



MEETING MINUTES

Meeting Date: December 6, 2006

Purpose: Fern Valley Interchange Project
Citizen Advisory Committee, Project Development Team
Meeting

Distribution: CAC Members, Project Development Team, Public

From: Sue Casavan, RVCOG

Date Prepared: December 2006

CAC Attendees: Bob Korfhage, Muriel Johnson for Joan Haukom, Dack
Doggett, Pauly Hinesly, Lee Carrau, Harry Page, Lenny
Neimark, Tani Wouters, Mark Gibson, David Lewin, David
Lowry and Madison Taylor

CAC Absent: Terry Helfrich

Project Team Attendees: Jerry Marmon, ODOT Environmental Project Manager
Debbie Timms, ODOT Project Manager
Gary Leaming, ODOT Project information
Brian Sheadel, ODOT Senior Designer
Christina Fera-Thomas, ODOT
Peter Schuytema, ODOT
Susan Landis, ODOT
Nancy Reynolds, URS Project Manager
Vicki Guarino, RVCOG
Sue Casavan, RVCOG

Other Attendees: 41 members of the public signed in (sign-in sheet in file)

PDT Attendees: Jerry Marmon, Brian Sheadel, Christina Fera-Thomas, Peter
Schuytema, ODOT; Jim Wear, Phoenix; Dale Petrasek, Jackson
County; Dan Moore, RVMPO/RVCOG

1. Introductions, Review Agenda, Approve Minutes

Vicki Guarino, RVCOG Facilitator

Guarino began the meeting at 6:36 and explained that this was a joint meeting with the CAC (Citizen's Advisory Committee) and the PDT (Project Development Team). The committee started with introductions and reviewed the agenda for tonight's meeting. She asked committee members to review the CAC and PDT minutes for changes or corrections. Minutes were approved as presented. She said the main focus for tonight's meeting will be an ODOT presentation on a new interchange concept called the Crossing-Diamond Interchange and encouraged all present to provide comment.

2. Project Update

Debbie Timms, ODOT

Debbie T. said the last meeting was two months ago and that ODOT was asked to go back and refine the alternatives, look at bike/ped issues, and come back with 3-D modeling. She said we had an opportunity to see a new interchange type that we thought was important and viable enough that this community should see it, understand how it works, and possibly think about including it as part as one of the options or ask for further studies. She added that Joan Haukom was out on vacation and Muriel Johnson would be sitting in for her.

3. Bike / Pedestrian Sub-Committee Report

Brian Sheadel, ODOT

Brian S. updated the members on the last bike/ped meeting. He said the subcommittee was given information about lane width and standards and were primarily concerned with Highway 99. He showed a cross-section of the travel lanes, sidewalks and bike lanes and explained the individual widths, 79 feet curb to curb. David Lewin asked if speed limits would be the same as present. Brian S. said they would be the same. Jim W. commented that there would be 13 feet more than what was currently there. Brian S. said that sounded about right. Pauly H. asked if it would reduce width of the auto travel lanes and would property be taken on each side. Brian S. said the travel lane width would be the same and yes, it would be 13 feet wider than what is there now.

4. Crossing Diamond Interchange

Brian Sheadel and Peter Schuytema, ODOT

Brian S. introduced a new interchange type. He said the main issues in deciding which interchange type to use at Fern Valley have been the footprint and capacity. The Crossing-Diamond Interchange (CDI) has a smaller footprint with more capacity. He showed a video simulation from Missouri and added that it looked a little different but the concepts, ideas, and principles were the same. He said to notice the barrier in the middle, extensive signing, striping, and glare shields. Brian S. showed a CDI schematic and said the primary difference

between a standard diamond and CDI is how the signals operate. He gave the following example of traffic moving from the east; traffic approaches the crossing signal, directed to the left side of the road, travel over the freeway to the next crossing signal where traffic is put back on the right side of the road. He said this eliminates the troublesome left turns providing the turn onto the freeway. He added that instead of a four-phase signal it is only a two-phase signal with only 2 phases resulting in more green time and less delay.

Dan M. asked how the geometrics were for freight trucks. Brian S. said the turning movement radiuses would be appropriate for an interstate designed vehicle; they can be accommodated and it is not an issue.

Madison T. asked how pedestrians would get across from the north to the south side.

Brian S. responded that the bikes go with traffic and that pedestrians come up on the sidewalk to crossings and islands.

Pauly H. commented that this looked so simple and wondered where it was 6 months or a year ago.

Jim W. asked how the constant free right is dealt with for pedestrians.

Brian S. said those movements were signalized for pedestrians.

Lenny N. wondered if this would require a 4 or 6 lane bridge.

Brian S. said he did not have that information at this time.

Debbie T. added that we are not at the point and if the committees decide they would want us to look at that we need that guidance.

Tani W. asked if they had any idea how it would link up to the east and west at this time.

Brian S. said not tonight.

Why a Crossing-Diamond Interchange (CDI) Now?

- The Crossing-Diamond (CDI) is a new interchange design concept. It is also known as the Diverging Diamond Interchange.
- It is being evaluated in several locations in the in the U.S. Missouri will be constructing a CDI starting in 2007.
- ODOT is now in the process of evaluating how well the CDI could function for I-5 interchange reconstruction projects.

Other Agencies Considering Application

Agency	Considering?	NEPA	Design	Construction	Site Not Suitable
Missouri DOT			◆	(2007)	
New Mexico DOT		◆			
Virginia DOT		◆			
City of Baltimore		◆			

Ministry of Ontario	◆				
Colorado DOT					◆
Ohio DOT					◆

Crossing-Diamond Interchange (CDI)

- Oregon Bridge Delivery Partners is evaluating the CDI concept as part of the Ashland Exit 14 bridge replacement project.
- The CDI has a great deal of benefits over other interchange designs and may provide a good alternative for consideration at the Fern Valley Interchange.
- No apparent fatal flaws of the CDI have been identified based on roadway geometry or traffic.
- Preliminary analysis indicates the CDI would result in higher capacity, lower delays, and potentially lower costs than other alternatives—making the CDI concept viable for consideration.

David Lewin commented that he thought the footprint was a little larger than the SPUI. Brian S. said not necessarily larger and that later in January we will have the actual layouts and we can see. He added that ODOT had spent a lot of time looking for fatal flaws and they had found none.

David Lewin said he had heard there are places in Europe that have something similar in place and Brian responded that it was not quite the same operation as we would have here.

Key Crossing-Diamond Design Elements

- Design eliminates left turn lanes from the crossroad (in this case, Fern Valley Road).
- Vehicles turning left onto the on-ramps only travel through one signal.
- Only through movements occur at cross-over signals.
- Glare shields are installed on the center median to prevent views of headlights in the opposite direction.
- Requires good access management downstream of ramp terminals.
- Pedestrian & bicyclists can be handled on:
 - On the outside edge
 - Down the middle

Jim W. asked if Luman Road would have access management and Brian S. thought the Luman intersection would not be an issue.

Lee C. asked how this design would affect the Bear Lake Estates and Exit 24 Shoppes. Brian S. said he did not think it would affect it at all.

Crossing-Diamond Challenges

- Driver Expectancy – Vehicles travel on the left side of roadway across the structure.
- Design modifications needed to permit direct off-ramp to on-ramp movement (up and over) for excess height vehicles.

Mitigating CDI Challenges

- Driver Expectancy
 - Guiding geometry (how vehicles approach signals)
 - Visual cues (signing, striping, etc.)
 - Barriers to shield views of opposing traffic
- Up and Over Options
 - Design median barrier to allow occasional movements thru ramp terminals (up and over)

Tani W. wanted to know about safety for emergency vehicles and if they would be able to time the signals like regular intersections.

Brian S. said they don't have historical data but conflict points are eliminated on the intersection and they would be able to time the signals.

Madison T. thought the hardest thing would be crossing over into the other lane in the short distance over the freeway and the driver would have to change lanes to go straight.

Brian S. said they would not have to change lanes that the two lanes go all the way through.

Crossing-Diamond Advantages

- Improved Safety
 - Reduced conflict points
 - Up to 50% less crashes over a standard diamond
- Cost-Effective
 - Reduced cost because fewer lanes are needed on the bridge structure
 - Potentially less right-of-way needed
- Sustainability
 - Improved future growth capabilities
 - Design will better accommodate additional or unanticipated growth past the design year
- Improved Mobility
 - Fewer signal phases
 - Less congestion; more efficient

Fern Valley Interchange Comparisons

Peter S. noted that the CDI v/c ratio of 0.43 was calculated with 6 lanes, a 4 lane CDI would have a v/c of 0.62. The average delay per vehicle with 4 lanes would be about 13 seconds.

Topic	6-lane Diamond Interchange with SE Loop	Single Point Urban Interchange	Crossing-Diamond Interchange
Interchange v/c	0.65	0.58	0.43
Average Delay per Vehicle (seconds)	29.1	24.2	10.4
Signals: Number	2	1	2
Signals: Phasing	3 phase	3 phase	2 phase
Future Growth: 2030 volumes +20% (change in v/c)	0.14	0.10	0.09

Topic	6-lane Diamond with SE Loop	Single Point Urban Interchange	Crossing-Diamond Interchange
General ROW impacts	Highest	Moderate	Minimal to Moderate
Access Control Issues	Most	Least	Same as diamond
Potential Conflict Points	40	40	16
Points with Simultaneous Conflicts	6	6	0
Bridge Width	6 lanes	6 lanes	4 or 6 lanes

David Lowry asked if it would be possible to build it with 4 lanes with the ability of extending it to 6 lanes in the future.

Peter S. said he believed that was possible but it has not been explored yet.

CDI Animation Notes

- Animation is not calibrated, so this will only show how the traffic generally flows through the CDI, not the specific operation of any intersection or any roadway segment.
- Animation will show overhead, “helicopter”, and “through the windshield” views.

Dack D. asked if you could change lanes on the bridge and Peter responded, yes.

David Lowry said it looked like it is angled over the freeway and wanted to know if it was possible to keep the current Fern Valley Road alignment.

Peter S. thought that would be possible.

5. Next Steps

Debbie Timms, ODOT

Debbie T. asked members what they thought. Tani W. said she had a lot of questions but she liked it. Debbie T. said she thought the question was how we work with both ends. She said we will come back in January and show the various connections on each side. She added that members will need to look at this along with the other 4 and decide what to do. David Lewin asked if she was thinking of two additional termini, one where the SPUI is and one where the PBA diamond is. Debbie T. responded that she thought we needed to connect it with the 2 options we have for east and the options on the west and come back and present that information. She said the team would bring it back to this committee and see where they want to go.

David Lewin said he would like to see how the CDI diamond would fit into where the SPUI is and where it would fit with the PBA Diamond. Debbie T. clarified that he wanted to see the footprint. David Lewin asked if they could also get some idea of the cost.

Lenny N. wanted to thank everyone for thinking outside the box and presenting this option. He said it should be considered and studied more. Debbie T. added that she thought this could be something the community could work with.

6. Public Comment

Vicki Guarino, RVCOG Facilitator

Ken Hanks thought the CDI looked viable and cost-effective and reduced the impact. He thanked the team for thinking outside the box and pulling through for Phoenix. He said it is a very difficult process and thanked everyone very much.

Al Bordeaux said he liked this idea and he liked the idea of Fern Valley being an underpass. Brian S. reminded him that Fern Valley would be the opposite.

Man from audience said he commended ODOT as the others have done for looking out of the country for alternatives, he thought they had a good idea. One thing he liked was the glare shield for the traffic and wanted them to think about putting signals on the poles next to

the intersection and not only in the center of the street because where Highway 99 and Fern Valley intersect the driver is looking directly into the sun and it is difficult to see.

Wanda Long said she had received an e-mail with a statement at the bottom that she would like to read: “We don’t want our roadways to be scars in our communities we want them to blend in with our surroundings and act as community members.” She thought this was a good statement and said we are getting closer to that.

Glen Archambault thought the big question was what was on each end of this proposal and he had concerns of what it looked like as a driver having a wrong side feel to it. He said he had been to New Orleans and looked at the destruction of roads and infrastructures and what he observed was that the new structures failed terribly. He said the old town is what is surviving and you could see what worked well. He added that if this project will work and Phoenix will work with it then he thought it was a good project.

Albert Reynoso said he heard them mention the City of Ashland was considering this. He wanted to know if ODOT knew where Ashland was in the process and if they had heard from them. He thought ODOT needed to come back with the footprint and show the connections to Highway 99 and North Phoenix Road and that would be a big consideration of what the impact will be.

Vicki Bear wanted the following e-mail in the record for the CAC and PDT: “Dear ODOT folks, We are sitting here at the Workshop and I am e-mailing you directly from the meeting. The Council and Citizens are saying that we are willing to consider changes in the area around 99 and Fern Valley and we would like to see very minimal impacts to the rest of 99. Council has a design that we would like you to look at and model by the next CAC PDT meeting on the 6th of Dec. Could you make any modifications to make the modeling work, in order to preserve the integrity/livability of Phoenix we would be willing to accept decreased V/C ratios and increased queing. Please see fax of design that Jim Wear is sending The Goal is to Maintain HWY 99 as close as possible to the existing width with modification@ intersection, and leaving East Bolz. Can you model this for us with respect to V/c ratios and traffic ques? What would the anticipated life of that intersection be, and what impacts would it have? We would like to see the livability of Phoenix maintained.”

7. Comfort Check

Vicki Guarino, RVCOG Facilitator

Brian Sheadel showed a re-run of the first video of the Crossing-Diamond simulation. Debbie T. said she thought some people were confused, thinking a driver would be really uncomfortable driving on the other side of the road. She thought, as Brian S. pointed out, that because of the barrier, shields, signage, and the lighting the driver would feel like as if it was a one-way road and the cars on the other side would not be highly visible.

Harry Page – Been a long time coming and thank you for coming up with it. I think you should proceed with it. I am ready.

Muriel Johnson – It looks very interesting, I think it would work and I will pass it on to Joan.

Pauly Hinesly – When I first looked at this, I thought it was going under the freeway. It should be interesting to see. I am with Lenny; I would like to see 6 lanes. I do like it.

Mark Gibson – I like it as well, we had an industry presentation earlier this week and I have had a few days to think about it, there are a couple truck issues, it will be interesting to see how it connects.

Dack Doggett – My first impression is that it is smooth, everything looks really smooth going through the intersection and looking forward to looking at the connections. Thank you for the hard work on it, it is nice to see this alternative out there.

David Lewin – I think we just found the silver lining of why we have taken another year with this project.

Bob Korfhage – I thought it went pretty smooth and I tried to visualize myself riding my bicycle in the video and quite frankly I felt safer watching the video than actually riding over the current overpass.

David Lowry – Seems to have strong points, lower costs, faster movement, safer and will last a long time into the future.

Lee Carrau – I saw some real progress and am very pleased with what you have done.

Lenny Neimark – I think it is a terrific possibility, thank you for all your participation.

Tani Wouters – We are no longer internationally challenged. I think it is innovative, a large piece of a puzzle and I really need to see the connections. I appreciate it and thank you.

Madison Taylor – I am really impressed with the innovative design, thanks for looking outside the box and think of all the tourists and project managers coming to look at it.

Dale Petrasek – I like the concept, can't wait to see how the connections work.

Jim Wear – I think we could very proud to be the first one in the state of Oregon to have one.

Dan Moore – I thought I knew a lot about transportation planning and you can always learn something new everyday.

Christina Fera-Thomas – I look forward to looking at the analysis over the next month and see how it comes out.

Peter Schuytema –I am surprised how well this was taken tonight, definitely out of the box, looking at the analysis numbers it is surprising it works that well, I tried to make it fall apart and it does work.

Brian Sheadel –I was glad it was well received also.

Jerry Marmon – Ditto what everyone else said.

8. Agenda Build for Next Meeting

Vicki Guarino, RVCOG Facilitator

Vicki G. asked if there were any other agenda items other than the next steps that members would like to see next month. She said if they think of anything to contact her. Pauly H. said they would like to know a ballpark cost figure for the alternative, if at all possible. Jerry M. said it would be possible to give some relative cost and how it compares to the other ones. David Lewin would like to see the difference between the 4 and 6 lane alignments. Debbie T. added that Brian S. may not get to the 6 lane because of other job demands but would try his best.

9. Adjournment

The meeting was adjourned at 7:55 p.m.

Next meeting: Wednesday, January 3, 2007 from 6:30-8:30 p.m.
Phoenix High School Commons
Phoenix, Oregon