

**Glencoe Interchange Project
SWG meeting #6**

6:30-9 p.m. Wednesday, August 2
Jessie Mays Community Hall
30955 NW Hillcrest, North Plains

AGENDA

SWG members present:

Paul Coussens (Property owner)
Robin Biden (Hillsboro School District)
Mitch Ward (North Plains Planning Commission) – Alternate
Marie Finegan (Washington County Farm Bureau)
Clark Berry (NW ACT)
Tai Kim (Subway)
Wayne Holm (Oregon Canadian Forest Products)
Rick Dobbs (Washington County Fire District #2) – Alternate
Kat Iverson (Washington County Bicycle Transportation Coalition) – Alternate
Stewart King (North Plains Chamber of Commerce)
Bob Jossy (Jossy Farms)

SWG members absent:

Debbie Raber (City of Hillsboro)
Joe Darby (Stewart Stiles Truck Line)
Nick Kelsay (City of Forest Grove)
Susie Anthony (CPO 8)

Staff present:

Lili Gordon, Tom Braibish, Tim Wilson, Aaron Myton, Steve Harry (ODOT)
Rick Kuehn (CH2M Hill)
Marc Butorac (Kittelson & Associates, Inc.)
Kristin Hull, Kalin Schmoldt (Jeanne Lawson Associates)

Meeting purpose:

- Review evaluation of remaining alternatives
- Recommend alternatives for additional evaluation and public review

Welcome and introductions

Review agenda - Kristin called the meeting to order. She announced that tonight the SWG will review the next set of concepts, hear about what the PDT has discussed, and look at the remaining eight options. She noted that the meeting was longer tonight to allow for more discussion.

Adopt meeting 5 summary – The meeting 5 summary was approved with no comments.

Open house - Kristin noted that there will be an open house on August 17 where the public will be asked about what options they prefer. Kristin added that the group has thus far talked about what “works,” and now it is about what works better, and subsequent meetings will be about refining what works the best. A final recommendation will be determined on August 23.

Local access meetings - Kristin also noted that she, Lili, and Tom are beginning to meet with property owners in the project area to talk about access issues, and added that the SWG will soon be talking about how access issues in the interchange area.

A SWG member suggested employing a “quorum” as a decision making tool if necessary. Kristin clarified that the group had a “quorum” of 50% to make decisions and had agreed on a threshold of 2/3 of those present in support of an option for it to be a group recommendation. She said the group could use this tool if they could not reach consensus, but that reaching consensus was important because recommendations that everyone “can live with” are stronger advice to the PDT.

Initial screening decision

Rick briefly talked about the concepts listed in the handout under table 3b-1.

Concept #3 – Rick noted that the PDT had reviewed the concept and forwarded it to the SWG, but the SWG recommended dropping it since it provided a loop ramp in a direction with low demand. The PDT agreed with the SWG and dropped it from further consideration.

Rick noted that the SWG was split over concepts 9, 13, and 14b and asked that the PDT look at those concepts again. The PDT opted to drop all three.

Concept #9 – The flyover concept was dropped. Rick summarized that the concept was out of character with the community, would have a higher estimated cost (around \$40 million), would increase impacts to adjacent property owners, and could create substantial noise impacts. He noted that the concept would require either two separate ramps or a ramp that splits. He said this would move the westbound off-ramp far to the east and would create spacing issues with the Jackson School Road interchange. There would also be impacts to EFU lands. On the positive side, Rick noted that the option would allow free-flow movement from Hwy 26 westbound to Glencoe Road southbound, and would also reduce the lane needs on the Glencoe over crossing structure from 5 to 4 lanes.

A SWG member suggested that the section of the table which read “Dropped per SWG recommendation” should be changed to reflect that the SWG did not reach consensus either way and agreed to accept the PDT decision. Kristin said it would be changed.

Concept #13 – Rick described the roundabout option as likely to confuse drivers and make future expansion at the interchange difficult or impossible. He also noted that a roundabout would possibly be difficult to construct while the keeping the interchange open to traffic. With a roundabout design, he said that the vertical alignment of Glencoe would have to extend further north and south because the roundabout needs to be level all the way across the interchange. He added that large trucks may find it difficult to navigate and have

difficulty interacting with other vehicles in the roundabout. Finally, he added that it does not maintain as much reserve capacity as other options after 20 years.

Concept #14b – Bringing Highway 26 over Glencoe road was dropped primarily because of the potentially high cost, the large retaining walls necessary, the increased noise, and the impacts to businesses. The PDT also found that the option didn't provide any operational benefit over the alternatives where Glencoe passes over the highway.

Concept #22 – The concept includes a tight diamond at Glencoe and a partial interchange at Gordon which could divert some traffic off of Glencoe and into the west end of North Plains. Rick noted that the concept would impact EFU lands and the resulting interchange spacing to Glencoe and Dersham would be too close. Rick also noted that supplemental improvements might be necessary on Gordon road if an interchange were to be built there. Rick said that the concept would violate many accepted management policies. The concept could create access management issues on Gordon Road. The concept also appeared to provide no real benefits for travelers going east.

Evaluation of interchange designs

Method/process - Marc discussed briefly the progression to eight final concepts. He said that traffic operations is usually used to screen options, but the traffic analysis did not show significant differences. Consequently, the PDT had to look at other factors like the cost of bridges, ramps, and for right-of-way.

Marc said that they found that almost all of the options could be designed to work from a traffic operations perspective. He noted that the roundabout concept had less capacity than the diamond and loop concepts, and would require a wider overpass to accommodate side by side left turns.

A SWG member asked for the difference between rebuilding the interchange as it is and the tight diamond. Marc responded that a tight diamond design would bring the ramp terminals even closer together.

Marc described how the PDT also looked at construction costs. By looking at recent projects in the region, they were able to approximate the costs of each option and found a range of \$18 to \$37 million. Concept 14b and 9 had the highest costs, with loop ramp designs costing about \$10 million more than diamond interchanges. Compressed and tight diamonds were found to have the lowest estimated construction costs.

Marc talked about right-of-way acquisitions and impacts to business and structures. The PDT compared the number of properties and structures which would be impacted by each design. Loop ramps create the largest footprint and the greatest number of right-of-way impacts. Marc noted that the numbers for Concept #22 do not include right-of-way costs or structure impacts for the partial interchange at Gordon road.

Marc then showed the sum of right-of-way costs plus construction costs, and noted that the numbers were based on similar takes which have occurred over the past several years. The diamond designs performed the best.

PDT recommendation – From the preceding criteria, the PDT recommended three concepts for further study: 11c, 12, and 14a.

Concept #11c – The concept would build the ramp terminals at roughly the same points, but would have longer on/off ramps and slightly different ramp geometry.

Marc noted that this option might require six lanes on the Glencoe structure. This was assumed in the cost estimate.

Concept #12 – The Single Point Urban Interchange (SPUI) would be unique in that it would be located atop the interchange instead of beneath it like other examples in Salem and Vancouver. This option necessitates a wide and flat over crossing area. Marc noted that the SPUI would need only one signal, and would create fewer north/south delays.

A SWG member asked whether the SPUI would be confusing to drivers. Marc said that in his experience people have adapted quickly. He said that the accident history is similar to other configurations because the intersection only has one signal. Marc added it does cost about \$12 million more than the diamond options.

A SWG member noted that SPUIs are difficult for trucks to negotiate.

A SWG member mentioned that the extended ramps would require raising Highland Court. Rick responded that the difference in elevation was manageable. Tom added that while the road needs to be flat, it doesn't necessarily have to be horizontal. He said that there is some flexibility in how the structure itself is laid out, and Highland Court would not be closed because of the design.

A SWG member asked why the SPUI is still an alternative. Tom pointed out the advantage of having a narrow footprint. Another SWG member asked about the likelihood of this option being selected given budget constraints. Tom responded that there might still be benefits to looking at this option alongside others, allowing for the comparison of pros and cons. Tom agreed that cost is indeed an issue.

A SWG member asked about the safety history of single-point interchanges and whether drivers would be familiar with the concept. Rick noted that he was unaware of any large accident records from his personal experience. He added that the left turns in SPUIs are not sharp, and while they might have a slightly higher number of accidents on average than regular intersections, they are comparable or slightly better than the average for two separate intersections—which they serve to replace. He did note that some can be poorly designed with inadequate sight lines. A SWG member emphasized that as the interchange is part of a major truck route, more data is necessary.

Marc noted that SPUIs might be shown to provide an operational benefit, which he said the PDT would like to explore further.

A SWG member requested a photograph of what a SPUI might look like.

Kristin asked whether the SWG could live with giving the PDT another chance to consider the SPUI further and show to the public at the open house.

A SWG member asked whether the SPUI will require merging from five lanes to two lanes on Glencoe Road. Marc noted that all of the options will require similar merging.

A SWG member asked whether any thought had been given to raising Glencoe Road and lowering Highway 26 and how that might affect Highland Court. Kristin responded that all of the concepts will pose manageable impacts to Highland Court. Tom noted that Highway 26 is already close to the floodplain.

A SWG member asked about whether right turn lanes at the intersection would turn into their own lane. Marc said no.

A SWG member requested that more detailed drawings be brought next time which show distinct lanes.

Concept #14a – The concept has the lowest cost, but increases queuing impacts on Glencoe road. Marc noted that the design will have adequate traffic capacities, though that could require another lane. Rick noted that the concept could be designed to shift queuing to the outside of the overpass. A SWG member said he was pleased with the Jackson School Road interchange design, and that it seemed simple. Marc responded that that interchange is akin to Concept #11c, while this concept is narrower by 50-75ft.

In response to a SWG member's question about providing capacity, Marc noted that all of the concepts will provide about the same capacity, and each will have about the same lifespan.

A SWG member asked about the term "clear zone," which Rick defined as the 1,320 feet from the interchange where access is moderated or restricted.

A SWG member asked how far four lanes would extend on either side of the interchange. Aaron said they don't know yet.

A SWG member asked about how width estimates figure into right-of-way. Marc said that there is a 90 foot minimum. Rick added that the embankments also affect the width of impact.

A SWG member asked whether these were "throw-away overpasses?" Marc indicated that they were designed for a life-span of 50 years. Tom noted that diamond interchanges can be widened, extending their useful life. Marc said that the SPUI can be expanded or retrofitted, but those considerations would increase the cost today. Tom mentioned that although expandability was not part of the evaluation criterion, it was noted.

No one objected to carrying Concept #14a forward for consideration.

SWG recommendation

The other five options (of the eight) were those that the PDT did not think warranted further consideration.

A SWG member asked about the PDT's basic assumptions, the 2030 traffic needs. Tom replied that they have to make design decisions based upon what they know will happen, and a design change cannot be made based on speculation. He said that they had modeled within the existing UGB and considered a scenario which looks at what a fully urbanized North Plains would look like. Rick said that they also used the Washington County model to address outside traffic moving through this interchange. Marc added that the NEPA process requires proceeding according to existing comprehensive plans because they are known and have been adopted. Kristin offered to talk more after the meeting about how the assumptions were made since the group had reviewed this information at an earlier meeting.

Kristin asked the SWG whether they agreed that the five options should be eliminated. The SWG agreed by consensus. Kristin said they would look at the options with the lane drawings on the 17th, and meet again on the 23rd.

Kristin briefly discussed the open house: the first two hours will be a public meeting followed by a presentation at 7:30. The presentation will talk about local access, what that means, and who it affects. Affected parties will be invited to attend.

Public comment

Kelly Stadelman said that she owns property on Glencoe road and was concerned that the options being presented would land lock her property. Kristin noted that they were planning to meet with property owners to talk about such issues, and offered to talk after the meeting about when they could set up a meeting.

A SWG member said that he didn't think he could pick a favorite plan until he has seen all the details. Tom said that the double line drawings will include lanes and approximate widths, though local access options have yet to be worked out. The SWG member requested an aerial and tax-lot overlay. Tom said that these won't be the final plans, but should be close, while and certain elements, such as the vertical geometry, the radius of turns, and widths of lanes will be as correct as possible. This will be the means for evaluating the right-of-way and dealing with access. The drawings will also make it clear which structures will be affected by the interchange itself.

Next steps and close

- Next public meeting:
5:30-7:30 p.m. Thursday, August 17
Jessie Mays Community Hall
(Kristin noted that 5:00 should be 5:30.)
- Next meeting:
7-9 p.m. Wednesday, August 23
Jessie Mays Community Hall