1 Resources needed – When can the resources and materials be developed necessary for the decision.

6. **Sort issues to determine which are priority and set calendar for TAC, PTL, PMG, CAC and Steering Committee**

7. **Develop one pager for each decision** – develop project calendar based on decisions.

8. **Define responsible staff person**
E-3: 17th Avenue – Confirm Station Locations

1. **Issue and policy question:** The LPA design includes two stations on 17th Avenue (Rhine and Holgate). The City of Portland requested consideration of optimization of station locations including Rhine and Holgate.

   Is there a viable one station alternative along 17th Avenue that meets neighborhood ridership and future redevelopment potential? Is there a benefit of such an alternative in reduced impacts and costs?

2. **Information necessary to make an informed decision**
   2.1. Alignment, section alternatives
   2.2. Ridership, Cost Benefit Analysis (TSUB) impact assessment
   2.3. TriMet master plan update at Center Street facility

3. **Define external and internal partners who need to comment**
   3.1. City of Portland
      3.1.1. PDOT
      3.1.2. Planning
   3.2. TriMet
      3.2.1. Facilities
      3.2.2. Operations
   3.3. Metro
   3.4. Brooklyn Neighborhood Association
   3.5. 17th Avenue Properties

4. **Determine level at which the decision needs to be made**
   4.1. Steering Committee

5. **Priority**
   5.1. **High priority** – incorporate in 15% design.
   5.2. Resources:
      5.2.1. TM, PDOT, Metro Staff

6. **Sort Issues for Priority and set calendar**
   6.1. SC/PMG: February 12th (PMG)
   6.2. CAC: January, February
   6.3. PTL: February 3rd
   6.4. TAC: January

7. **Staff Assignment - Schlupp**
E-11: Park Avenue Park & Ride

1. **Issue and policy question:** The project LPA conceptual design and cost estimate includes a 1000-space structured park-and-ride at Park Avenue. In the interest of funding the project to Park Avenue, in advance of other budget constraints, consideration of a mix of existing surface and new structure may be a net savings to the Project, while meeting Project goals.

   Traffic modeling and ridership projections established the park-and-ride sizing. A minimum 800-space park and ride at this location could be considered, but would necessitate additional spaces assigned to the Tacoma Park-and-Ride.

2. **Information necessary to make an informed decision**
   2.1. Park Avenue traffic analysis
   2.2. ODOT approach access analysis
   2.3. Right-of-way acquisition trade-offs
   2.4. Capital cost comparison
   2.5. Public process: Oak Lodge CC, Oak Grove CPO, Oregon City, Milwaukie.

3. **Define external and internal partners who need to comment**
   3.1. Elks Lodge
   3.2. Property Owners at LPA park-and-ride site
   3.3. Oak Lodge Community Council
   3.4. Clackamas County
      3.4.1. Trolley Trail
      3.4.2. Traffic
   3.5. ODOT
   3.6. Oak Lodge Sanitary District
   3.7. City of Milwaukie
   3.8. Oregon City
   3.9. TriMet Operations

4. **Determine level at which the decision needs to be made**
   4.1. Decision needs to be made by SC
   4.2. May affect LUFO or require CE for use of Elks site.

5. **Priority**
   5.1. High priority – incorporate in 15% design

6. **Sort Issues for Priority and set calendar**
   6.1 CAC: January/February/March
   6.2 SC: March TBD
   6.3 PMG: March 12th
   6.4 PTL: March 3rd
   6.5 TAC: February 19th

7 **Staff Assignment:** Robbins
Date: December 15, 2008
To: Project Management Group
From: Leah Robbins
Subject: Policy Recommendation - Clinton Station Location

As part of the process to adopt the Portland-Milwaukie Light Rail Project’s Locally Preferred Alternative (LPA), the City of Portland recommended that staff consider optimization of the Clinton Station location based on analysis of connectivity and redevelopment potential.

City of Portland staff from Planning, PDC, and Office of Transportation reviewed opportunities and constraints of the Clinton station and other alternate locations (NWNG site, 8th/Division, and Powell).

**Economic Development Potential**
The Clinton station location has the best opportunity for mixed-use development, including affordable housing and walk-in retail. It was unclear to staff that the NWNG site would offer more opportunity than the Clinton site. Current zoning at 8th/Division would not support redevelopment aspirations. A Powell location was considered for visibility, but site access is too great an obstacle.

**Station Access and Connectivity**
The Clinton station is well positioned for bus transfers from existing routes on Milwaukie Avenue and Powell Blvd. Pedestrian access and connection to neighborhoods north of the trackway will be crucial to success of the station. Positioning of the planned pedestrian and bicycle bridge closer to the station platform would improve the performance of the Clinton station.

**Recommendation**
Staff recommends proceeding with the Clinton station in its current location. Additionally, staff recommends siting the pedestrian bridge closer to the station, near SE 14th.

Further analysis of access and circulation throughout the Southern Triangle is recommended as part of PE.