

**Bethany Boulevard
(NW Bronson Road to NW West Union Road)**



**Traffic 101 Workshop Summary
June 25, 2010**

Washington County, in cooperation with Citizen Participation Organization (CPO) 7, held a traffic workshop for the Bethany Boulevard project on Thursday, June 25, from 4:00 to 6:00 p.m. at Portland Community College – Rock Creek Campus, Building 7, Room 121. To inform the public of the event, Washington County sent announcements to the OSU Extension Service to include in CPO 7's monthly newsletter, the Cedar Mill News, the Oak Hills School Bulletin, the Oak Hills Oracle, and the Oregonian. The announcement was provided to Project Focus Group members and they were encouraged to share the information. A posting was also made on the home page of the project web site.

The purpose of the workshop was to inform and educate interested parties on traffic related issues as they relate to the upcoming Bethany Boulevard project. Topics discussed were traffic terminology and concepts (level of service, traffic signal warrants), findings of the existing and future conditions analysis, and the tools that can be used to improve traffic safety for all modes of transportation. Seven members of the project team were available to answer questions and facilitate small group discussions. Approximately 30 people attended the workshop. At the beginning of the workshop, attendees were asked what they hoped to learn for the evening. Following are the questions that were asked:

- How does the County assess "livability" in existing neighborhoods with respect to improvement alternatives?
- How do traffic forecasts account for future development?
- How much time does it take to go from concept to completion?
- What is the source of accident data?
- What criteria are used to determine work/live commute assumptions?
- What are the future traffic projections for Highway 26?
- How do you decide where to install traffic signals and crosswalks?
- How can we influence Multnomah County to construct new road improvements?

The lead traffic engineer for the project, Wade Scarbrough from Kittelson and Associates then gave a PowerPoint presentation covering the following topics:

- Traffic Analysis Basics
- Bethany Boulevard Planning Context
- Existing Traffic Conditions
- Projected 2035 Traffic Conditions

The attendees asked questions throughout the presentation, and the presenters responded. The power point presentation has been posted on the project website for the public to review in detail.

After the presentation a traffic simulation model was shown. The model simulated traffic flow with future (2035) traffic conditions under two scenarios: (1) three lanes on Bethany, and (2) five lanes on Bethany.

The group then broke into four smaller groups and discussed the traffic issues along Bethany Boulevard and brainstormed possible solutions. Each group was given an aerial photo strip map and design templates showing standard widths for 3-lane, 4-lane, and 5-lane roadways at the same scale as the base maps. These tools were to be used to develop alternatives to address the traffic capacity issues identified in the presentation.

Staff members were then asked to summarize some of these discussions. Following is a summary of those conversations and suggestions:

Suggestions for Improvements:

Many people agreed with the need for a new traffic signal at the Bronson/Bethany intersection.

Many people expressed a desire for a new traffic signal at the Oak Hills/Bethany intersection for the following reasons:

- It's difficult today to make left turns or through movements from the Oak Hills approaches. Many residents of the neighborhood say they avoid turning left at the Oak Hills/Bethany intersection and instead use alternate routes to avoid lengthy wait times.
- Crossing Bethany Blvd as a pedestrian is perilous today and would be even worse if it is a 5-lane road.
- School children today have to be bussed from the neighborhoods on the west side of Bethany, even though many of those homes are within walking distance of the school.
- Crossing Bethany Blvd is particularly challenging for elderly and/or disabled pedestrians.

There was concern that cut-through traffic may increase on Oak Hills Drive (east of Bethany), especially if the Oak Hills/Bethany intersection is signalized. A number of participants had the following suggestions to discourage cut-through traffic on Oak Hills:

- Eliminate some or all left-turn movements at the Oak Hills/Bethany intersection. Consider posting signs that would restrict left-turn movements only during peak time periods (while allowing left-turn movements during other periods).
- Install "No Through Traffic" signs on Oak Hills Drive.
- Consider speed bumps or other calming measures on Oak Hills Drive.

One group suggested constructing a new right-in/right-out access on the north side Bronson Road, west of Bethany that would connect to Avondale Drive (i.e. an extension of NW 160th Avenue). This could potentially allow left turns to be eliminated from the Avondale/Bethany intersection which would possibly eliminate the need for a left-turn lane on Bethany at this location.

Consider using a 4-lane roadway, with 5 lanes only at key intersections. If there is a cost savings, use the money to widen Bethany as far north of West Union Road as possible.

Consider using a two-way bike lane (or bike path) on only one side of the Bethany to reduce the overall width requirement.

Consider using 2 walls along Bethany, where the first wall would be a low barrier (~2' tall) separating the sidewalk and two-way bike path, and the second wall would be a sound wall outside the bike path (sketch provided).

Consider adding a new access point from the Westbound Hwy 26 Ramp to the Bronson neighborhood (i.e. Skyview and White Fox neighborhoods on the east side of Bethany).

Consider adding a new exit from Hwy 26 to Bronson Road, west of Bethany Blvd. This could reduce traffic from the Bethany-Cornell interchange.

There was concern that community livability needs to be assessed. Constructing 5 lanes would potentially destroy 14 houses in Oak Hills, and 90 in total, diminishing livability and economic feasibility for home owners.

Several participants asked whether roundabouts would be considered at the Bethany/Bronson and/or Oak Hills/Bethany intersections. During the work session, groups used the provided roundabout design template to investigate the impacts. Teams noted that a roundabout would require removing homes and taking significant portions of the properties at the corners of the intersections.

Several people noted concerns about noise increase and asked whether sound walls will be considered. County staff responded that a noise analysis will be under way soon, and sound walls will be considered if found to be an effective means of mitigating noise impacts.

Questions/Concerns:

There was concern that Hwy 26 will be unable to handle future demands for east-west travel. There should be other improvements on east-west roads on the north side of Hwy 26 (such as Germantown Road) to alleviate pressure from Hwy 26 as well as Bethany Blvd. Participants asked how Washington County could influence Multnomah County to expand other east-west corridors into Portland.

Several participants expressed concern that building five lanes on this section of Bethany doesn't make sense when there will still be only 3 lanes to the north and south. The project team noted that five lanes are planned for Bethany all the way to Springville Road. The Hwy 26 interchange is currently being studied to develop near-term and long-term improvement designs, and the initial findings of that study have recommended a five-lane cross section on Bethany between the westbound ramp terminal at the Bronson Road intersection.

Other Questions Asked during the Meeting:

- Does the peak hour dictate our design?
- Does the Level of Service analysis differentiate between left-turns, right-turns, and through cars?
- Does signal warrant #4 (pedestrian volume) include a discount for elderly pedestrians?
- Do we have the ability to perform "what if" scenarios regarding warrants, especially warrant #5 (school crossing), since most kids are bussed or driven to school today?
- Please clarify what "grade separation" means.
- Does the County ideally want Collector roads intersecting Arterials?
- Who makes the designation for the different types of roadways (Arterials, Collectors, etc.)?
- Does the County sign for NO THROUGH TRAFFIC?
- Why doesn't the TSP map show any Principal Arterials?
- What is the definition of a Neighborhood Route?
- Why does the County map show a connection between Bronson Road and Cornell since ODOT segregated this connection several years ago?
- When was Bethany designated an Arterial roadway?
- When was the Bethany centerline established?
- How many homes are estimated in the North Bethany area?
- How do we justify only collecting counts for one day?
- Do we have count data for Saturdays? One audience member remarked at the volumes present on Saturdays.
- Approximately how many hours do we have "problems" with the existing system (i.e. is it just the peak hours)?
- Do we know how many cars along Bethany are simply trying to cross US 26 and not access the on-ramps?
- Do traffic counts account for the cars along Oak Hills Drive that are avoiding the Bethany intersection during peak hours?
- Would adding sidewalks along Bethany lead to a decrease in the number of cars (since some that transport kids to school would let them walk)?
- Are roundabouts an option along this corridor?
- How does the County's model account for employment numbers?
- Do the 2035 volume projections include higher mode splits to other forms of transportation?

- Do we know the Levels of Service along Bethany if ODOT does not widen the bridge over US 26?
- Did we analyze a 4-lane option?
- How much time is saved from one end of Bethany to the other by having five lanes vs. three lanes?

At the end of the workshop each group summarized for the rest of the attendees the discussions they had had and any recommendations they were making. In addition, staff went back to the list of questions posed at the beginning of the workshop and reviewed the answers. Attendees were asked to complete an evaluation form. The County compiled the results and will use them in working with CPO 7 to prepare for the Design 101 workshop scheduled for August 5th.

Displays and Handouts

The following exhibits were on display at the meeting:

- MSTIP exhibit
- Existing Traffic
- Existing Cross Section (2 lane)
- Typical cross section (5 lane)
- Aerial showing project area with existing right of way
- Historic photos of the corridor
- Aerial for attendees to place dots showing where they live.

Handouts:

- Meeting Agenda
- Evaluation forms
- Traffic Terminology
- 11x17 strip maps of the project