



**NW Bethany Boulevard Improvements  
Project Focus Group Meeting #7 Notes**

**Meeting Date: March 10, 2011**

**Time: 5:00-7:00 p.m.**

**Location: Sunset Presbyterian Church**

**FOCUS GROUP MEMBERS:**

Doug Alvarez	√	Paul Enriquez	
Debra Ashe	√	Bob McMillan	√
Hal Ballard		Charles Murphy	√
Chris Biggs	√	Steve Murray	√
Ann Bryan	√	Jeff Oberst	√
Robert Bueermann	√	Sandra Peterson	√
Stephen Collins	√	Norm Rose	√
Rob Saxton	√	John Hartsock	√

**PROJECT MANAGEMENT TEAM:**

<b>WashingtonCounty</b>			
Matt Costigan	√	Jan Wilson	√
Brian Irish	√	Magdalena Campuzano	√
<b>Howell Consulting</b>			
Leslie Howell	√		
<b>WHPacific</b>			
Wayne Bauer	√	Ken Rehms	√
Sarah Heller	√		
<b>Kittleson &amp; Associates</b>			
Wade Scarbrough	√		
<b>Michael Minor &amp; Associates</b>			
Michael Minor	√		

**OTHER ATTENDEES:**

Approximately 20 others (see sign-in sheet for names)
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### **Welcome and Introductions – *Leslie Howell (Howell Consulting)***

Leslie welcomed everyone to the meeting and reviewed the night's agenda. (Copies of the agenda were made available for the audience). Leslie reminded the audience that this is a committee meeting with time available at the end for public comments. The audience is asked to hold comments until then. Leslie reminded the audience that the Project Management Team would be available after the meeting to answer specific questions one-on-one.

Leslie reviewed the Project Public Involvement Process Chart, future meetings, and what has happened since the last PFG meeting in December.

- An open house was held at the church on January 20.
- The Board of County Commissioners (BCC) met on February 8, 2011 in an extended work session. Part of the work session included a presentation by staff of the Bethany project.
- There was a general meeting of the BCC on February 22, 2011. At this meeting, members of the public were allowed to comment. The BCC asked follow-up questions of staff and then debated amongst themselves. They voted 3-2 in favor of a motion to go with Alternative 2A (shifting centerline to the west and reducing lane widths). Also part of the motion included extending the project limits south to Cornell Road and to proceed with the Highway 26/ Bethany interchange improvements.

Tonight's meeting agenda was reviewed. This will include:

- An update will be given on the noise, air, and cultural resources studies.
- A review of the design of Alternative 2A.
- The next PFG meeting is scheduled for Thursday April 14<sup>th</sup>.

Items from the "issues bin" from the last meeting were reviewed.

- **Photos of noise walls.** This is deferred until the April PFG meeting, at which time Michael Minor will have completed the noise analysis and will present the results.

### **What Has Happened? – *Leslie Howell (Howell Consulting)***

Leslie reviewed what has happened on this project since the last PFG meeting in December.

- Approximately 450 people attended the Open House in January. Approximately 360 comment cards were collected that offered feedback on which alternatives were preferred and why or why not. The Open House summary is posted on the project website along with transcribed comments.
- The Board of County Commissioners (BCC) had a work session on February 8<sup>th</sup> followed by a commissioners meeting on February 22<sup>nd</sup>.
  - February 8<sup>th</sup>: County staff presented the four alternatives to the BCC. The BCC asked several questions of County staff; in particular, they requested that County staff refine Alternative 2. This was developed into Alternative 2A which will be discussed in detail later, but essentially shifted the centerline alignment and narrowed travel and bike lanes. The traffic model simulation presented at the board work session is posted on the project website.
  - February 22<sup>nd</sup>: After staff presentation, there was a 1-hour public testimony period. Three motions were made, one of which passed. The BCC voted to move forward with Alternative 2A, to minimize property impacts, and to move the project forward along with the Highway 26 interchange project.
  - Commissioner Terry requested staff to look at flipping with sidewalk and bike lane locations and look at the potential for a cycle track on this project. Matt mentioned that

the PMT will be looking at this option over the next month, but that preliminary thoughts are that this project is not good fit for a cycle track. The board, in a separate action requested that a cycle track be considered for Brookwood Avenue

Question: I wasn't at the BCC on February 22<sup>nd</sup>. The consensus at the last PFG was "no 4-lanes". What was the BCC's reasoning for moving forward with the 4-lane alternative?

Answer: The purpose of the board meeting was to provide direction to staff on which alternative to advance to design. The BCC made three motions. The first motion was to move forward with Alternative 4 (3-lane). The second motion was to delay the project and study the traffic further. The third motion was to move forward with Alternative 2A.

One of the concerns of the BCC was that the transportation plan update will start next year, which would delay this project until it is completed, which was not acceptable. At all major intersections, 5-lanes are needed for traffic capacity. The 3-lane alternative was noted as an interim project and the 5-lane alternative had a greater impact to property. The compromise was to move forward with Alternative 2A.

Question: When I talked with Commissioner Terry after the meeting, he commented that he didn't realize that Alternative 2 included 5-lanes for much of the project.

Answer: Can't explain the commissioner's comment as staff went over all of the alternatives with the commissioners. They were all aware of the details of each of the alternatives.

The BCC meeting was videotaped on public TV (TVCTV) and is available on the County website. A link to that has been posted to the project website as well.

<http://www.tvctv.org/government-programming/government-meetings/washington-county>

### **What is Next? – Wayne Bauer (WHPacific) and Leslie Howell (Howell Consulting)**

#### Review of Alternative 2A

This alternative was generated between the two BCC meetings in February and continues to be refined. Alternative 2A will become the preferred alternative and will be moved forward into design.

Wayne discussed the differences between Alternative 2 and 2A.

- All other alternatives were centered on the right-of-way centerline. Alternative 2A shifted the centerline to the west to minimize impacts to the east.
- The travel lanes were narrowed from 12' to 11'. The bike lane was narrowed from 6' to 5'. The center turn lane/median, where included, was narrowed from 14' to 12'. This resulted in an overall reduction of 8' horizontally (not including the centerline shift). The PMT is moving forward with design exceptions for the narrower widths.
- The west side of the roadway was set based on the 45' right-of-way line. From the right-of-way line, 2' was allowed for sound walls, then 2.5' for a landscape / utility buffer area behind the sidewalk.
- The alignment holds the west side curb line parallel to the right-of-way line. The east side curb line was adjusted in and out based on the tapers between 4-lane and 5-lane segments. This was done to maximize the benefits of a shifted centerline.

The tapers (going from 5-lane section to a 4-lane section and vice versa) are used to minimize impacts. One way to do this was to replace the angled transitions with reversing curves. The reversing curves pull the alignment over quicker during transitions, as the curves round off the ends of the tangent sections. In looking at one of the worst case areas, the house on Barkton that was shown as an impact on Alternative 2

is now showing an 8' buffer as a lessened impact. One result of Alternative 2A is more land is saved for property owners and the roadway still meets design standards.

Question: Did you say 11' lanes?

Answer: Yes.

Question: Can you explain the cross-section refinements and features?

Answer: We will but a little later in the meeting.

#### Design Issues / Refinements

The design at the south end of Bethany Blvd was refined to match into the most current interchange alignment layouts. The storage length needed south of Bronson is being looked at relative to traffic volumes and storage length. Also in this area, the roadway is being widened to the east to lessen the impacts to the property on the west.

Question: Will the island at Bethany Blvd and Highway 26 be modified?

Answer: The existing island is only striped and not curbed. Modifications to the island will be part of the interchange project and will be coordinated with the design of this project.

Question: The island is the bottleneck.

Answer: The idea behind the design of the island is to provide adequate left turn storage for northbound traffic, but also to allow through lanes to line up. The striped island is opposite the left turn lane onto westbound 26 on ramp.

Question: The map shows 5 lanes. What will this really be – 6 lanes, 7 lanes?

Answer: There are generally 6 lanes provided at the overpass. The design details will be completed by the overpass project. The previous design team looked at preliminary alignments. The current configuration shown was based on traffic projections.

Question: Are there 2 lanes for northbound left turns at Bronson?

Answer: No - There is 1 lane required for left turns. The area on Bethany Blvd between Highway 26 and Bronson could change as a result of work the overpass design team will be doing.

Question: Is there a public forum for the Highway 26 overpass project?

Answer: Yes, PB Americas has been chosen as the design consultant and will be under contract soon. DKS and Associates is a subconsultant to them for the traffic analysis. After project notice to proceed is given, there will be an open house to discuss the project and present design information.

The design at the north end of Bethany Blvd will transition to the 3-lane section north of West Union. The design in that area will be further refined now that the Alternative 2A has been selected.

Elsewhere along Bethany Blvd, the design team is looking at further revisions to the alignments. Near Audrey Drive there are opportunities to lessen impacts to properties by revising the turn pocket dimensions.

Question: What enhancements are being incorporated?

Answer: We have heard the term "concrete canyon", and we are looking at options to enhance the roadway and lessen the concrete feel. We are looking at wall treatments, crosswalks, illumination, and landscaping.

Question: I'm surprised by narrowing the lanes and crowding vehicles into the bike lane and sidewalk. Narrowing helps the overall width constrictions, but safety for alternate modes of transportation needs to be considered.

Answer: County staff is looking at the cycle track options and safety. This is a work in progress. We are concerned with space – the cycle track typically takes up more room with the buffers and elevations. If these result in impacts to properties, it may not be appropriate for this project. We will be looking at whatever creative approaches might work here.

Question: Will buses stop in travel lanes or have pullouts?

Answer: TriMet buses do not like pullouts anymore and prefer to stop in travel lanes. They are experiencing problems with other vehicles not letting the buses back into traffic after stopping at a pullout.

Question: If you are modifying the plans, we would like to have input. Two considerations: 1) include a green area on the medians, and make the medians wider and 2) include crosswalks and signage. We would like the landscaping expanded on the medians as possible. We would like a speed board installed since the 35 mph speed limit is not typically followed.

Answer: 1) we are looking at median lengths and widths with respect to potential areas for landscaping. 2) The signals at Bronson and Oak Hills should help to control speeds.

Question: Are there crosswalks anywhere other than the signals? Please look at other options.

Answer: Currently, all intersections will be a legal crossing (unstriped) but striped crosswalks will be installed at Bronson, Oak Hills, and West Union roads.

Question: Based on the cross section, it seems that the landscaping seems to need more than a 2'-wide area? Can we widen the median instead of including the two feet at the edge to get more "bang for the buck"?

Answer: We are talking with our landscaping folks to look at options that would fit in the 2' strip.

Question: It may be more valuable for homeowners to keep their property than to give it up for a 2' landscaping strip.

Answer: A buffer is needed between the walls and sidewalk as pedestrians don't like to walk immediately adjacent to a wall face.

Question: What will the median be? Are there other examples where I could see this?

Answer: The median is shown as a 2' traffic separator. Other examples would include Murray Blvd at Cornell Road, Saltzman Road.

Fire access has been looked at and discussed. We will be talking with Tualatin Valley Fire & Rescue to further coordinate. We will also be coordinating with Tri-Met on bus stop locations.

Question: Can we keep the bike lane at 6'? Traffic will encroach on the bike lane. As a biker, I would feel better with a 6' bike lane.

Answer: There is a trade-off between 6' bike lanes and property acquisition. For example, Oleson Road was recently rebuilt with 11' travel lanes and 5' bike lanes; 99W between Highway 217 and Greenberg Road also has 5' bike lanes. Saltzman Road is actually less than 11' travel lanes with 4' bike lanes in the last block before Cornell Road because of site constraints. Increasing widths will impact something else.

Question: What about a shared use sidewalk / bike lane?

Answer: This could be looked at as an alternative but from a cycling standpoint, it is not favored. The challenge is to look at options that do not meet current County design standards.

Question: Were sidewalks narrowed also?

Answer: No, Sidewalks were not narrowed; they were held at 5'.

Question: Can you raise the grade on the bike lane to match the sidewalk elevation?

Answer: WHPacific has completed a project near Bend that did something similar, though it wasn't the exact same grade. We will look to see if that design could apply to Bethany Blvd.

Feedback from the PFG members on the design elements was requested. Contact Matt with input or bring that input to the next PFG meeting.

#### Declaration of Necessity

A Declaration of Necessity that is approved by the BCC is the trigger for the right-of-way acquisition process to start. The BCC will need to state and declare the centerline of right-of-way, which initiates the right-of-way acquisition process. This is just a notice that this will be coming up.

#### Land Use Application Process

This project falls under Article VII of the Washington County Land Use process. We will look at the design and determine how it fits into the County standards. This will be started in the next 1-2 months. This project will likely be a Category B Type 2 process, which requires formal documentation, formal reviews, and allows for public comment. More information will be coming on this process. The process ensures that the design meets County standards.

Question: Does a Category B Type 2 require going in front of a hearing examiner?

Answer: No, it is staff approved. A Type 3 goes before a hearings officer.

Question: How is the category and type determined?

Answer: It is determined in the pre-application conference and by the County planners. We should know in the next couple of months what it falls under. In looking at the code, we anticipate that it would be a Category B Type 2, but we won't know for sure until the pre-application conference is held.

A small portion of the southern end of the project falls within the City of Beaverton city limits. As such, the project will go through the City of Beaverton Land Use process as well.

Question: Will the project go through the WCCC review also?

Answer: No, just the Land Use (development review) process.

#### Schedule Update

Leslie gave an update on the overall project schedule. This is also on the project website.

#### **Update on Environmental Analysis – Michael Minor (Michael Minor & Assoc.) and Wayne Bauer (WHPacific)**

#### Noise Update

Michael Minor gave an update on the noise study and work that has been completed. Preliminary sound walls have been modeled, including approximate locations of the base of the walls. He has looked at potential issues with the sound walls. He will be completing the final modeling to include heights and intersection end points over the next few weeks.

Sound walls must be able to reduce noise by at least 5 dB to be considered effective at reducing noise. A 7-10 dB reduction would be perceived as reducing the noise by half. When noise hits the sound wall, some of it diffracts over the wall and then “bends down” back toward the ground. How much noise diffracts over the wall is dependent on the type noise. Low frequency noise associated with heavy trucks diffracts the most, and therefore, taller sound walls are required to achieve the required noise reduction. For that reason, freeways generally require taller sound walls than arterial roadways. For Bethany Blvd, the sound walls will be shorter as there is not a large volume of heavy truck traffic.

Noise not only diffracts over the top of sound walls, it also diffracts around the end of the walls. This can result in noise reduction problems at, and near, intersections and other openings in walls. Finally, sight distance and other safety issues must also be considered when designing sound walls. Sight distance can also be problematic for sound walls at intersections.

Michael mentioned that the next steps are to refine how the sound walls fit at intersections, how they affect sight distance, and how to treat the ends of the walls.

He stepped through the requirements and issues with the sound walls starting on the west side from Bronson Road north, and then on the east side from Bronson Road north.

Sound walls are continuous on the west side. The intersections need to be worked out. The least overall reduction in noise will be at intersections. The best overall reduction in noise will be the center of the block. For residences near intersections, the relation between back yard noise and front yard noise is studied to find the best overall solution.

On the east side, sound walls are needed starting at Sunningdale Drive, heading north. Then they continue up to Oak Hills Drive, and then on to Telshire Drive. Between Telshire Drive and Ridgetop Lane, the houses are built on a fill that is higher than Bethany Blvd. The homes in this area have a retaining wall supporting the house-side of the road. The retaining wall will not support the additional weight of a sound wall, and therefore no sound wall is likely in this area. It is also difficult to find a solution for the two houses at the end of this area, because noise diffracting around the sound walls reduces the effectiveness of the walls to less than 5 dBA. A minimum reduction of 5 dB is needed, and a minimum of 7 dB is preferred. If the sound wall yields reduction less than 5 dB, it will not be recommended. Between Ridgetop Lane and West Union Road, sound walls are likely and we are looking at how and where to end the sound walls.

Michael’s preliminary analysis shows that the sound walls heights are likely to be in the 6’-9’ range. We have developed a 3D traffic noise model based on the project design and surface elevations that is used to determine the height of sound walls. The model calculates the noise reduction at representative receivers and is used to determine the sound wall heights. Sound wall heights are adjusted to achieve a balance of noise reduction and cost. Sound walls that meet noise reduction and cost requirements are recommended to be included in project construction.

Question: What about the area on the east side between Highway 26 and Bronson Road?

Answer: Michael has looked at that area as part of the Highway 26 project. The frontage road for the ramps from Highway 26 acts as a noise reducing berm for traffic on Highway 26. Because the frontage road is so much higher than the homes, noise on the frontage road actually goes over the top of the homes, keeping noise levels in this area rather low and below the impact criteria. There are no noise walls on Highway 26 as part of the Cornell Road to 185<sup>th</sup> Avenue project because no locations met the requirements for noise reduction or cost as provided by ODOT.

Michael discussed some of the sound wall rules. First, it is hard to mitigate noise receptors that are higher than the adjacent road due to noise diffraction over the walls. Also, if a residence is located more than 400 to 500 feet from the road, sound walls will not help to reduce noise by a noticeable amount. The park and houses by NW Bronson Road just to the northeast of the overpass near Highway 26 are shielded from Highway 26 noise and sound walls are not warranted even with 5 or 6 lanes of traffic on Bethany Blvd. Michael is looking at and modeling that area, but he does not expect sound walls to be warranted or meet noise reduction or cost requirements. For sound walls to work there needs to be at least a 5 dB reduction in noise, which is generally within a 300' distance of an arterial.

Question: Can you walk through what sound walls look like at intersections? Do they stop abruptly or wrap around the corner?

Answer: Typically the sound walls wrap around the corner and step down. This helps to keep noise from flanking around the corner into the neighborhood.

Question: Do you have pictures of sound walls? Will these be cinder blocks or cast-in-place or something else?

Answer: All kinds of sound walls are being looked at. Michael said that he determines the dimensions required, not the aesthetics. Options could include concrete, cinder blocks, decorative brick, cast-in-place, wood post, recyclable materials. There is flexibility because of the vehicle type (no high volumes of semi-trucks). Michael will bring pictures of options to the PFG meeting in April.

Question: Sound walls are closest to the property line. What dimensions of construction easements are needed to construct these?

Answer: 3'-5' is normal, but it depends on grades and excavation depths.

Question: ODOT took 10' for sound walls on part of Oak Hills and mitigated nicely. Will the County do something similar?

Answer: The County will work with property owners to minimize impact to private property. Temporary fencing may be installed.

Question: When will we see noise numbers?

Answer: The noise studies will be completed and presented at the PFG in April. Models are being worked on now for current and projected 2030 traffic both with and without the project improvements (Alternative 2A).

#### Air Quality Update

Studies have shown that the number one pollution source in the Portland area is cars. In the 1970's ozone and carbon monoxide (CO) were a major concern and frequently exceeded the EPA regulations. Over the last 30 years, changes in automobiles and gas have led to improvements in air quality. For example, lead emissions are no longer an issue due to unleaded gas. Carbon monoxide levels have gone down significantly because of cleaner, more efficient engines. Particulate matter has also gone down because of clean diesel and more efficient engines and filtering systems. In the past 10-15 years, there have been no exceedances in the Portland area due to these changes.

For the air quality study, Michael will look at the list of pollutants regulated by the EPA and identify any potential air quality impacts. In general, vehicles produce the dirtiest air when they are idling. If you improve the movement of vehicles and reduce congestion, you improve the quality of the air, as the air is less stagnant. A delay of 35 seconds or more at a signalized intersection triggers the need for a detailed air quality analysis. Because the project is improving traffic flow, it is unlikely to see any air impacts related to the Bethany project. Even so, we are still required to complete an air quality analysis. We should have the results of that analysis at the next PFG meeting.

### Cultural Resources Update

Wayne reported that a draft report was completed today by AINW. They researched data for cultural resources. The draft report has not yet been reviewed, but it will be provided to the PFG and public as soon as it is ready. Once the PMT has reviewed the draft report, it will be forwarded on to the Corps of Engineers and then on to the State Historic Preservation Office (SHPO) for their reviews. The Oak Hills request to become a historic district is included in the report.

The SHPO review will determine if any mitigation is required. If houses are impacted, mitigation would be needed. The current design avoids house impacts.

After the internal review is completed, the draft cultural resources report will be posted on the project website. This is expected to be within the next few weeks.

### **Public Comment Period – *Leslie Howell (Howell Consulting)***

Leslie asked for public comment from those in the meeting audience.

Micki Sparr – I have been coming to meetings for a long time. The transportation planning has changed over 25 years, except in Washington County. Washington County is holding on to the late-80's transportation plan. We did what we were told and followed the process. When we questioned data, we were dismissed. The data was not appropriate to the area. We tried to hire traffic engineers, but could not get anyone on board to challenge the County. Why? The process is to placate citizens. As you have noted, there was a huge number of comment cards and nearly 87% selected the 3-lane alternative. We have a road that is 80% 5-lane and 20% 4-lane. The data presented to the BCC is inaccurate and they based their decision on faulty data. The process is a sham.

Jim McClure – I have a handout and echo Micki's comments. The project is misleading as most of the road is 5-lane. I would like to make the most of the selected alternative, and have a couple recommendations, as noted in the handout. Calm traffic coming off the highway. I have worked with FHWA and Federal Parks and they modify entrances to parks to calm traffic. Look at changing the entrance to Bethany Blvd.

1) Pedestrian access: At the BCC, there were concerns raised for a pedestrian crossing at non-signalized intersections. Incorporate crosswalks at Telshire Drive and Avondale Drive, maybe. Look at where we should put crossings. People won't go to the signals, and they will try to cross at other intersections. I thought the BCC told staff to look at crosswalks. The county built flashing crosswalk for neighborhood to the north. It is hard to get people to drive slowly. This has a freeway feel with the median barrier. Telshire Drive is a good area for a crosswalk.

2) Landscaping: As for the 2' island for 450' of traffic separator, I would like to see these changed to a 4' landscaped median. I don't like the 2' separators. 790' out of 5,000' length makes the little islands seem out of place. It will add to the right-of-way impacts. Bethany Village has street trees. I would like to see that incorporated into Bethany Blvd. Claremont maintains trees as a requirement of development. Trees have a calming effect on traffic. In conclusion, look at pedestrian crossings; get rid of the snake islands; add trees. I would like it to look like a boulevard section. Treat it like Claremont for continuity.

Adam Shields – I am a newer homeowner in Oak Hills. Are there materials available to help absorb sound?

*Response:* Yes, there are material types like that. They are more expensive and could shorten the wall height by approximately 2'. They are typically twice as expensive as regular sound walls.

Could they be used for noise tunnel reduction?

*Response:* The reflection of noise is typical for a 2-lane roadway. It is not very effective with a 4-lane roadway.

The triangle of land at the south end near Highway 26 with respect to noise – can we densify trees in the park area?

*Response:* Dense evergreen foliage will decrease noise; otherwise, trees do not reduce noise. You would need 60’-80’-100’ of dense evergreens to reduce noise. The park is already a quiet area. The steep hillside will not increase noise quality. Noise walls would not be warranted and would just beautify the area.

Norm Rose – With kids crossing a 5-lane roadway, would a crossing guard be required for the schools?

*Response:* Beaverton School District would use a crossing guard.

Doug Alvarez – I support McClure’s letter for the 4’ median and crossings at Telshire Drive. I like the street trees for continuity and neighborhood feel to it. The 2’ space for trees and landscape will not hide the sound walls.

*Response:* The landscape architects are looking at options.

I would like to see the blinking light crosswalks like at Claremont.

*Response:* We will look into it.

Charlotte Awe – The sidewalks are 5’ wide. I am wondering if sidewalk on only one side is an option? Can it just be on the west side? Kids can cross at Oak Hills. I don’t see why it is needed on both sides.

Gail Arnold – I need clarification on the 4-lane since it is really a 5-lane. What is Saltzman classified as? Micki was right – we were disrespected, not by you, but by the BCC.

*Response:* Saltzman is considered a 3-lane.

**Conclusion – *Leslie Howell (Howell Consulting)***

Leslie thanked everyone for their comments and mentioned that the next PFG meeting will be April 14<sup>th</sup> at 5pm, same location. This will be a “hands-on” meeting to work through issues and options.

**Items added to the “issues bin” for the next PFG meeting:**

- none

**End of Meeting Notes**

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**Next PFG Meeting: Thursday April 14<sup>th</sup>, 2011, from 5:00 to 7:00 p.m.**