Portland-Milwaukie Light Rail Project
Citizens Advisory Committee
Thursday, January 15, 2009
6 – 7:30 p.m.

PMLR CAC Members Present:

Rick Williams – CHAIR - Lloyd District Transportation Management Assoc.
Heather Andrews, Bicycle Transportation Alliance (BTA)
David Aschenbrenner, Hector Campbell Neighborhood
Lina Bensel, TriMet Committee on Accessible Transportation (CAT)
Ray Bryan, Historic Milwaukie Neighborhood
Valerie Chapman, Oak Grove
Debbie Cronk, South Waterfront Neighborhood
Barbara Dimick, Oak Grove
David Edwards, Oak Grove
Neil Hankerson, Dark Horse Comics
Frank Hemer, Milwaukie - Milwaukie Lumber
Reid Kells, Sellwood-Moreland Improvement League (SMILE) (Alternate)
Lance Lindahl, Portland - Brooklyn Neighborhood
Dan Packard, Eastmoreland Neighborhood
Susan Pearce, Hosford-Abernethy Neighborhood (HAND)
Valeria Ramirez, Portland Opera
Henry Schmidt, Oak Lodge Community Council
Lynn Welsh, Island Station Neighborhood
Dee Walsh, Central Eastside Industrial Council (CEIC)
Dan Zalkow, Portland State University (PSU)

PMLR CAC Members Absent:

Michael Gephardt, Portland - Sellwood-Moreland Neighborhood (SMILE)
Michole Jensen, Ardenwald-Johnson Creek Neighborhood
Ken Love, South Portland Neighborhood
Rod McDowell, Oregon Museum of Science & Industry (OMSI)
Joe Traverso, WW Metal Fab
Lynn Welsh, Island Station Neighborhood

Rick Williams (Chair) started the meeting and asked members to introduce themselves. He asked if there were any comments on the notes from the November 2008 meeting; no suggestions were made and the notes were approved. Rick noted that a Vice Chair will be appointed at a future meeting. Two people have submitted their names so far; all are invited to consider it. The Vice Chair will facilitate CAC meetings
and will attend other meetings (e.g., Steering Committee and agenda planning meetings with staff) when Rick is out of town.

Rick asked for feedback from those who attended the alignment tour on Sunday, January 11.

**Lina Bensel** commented that she learned a lot about where certain buildings and businesses are. Interesting to see where the alignment starts and ends.

**Dee Walsh** said the tour was helpful and really drove home how much work there was to be done.

**Debbie Cronk** commented that she was impressed with how many businesses will have to be moved.

**Ray Bryan** found the tour beneficial; it was nice to see project at street level. Surprised by how many businesses and buildings were going to have to be moved. The alignment is quite an engineering challenge.

Rick thanked the staff for putting the tour together.

Rick opened the first public comment portion of the meeting and asked speakers to limit their remarks so everyone has a chance to speak. There will be a second public comment period at the end of the meeting.

**Kamala Bremer (Resident, Hosford-Abernethy Neighborhood (HAND))** presented concerns about train horn noise around Clinton and Division. The noise from the current volume of trains on the Union Pacific railroad is already a problem for many residents. When became very concerned when we learned that light rail trains would have to blow loud horns just as the larger trains do -- 170 additional trains and horns a day. I understand that TriMet is working on a mitigation of the noise, but we are already at our limit with the current trains. We are planning to ask the City of Portland to create a Quiet Zone in that area. We understand that the design process is starting now for the light rail and we'd like that design to reflect Quiet Zone standards. We want to ask TriMet to work actively with the City of Portland to establish a Quiet Zone for this area so that no trains have to blow their horns unless there is an eminent danger. This is what TriMet is doing in Milwaukie where there is a section of four intersections. We would like our neighborhood to get the same consideration as Milwaukie. (Copies of Ms. Bremer’s written testimony will be distributed to the CAC).

**Patrick Conner (Owner, DaVinci’s Restaurant)** explained that his restaurant is at the end of the line near Park Avenue. My building will be demolished for this project and I’d like to see what the comments are going to be.
John Ghormley (Citizen) expressed disappointment at not being included in the CAC tour of the alignment. I toured another light rail alignment in Vancouver that was open to the public, which was a great opportunity for the community.

John Stevens (Member, Brooklyn Action Corps) expressed concern about the 17th Avenue trackway being rocks and railroad ties rather than paved concrete. We think this would have a negative effect on redevelopment. We are opposed to using rocks; they would attract litter and weeds and look bad.

Dan Yates (Central Eastside Industrial Council) expressed concern about the Central East Side being cut off from access to Powell Boulevard. Powell is the primary route for trucks to southbound I-5. We’ve heard there is discussion about putting a traffic signal at Woodward to help get buses from the transit bridge, which would interfere with trucks coming up from McLoughlin and doing a sweeping u-turn on Powell to access the Ross Island Bridge. ODOT doesn’t want the traffic to back up on the bridge and we don’t want our trucking traffic to be more constrained than it already is. Also the 17,000 jobs are important here. It’s the only place where employment is growing. We don’t want to be choked off due to poor planning.

Bridget Wieghart (Metro Transit Project Director) discussed the Final Environmental Impact Statement (FEIS) Issues List (handout).

At the last meeting we introduced the process for the Final Environmental Impact Statement (FEIS), and the committee was interested in hearing an overview of the big issues from the draft FEIS. Today we want to prioritize the issues with you so we can come back and comment on those areas that you are most interested in.

The FEIS is meant to identify impacts and benefits of the project. In all areas of potential impact we need to identify mitigation. We will work closely with engineers, TriMet, resource agencies, and the public in identifying mitigations to make sure that the project has the most benefits and least impacts as possible.

Bridget asked the group to look at the Project Benefits Map of the alignment included in the meeting materials. Next, Bridget discussed areas of study and specific examples of impacts under each category.

Social, Economic And Environmental
• Land Use and Economic Activity.
  o Evaluates the potential impacts to land use and economic activity.
  o Includes overview of past land use and transportation planning and expectations for future planning.
• Displacements and Relocation
  o Assesses the impacts to residences and businesses of displacement due to partial or full property acquisitions that may be needed for the project.
• Community Impact Assessment (including Environmental Justice)
  o Identifies and evaluates impacts to neighborhood character, cohesion and livability that could result from project generated impacts.
  o Includes an environmental justice analysis to ensure that there are not disproportionate adverse impacts to minority or low-income populations.
• Visual Quality and Aesthetic Impacts
  o Assesses the visual and aesthetic environment of the project and to evaluate adverse and beneficial impacts.
• Historic Resources
  o Examines the potential project impacts to historic districts, sites, buildings, structures, objects, listed on, or eligible for inclusion in the National Register of Historic Places.
• Archaeological and Cultural Resources
  o Examines the potential project impacts to archaeological sites.
• Parklands, Recreation Areas, Wildlife and Waterfowl Refuges (Section 4(f))
  o Examines the potential impacts to publicly owned parklands for the project.
• Geology, Soils and Earthquake Impacts
  o Identifies potential hazardous conditions in the study area due to soil types, geologic conditions, and potential seismic events.
• Ecosystems Impacts
  o Identifies and categorizes the biological resources that might be affected, including vegetation and wildlife, fishery resources, and wetlands.
  o Evaluates and determines the significance of the potential impacts based on state, local and federal regulatory guidelines, and consultation with resource agencies.
• Hydrology and Water Quality
  o Identifies and measures the impacts to water systems such as rivers, storm water hydrology, floodplains, and water quality for the project.
• Noise and Vibration Impacts
  o Estimates the noise and vibration output of the project; assesses the impacts on the surrounding areas and identifies mitigation methods.
• Air Quality Analysis
  o Compares the existing air quality conditions to the projected conditions of air quality that would be expected with implementation of the project.
• Energy Analysis
  o Estimates the variations in the type and amount of energy that would be consumed to build and operate the project.
• Utilities Analysis
  o Examines facilities, such as water and sanitary sewers that the project could impact.
• Public Services
  o Examines the project and services that it could impact including fire and emergency medical services (including hospitals), public schools, postal service and solid waste collection and disposal.
• Hazardous Materials
Identifies and assesses potential hazardous materials risks and impacts associated with the project.

**Security and Safety**
- Documents the work of the safety and security task force that includes dealing with personal safety and security when using project facilities.

**Financial**

**Capital Costs**
- Analysis of developing the estimates of how much the project is expected to cost.
- Estimates are based on engineering (plan and profile drawings) and operations. TriMet prepares these estimates based on a breakdown of the project into smaller units. These units are priced based on recent bids from the Interstate MAX, I-205 MAX, Portland Mall, Streetcar and Commuter rail projects.
- Estimates include contingencies to reflect 5% to 15% level of engineering, the cost of design and administration. Finally, costs are adjusted to the projected year of expenditure in order to account for inflation.

**Operation and Maintenance Costs**
- Analysis of developing the estimates for how much the project will cost to operate and maintain annually.
- Estimates take into consideration the train operators, security, cleaners, dispatchers, maintenance workers, and administrators. Estimates are based on past experience from the existing light rail projects.

**Financial Analysis**
- Analysis of the fiscal feasibility of construction and operations.
- Considers project capital costs, system operation and maintenance costs. Current available revenues are then compared to the costs.
- Shortfalls over a 20-year period are also identified. A financial plan is developed to fill projected shortfalls with additional revenues from local, regional, state, and federal sources.

**Cost Effectiveness**
- Calculates various cost effectiveness measures using several methods including operating cost and operating subsidy per originating ride, annual boarding rides per revenue hour, and incremental cost per new ride.

**Transportation**

**Transportation Impacts (traffic and transit)**
- Assesses regional and local transit and roadway impacts associated with the transit project.
- Includes motorized and non-motorized vehicles impact such as pedestrians and bicycles.
- Estimates and summarizes future traffic and transit ridership projections for the year 2030.

Bridget asked the group to identify the areas where they would like more information.
Rick Williams (CAC Chair) explained that by federal requirements the EIS must study 21 different elements. The last CAC knew that we probably could not handle 21 in-depth sessions on each of those topics, so we narrowed it down to the seven that were most important at that time.

Dana Lucero (Metro Public Involvement Specialist) reported that the topics that were identified by the previous CAC were:
- Land use and economic activity
- Community impact assessment
- Visual quality and aesthetic impacts
- Historic resources
- Parklands, recreation areas wildlife, and waterfowl refuges
- Noise and vibration impacts
- Air quality analysis
- Energy analysis
- Safety and security
- Capital costs
- Cost effectiveness
- Transportation impacts

Rick explained that these were the categories on which we got extensive information, and for the others we received more basic background material. Rick then asked the committee what areas they would like to focus on this time.

The committee then identified the categories they would like more in-depth information on:
- Land use and economic activity
- Displacements and relocations
- Visual quality and aesthetic impacts
- Historic resources
- Parklands, recreation areas, wildlife, and waterfowl refuges;
- Noise and vibration impacts
- Safety and security
- Capital costs
- Financial analysis
- Transportation impacts.

Secondary interests are:
- Ecosystems impacts
- Energy analysis
- Cost effectiveness.

Rick summarized that this list will serve as a guideline for future meetings, but the CAC can ask about anything in the report.
Susan Pearce (CAC Member) suggested that the Clinton Street noise issue discussed in public comment portion of the meeting be included in the noise and vibration category for further study.

Dave Unsworth (TriMet Deputy Project Director) discussed the Preliminary Engineering and Risk Assessment Report (handout) and Early Preliminary Engineering Issues list (handout).

Preliminary Engineering and Risk Assessment Report (see handout)
- The Project completed a risk assessment conducted by the Project Management Oversight Consultant who is hired by the Federal Transit Administration to review the our scope, budget, schedule and the Project's technical capacity and capability to perform the planning, design and construction of the proposed light rail project. This work assessment was completed in Dec 2009.
- The Project has been responding to request for additional information from the Financial Management Oversight Consultant, the Project Management Oversight Consultant and the Federal Transit Administration.
- We hope be approved to enter PE by the end of February 2009.
- The project will not directly benefit from potential economic stimulus dollars, but those funds could help the region in many ways. There are a number of packages have been approved for “shovel ready” projects.

Early Preliminary Engineering Issues list (see handout)
- Dave handed out a list of engineering issues that have been posed by local jurisdictions during the adoption process for the Locally Preferred Alternative Process. This is not a complete list of technical issues, but are key issues that need to be addressed during PE. These are significant issues that may require more public involvement and policy direction from decision-makers.
- Dave provided a short description of each of the listed issues and noted that the team will be returning each month with progress on resolution of these issues.
- The plan to resolve each issue is outlined in a one page description that summarizes the issue, information needed to resolve the issue, public groups that should be consulted, project staff assigned and general timeline.
- Successfully addressing these issues will keep the project on time and within budget.

Leah Robbins (TriMet East Segment Director) discussed some issues on the Early PE Issues List:

17th Avenue Station Location (see handout)
- The issue for consideration is whether the LPA design of two stations on 17th Avenue (at Rhine and at Holgate) could be modified to minimize traffic impacts (particularly truck movements) and right-of-way impacts. The design team will look at
the potential for combining the two stations into one, and whether this one station would meet neighborhood ridership and future redevelopment needs.

- The handout describes the steps in studying this issue, including input from neighborhoods and property owners, and a decision by the Steering Committee.

**Lina Bensel (CAC Member)** says she would like to have someone look into how the bus lines will be affected by the changes on 17th Avenue, specifically whether there would be access to the station for a person who cannot walk a long distance.

**Rick Williams (CAC Chair)** confirmed that staff will bring these issues to the CAC again for more in-depth discussion and input.

**Park Avenue Park & Ride** (see handout)
- The question is about the most cost effective design for the Park & Ride. The design team will look at the potential for some surface parking spaces, which are less costly than those in a garage.
- The handout describes the steps in studying this issue, including input from Oak Grove stakeholders, and a decision by the Steering Committee.

**Clinton Street Station** (see handout)
- This was a question about whether the station location should be adjusted, but TriMet and the City of Portland have concluded that the location shown in the LPA is appropriate.

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**Rick Williams (CAC Chair)** introduced Rob Barnard’s presentation on the Willamette River Bridge study. We are down to two bridge types and the LPA says that we want this project to get to Park Avenue. So we’ve got a tough decision to make here. The question is how are we going to build a bridge that fits into this project and the CAC’s input is important in the process.

**Rob Barnard (TriMet West Segment Director)** provided an update on the Willamette River Bridge study, with many visual renderings.

Our charge is to deliver a bridge that embodies the Portland aesthetic, is functional and affordable. The bridge selection process has been a narrowing process. We started with “many” and now we are down to “few.”

The types remaining for consideration are:
- Wave frame
- Cable-stayed (two-pier)
- Cable-stayed (four-pier)

(The through arch and tied arch types were eliminated as options.)
The risk categories we’ve studied are:
- Fabrication (erection)
- Material (superstructure)
- Design
- Schedule

The design team was asked to reduce the risk profile of the wave frame. The bridge is still risky to build, but we have made some changes to lower that risk:
- Fabrication (erection) risk is related to the high performance (HP) steel required for the superstructure. This requires complex, highly-technical welding, which translates to higher cost and schedule risk. Crews would need specialized training.
- Material (superstructure) risk is related to the HP steel, which is not readily available. This means that pricing is more volatile.
  - In the revised design, HP steel is only used for the top chord of the wave frame. Normal steel would be used for the remainder of the bridge steel elements.
  - Advantages of using HP steel are that it has excellent structural properties (strength).
  - The disadvantages are that it is available from only two sources, which is likely to mean volatile pricing. We’ll need a special run of the steel.
- Design risk is based on the wave frame being a prototype, which is more risky.
  - The prototype includes complex steel-to-concrete connections and a non-redundant structure. This means a more cost and schedule risk.
  - The design team did refine the construction details and methods, to provide some lowered risk.

Rob reviewed opportunities and challenges of the wave frame and the cable-stayed bridge types.

**Two-Pier Cable-Stayed**
- Opportunities
  - More open (no landside piers)
  - Low lifecycle cost (more concrete, less steel)
  - Largest horizontal clearance
- Challenges
  - Environmental issues associated with piers in shallow water
  - Lowest vertical clearance, but still provides 75 feet
  - Accommodation of curved spans at greenway.
Four-Pier Cable-Stayed
• Opportunities
  o Low lifecycle cost (more concrete, less steel)
  o Lowest risk profile for schedule and budget
  o Second largest horizontal clearance
  o Accommodates various bike and pedestrian and train/bus configurations
• Challenges
  o Landside pier closest to greenway
  o Widest bridge over greenway by three feet

Wave Frame
• Opportunities
  o Innovative design
  o Piers closer to deeper water makes them farther from contaminated media
• Challenges
  o Narrowest horizontal clearance
  o Increase design and construction engineering costs
  o HP steel has more price volatility than concrete
  o Increased lifecycle cost
  o Contingency required from FTA (funds that could be used for other construction needs would be held back until bridge is 20% complete)

Rob reviewed costs of each type, summarizing draft cost estimates:
  o Four-pier cable-stayed is about on budget
  o Two-pier cable-stayed is about $7-11 million over budget
  o Wave frame is $32-37 million over budget
We will continue to do more analysis. Also, please note that construction delays are not considered in these numbers.

Susan Pearce (CAC Member) commented that vertical clearance is important and she hopes the Portland Spirit is able to navigate under the new bridge. Susan asked whether there were comments at the recent Bright Lights presentation that the CAC should be aware of.

Rob replied that Miguel Rosales, the architect developing the bridge types, gave a presentation that was very unbiased. But what matters most is finding the bridge type that fits best for our community. The audience had questions about Miguel’s experience on other bridge projects, but they didn’t spend much time discussing preferences for our bridge.

Valeria Rameriez (CAC Member) commented that although she likes the aesthetics of the wave frame, she wonders why it is still on the table.

Rick replied that there are members of the WRBAC who seem to be torn. Some people really love the aesthetic of the wave frame. It was easy to eliminate the arch types from
consideration, but people want to make sure we’re doing thorough analysis of the wave frame, an “apples to apples” comparison.

Rob added that after a recent presentation to the City of Portland Design Commission meeting, that group was split 50/50.

Valeria asked if there are people on the WRBAC who are hanging on to the wave frame because they really don’t like the cable-stayed bridge.

Rick affirmed that he hasn’t heard any WRBAC members say they didn’t like or couldn’t live with a cable-stayed bridge. It’s more that some members are really excited about Portland being a leader in innovative design.

Valerie Chapman (CAC Member) expressed appreciation for the CAC’s opportunity to discuss the bridge in detail and in the context of the larger project. Maybe if money weren’t an issue, the innovation of the wave frame would be a higher priority, but with all the priorities on the project, staying on budget is important.

Barbara Dimick (CAC Member) asked about the lifespan of each bridge type, and commented that she has been attracted to the cable-stayed bridge type from the beginning.

Rob replied that both types are designed for 100 years.

Henry Schmidt (CAC Member) expressed concern about a bridge design that requires new technology and specialized materials only available from one source. Although the wave frame is attractive, the engineering, construction, materials and maintenance costs don’t seem to be worth being able to say we’re the first to build this kind of bridge.

Rick asked whether anyone on the CAC would feel it’s a fatal flaw if the WRBAC were to vote next month to drop the wave frame from further consideration. The CAC agreed this would be ok.

Rick opened the meeting for public comments.

A citizen asked Rob Barnard if the high performance steel were available outside the United States.

Rob replied that on a federally funded project, Buy America requirements dictate that steel must be purchased from US sources.

A citizen from the Hosford-Abernethy neighborhood expressed concern about train horn noise. In addition to health concerns for neighbors whose sleep is interrupted, the noise is also a problem for bicyclists and pedestrians. The neighborhood hopes that a Quiet Zone can be incorporated into the plan.
Rick affirmed that the CAC appreciates hearing from the neighborhood, and is supportive of the project moving as aggressively as possible toward getting a Quiet Zone designation.

John Ghormely noted that with the bridge landing near the Portland Opera facility, which includes performance space, there might be a need for noise and vibration mitigation.

Dan Yates, of the Portland Spirit, remarked that the wave frame bridge type has not been eliminated from consideration because of the influence of about five architects on the WRBAC, and because the Chair, Vera Katz, also is adamant about having an iconic bridge. Dan suggested that if the CAC is concerned about issues to the south and staying on budget, it needs to send a strong message to the WRBAC.

Barbara Dimick (CAC Member) asked about the decision-making structure and role of the WRBAC.

Rick replied that the WRBAC would make a recommendation to the Steering Committee, who will vote on the bridge type. Rick, as CAC Chair, has a position on the Steering Committee, which the WRBAC does not. Rick affirmed that he’s hearing strongly from the CAC that we want to stay on budget.

Dan Zalkow (CAC Member) suggested a motion to exclude the wave frame from consideration due the opportunities lost within the context of the project’s overall needs. It was moved and seconded.

The motion was approved, with 17 members voting in favor, none opposed, and two abstaining. (Reid Kells abstained due to a potential conflict of interest because of his wife’s employment with an engineering firm. Frank Hemer abstained, noting that he wants the project to stay on budget but also thinks the wave frame is gorgeous and would make a name for Portland.)

Rick closed the meeting, noting that the next meeting will be held February 19, same time.