

## PROJECT ADVISORY COMMITTEE MEETING #4 SUMMARY

The fourth Project Advisory Committee (PAC) meeting for the 125th Avenue Extension Project was held on January 20, 1998, from 6:30 to 9:30 p.m. at Conestoga Middle School. This meeting's purpose was to allow specialists to present, summarize, and discuss air quality and noise study processes with committee members. For more detailed information please refer to the handouts listed at the end of this summary.

### I. WELCOME/UPDATES

Attendees were welcomed and shown a video that compared actual area roads with the preliminary cross section, in response to the committee's prior request. The various types of roadways were viewed and discussed. In addition to the videotape, the committee requested still photos depicting the cross sections to enable better visualization of the sections. The following streets were included in the video presentation:

- ▶ 5th Street and Teal Boulevard are similar to Cross Section A.
- ▶ Greenway/Brockman and existing 125th Avenue are similar to Cross Section B in that they have a meandering sidewalk but do not have a landscaped median.
- ▶ 155th and Sexton Mountain Drive is similar to Cross Section D.
- ▶ 155th near Rigert is similar to Cross Section E.
- ▶ 158th Avenue is similar to Cross Section A and contains a concrete median, which is safe for vehicle emergency access.

Joel Howie will attend the BIKE Task Force meeting February 3, 1998, to present and discuss the cross sections. A response from the BIKE Task Force, indicating the preferred cross section, has been requested prior to the next PAC meeting. A 20-foot wide clearance is required by fire codes to allow adequate space for fire and emergency vehicles to safely pass by stalled cars. Recent state legislation clarified these requirements, stating that cities in Oregon are not required to abide by the 20-foot wide clearance on public streets, but if they fail to do so they will retain liability.

### PAC member comments included:

- ▶ We may need to discuss a vehicle-safe median in greater depth if the BIKE Task Force prefers Cross Section E.
- ▶ Cross sections A, B, and D only have an 18-foot wide clearance. Does this meet the fire code? (Team Response: The 20-foot wide clearance of the fire code includes width for the opening and closing of vehicle doors. Two feet of the median or planter strip can be included for this usage as long as there is enough median clearance to do so. In this case, there is clear space for opening of vehicle doors, therefore meeting the fire code.)

- ▶ Please provide the PAC with a summary of relevant information from the BIKE Task Force.
- ▶ Polaroid (or 35mm) photographs of the cross sections would be even more helpful than the videotape to help members visualize the cross sections. (Team response: We will provide more photos.)
- ▶ Kruse Way is a good example of separated bike/pedestrian lanes.

## **II. AIR QUALITY PRESENTATION:**

Martha Moore, an air quality specialist with TW Environmental, presented and distributed an overview of air quality study procedures and regulations. Ambient air quality standards (AAQS) are set to protect human health, and secondary standards are set to protect human health and the environment, including crops and streams. Carbon monoxide and ozone are the primary pollutants of concern for transportation projects. Ozone is a regional issue, because ozone is formed in a photochemical process in the atmosphere. The 125th Extension project is included in the regional carbon monoxide monitoring by the Department of Environmental Quality. Carbon monoxide (CO), on the other hand, is emitted directly by vehicles and can cause localized air quality problems. A “hot spot” analysis is performed at major high-volume multi-lane intersections, meeting an LOS “F” requirement, to determine if projects might violate CO standards. The analysis is performed by measuring background levels at the site and then estimating the concentrations using a dispersion model. If intersections do not meet signal warrants, then it doesn’t carry enough traffic to cause noticeable air quality problems. Based on projected traffic volumes along the 125th Avenue Extension, there is no need to do further study on air quality. Any testing would result in negligible findings that would be within the accepted levels of CO.

### **PAC member comments included:**

- ▶ Does the 125th Avenue Extension design or a deeper excavation make a difference? (Team response: Depth of excavation might minimally affect air flow, but would not result in noticeable air quality degradation. If the design was similar to I-405 in downtown Portland, with similar volumes of cars then there would be an impact. However, these designs are not depressed deeply enough to worsen air quality.)
- ▶ Do we need to perform an intersection “hot spots” analysis? (Team response: No. EPA guidelines recommend doing only intersections with a level of service D or less. The beginning and ending of the projects are estimated to perform at a level of service C.)
- ▶ Do trees and vegetation help air quality? (Team response: There is inadequate area to allow enough trees or vegetation to enhance air quality.)
- ▶ Does the type of vehicle affect air quality? (Team response: Yes. Trucks will more adversely effect air quality than cars. However, the 125th Extension is not a designated truck route.)
- ▶ If cars are stacked back a long distance from a signalized intersection on 125th Avenue Extension, will excessive levels of CO occur? (Team response: Not likely in this case because the length of time during peak hours is of short duration.)
- ▶ It seems like we need the air quality specialist for two reasons. The first is to assure that the project is in regulatory compliance (which this project is) and the second is to determine the best design that would minimize impacts to the adjacent homes. What type of profile and cross section design best minimizes the air quality impacts to the adjacent homes? (Team response: There will be minimal impacts regardless of the types of profiles and cross sections)

chosen. The air quality impact may be the difference between background and barely measurable above background.)

- ▶ The wider the roadway cross section, the more dispersion, and the faster the vehicle speeds are, the more dispersion? Is this true? (Team response: Yes. But in this case any changes in air quality are negligible.)
- ▶ What causes the greatest affect on air quality? (Team response: Traffic volumes usually have the largest affect on air quality. Also, the better traffic flows, the better it is for air quality.)
- ▶ Would a lower posted speed on 125th Avenue Extension create higher CO levels in the area? (Team response: It is possible but the air quality impacts probably will be imperceptible.)
- ▶ What would you consider to be the biggest impact on this project? (Team response: Noise.)
- ▶ Will sound walls degrade air quality for nearby residents? (Team response: It won't make any difference.)

**PAC RECOMMENDATION:** PAC members unanimously recommended against proceeding with a Phase II (intersection hot spots analysis) of the air quality scope of work. Since the air quality specialist was certain that a hot spot analysis would result in acceptable levels of CO, it was felt that this money could be better spent in a more productive manner.

### **III. NOISE STUDY PRESENTATION:**

Michael Minor, a noise specialist with Michael Minor & Associates, presented and discussed noise study methodology. This is an environmental noise study, which conforms to the National Environmental Policy Act (NEPA). Transportation projects using federal funding must conform to NEPA regulations, however, it is not certain whether federal funds will be used for this project. The first stage is called the comparative phase. Once a final mitigation decision is made, a mitigation phase will follow. The mitigation phase will finalize the mitigation measure details.

Noise levels are to be estimated using passenger vehicles, medium trucks, and heavy trucks. Passenger vehicle noise levels originate from 2 feet off the ground, medium truck noise levels originate from 4 feet off the ground, and heavy trucks noise levels originate from 8 feet off the ground. A vehicle volume count will be performed at the same time as the noise monitoring. An FHWA noise prediction model will be used. The noise model will be calibrated using the existing noise levels, traffic volumes, and projected traffic volumes. This project will have areas that will exceed the impact criteria.

There are two noise impact criteria to consider when determining necessary mitigation for this project. The first is noise levels exceeding 65 decibels (dBA). FHWA considers a noise impact to occur when levels approach or exceed 67 decibels. However, ODOT considers a noise impact to occur if it is within 2 dBA lower than the FHWA criteria. Therefore, 65 dBA is the impact criteria used for this project. The noise levels are projected to be a worst case scenario; during the peak-hour traffic period, at the exterior of a residence, and for a one hour period. The second impact criteria is an increase of 10 dBA or more during the peak hour period. Monitoring locations are 5 to 6 feet away from the sidewalk and five feet off the ground. The model is precise enough to predict noise level differences between a depressed or even a raised roadway. A sloping factor for the slope of the roadway is also included as input factors in the model.

A concrete noise wall is usually the most cost-effective mitigation measure. Currently, the cost of a concrete noise wall is approximately \$15.50 per square foot. Preliminary background noise level monitoring locations were discussed. The preliminary study indicates that almost all of the adjacent properties will exceed 65 dBA. It is expected that extensive noise walls will be needed with this project. Levels will also rise more than 10 dBA for many residences and are expected to be mitigated with sound walls. Computer modeling will occur over the next couple of weeks. Noise levels will be predicted for 35, 40, and 45 mph vehicle speeds, and the cross sections will be evaluated individually. A draft report will be presented and discussed at the February 10, 1998 PAC meeting.

**PAC member comments included:**

- ▶ Will sound walls mitigate for noise level increases on the second level of homes? (Team response: FHWA does not require mitigation for the second floor of two-story houses. Also, it is extremely rare and frowned upon by FHWA to retrofit homes to reduce noise levels on the second floor. Typically night time noise levels drop significantly.)
- ▶ How much does a gap in a wall affect noise levels? We may want pedestrian and bike access at key points. (Team response: Noise levels significantly increase if there are any breaks in the wall. However, noise walls can be overlapped or wrapped around corners at intersections.)
- ▶ What is the difference in sound levels between 30 and 35 mph? (Team response: There is no discernible difference. However, there seems to be a 1 or 2 decibel increase for every 5 mph greater than 35 mph.)
- ▶ Is there a difference in effectiveness between concrete and masonry sound walls? (Team response: Not for noise mitigation. However, masonry sound walls cost more).
- ▶ What height will these sound walls be? (Team response: We will not be sure until after the computer modeling and evaluation is completed. Sound walls are normally a minimum of 6 feet in height. If the road is level with homes then they would be in the 8-10 foot range. Also, sound walls cannot exceed \$20,000 per property benefitted, or they are not considered cost effective and won't be built. This maximum amount appears sufficient for properties along the project.)
- ▶ Would a foot higher than recommended by the model make a significant difference? (Team response: No, it wouldn't.)
- ▶ Does the pavement type affect noise levels? (Team response: It is not expected to in this situation.)
- ▶ Do studded tires make a difference? (Team response: It might. The model does not differentiate between tire types.)
- ▶ Is it better to keep the centerline down the middle of the right of way, or offset the centerline? (Team response: In this situation it would most likely be better to keep the centerline in the middle of the right of way. This will be verified by the model.)
- ▶ Who will do a cost estimate for the cost of the sound wall? (Team response: A cost estimate will be done in the noise study report and will compare various costs on noise mitigation measures. Also, the report will include a cost-effectiveness ratio for noise mitigation. The cost-effectiveness ratio is calculated by the number of homes that will benefit from the mitigation measures, divided by the cost of the noise mitigation. This project is expected to meet this cost-effectiveness ratio.)

- ▶ The sound near Berryhill Court will increase 11 or 12 decibels. This is a significant difference.
- ▶ If people don't want sound walls will it prevent the road from being built? (Team response: No. Even if they don't want sound walls, the road can be completed.)
- ▶ If the city doesn't want to build sound walls as a part of this project, and the road be built anyway? (Team response: Hypothetically the city could build the project with or without sound walls since there are no city standards governing them. However, the city typically follows the FHWA and ODOT sound wall regulations for determining their need and location.)
- ▶ Is an echo effect created with sound bouncing off the noise walls? (Team response: Yes, there will be some noise bouncing off of the walls. This is included and allowed for in the model.)
- ▶ Where will the walls be located? Near the road? Near the houses? (Team response: They can be located in either place. That will be addressed in the noise report. If the road is ever widened it might be best to locate them at the property line.)
- ▶ Can trees absorb a lot of noise? (Team response: The right of way width is not great enough for trees to have any affect on noise.)
- ▶ Do you think that modes of transportation will change significantly between now and 2015, resulting in decreasing noise levels? (Team response: It is not expected. Even with electric cars most of the noise comes from tires.)
- ▶ Five foot walls would look a lot better than 8-foot walls. If the road is depressed 3 feet in an area where 8-foot walls had originally been specified, would they then only need to be 5-foot tall? (Team response: Generally yes.)

**Green Lane Alignment:** The committee had considerable discussion concerning the viability of a Green Lane alignment to Hall Blvd. It will be included in the model. The majority of the committee felt that it will place too much additional traffic on the Ridgecrest neighborhood if Cresmoor is connected. There would be no advantage to closing off Cresmoor at Hall Blvd. if this is the intersection location. It would be better at that point to use the original alignment because of fewer impacts to adjacent properties. A recommendation regarding this alignment will be made after the Vose NAC representative (Byron DeLuca) and Joel Howie discuss this issue with the NAC at their upcoming meeting. Numerous residents have called the city already complaining about too much speeding, cut through traffic in the Ridgecrest neighborhood. It also would necessitate a comprehensive plan amendment to change the connection location to Cresmoor. The issue will be discussed again at a later meeting.

#### **IV. MISCELLANEOUS PROJECT BUSINESS:**

**Summary Adopted:** The summary from PAC Meeting #3 was adopted with several revisions that included: misspellings on Hyland Way and Scholl's Ferry; adding directions to Barberry and Davies (east or west) when referring to their connection to 125th Extension; remove the statement on page 3, paragraph 2, line 5 that alludes to a signalized intersection at Bel Air Drive and Denney Road; and delete the first bulleted item at the top of page 5 because it was discussed after the meeting by a limited number of individuals.

**PAC Meetings:** Food will not be allowed at future PAC meetings held at Conestoga Middle School

unless they are held in the Commons. The committee does not want to meet there because it is hard to hear. After discussing several possible meeting locations the committee selected to stay at Conestoga Middle School Library, at 6:30 p.m. without the inclusion of dinner.

**Tri-Met:** A written response is expected soon that will describe Tri-Met's intentions for 125th Avenue.

**V. WHAT'S NEXT?**

The next PAC meeting will be held at 6:30 p.m., in Conestoga Middle School Library. Randy McCourt, DKS, will return to present additional traffic findings, and Michael Minor will present findings from the noise study. A meeting date for March 3, 1998 was tentatively set for another PAC meeting.

**Attendees:**

Jim Persey  
Ed Vilhauer  
Ann Frainey  
Randy Smith  
Milton Missfeldt  
Carl Prenner  
Kathy Burry  
Eric Johansen  
Dan Maks  
Byron DeLuca  
Joel Howie  
Randy Wooley  
Trudy Rippe  
Martha Moore  
Michael Minor

**Handouts:**

Agenda  
Draft PAC #3 Meeting Summary  
Cross Sections A, B, D, & E  
Air Quality Background Information  
Noise Study Information

**Community Members:**

Kent Kacir  
Sharon Hiner  
Cheryl McClure  
Rebecca DeLuca