KINO PARKWAY – 22ND STREET INTERSECTION & WIDENING TO TUCSON BOULEVARD

November 13, 2007
Technical Advisory Committee (TAC) Meeting #5
Meeting Summary

A meeting of the TAC was held from 10:00 am -11:10 am on November 13, 2007 at the Public Works building fourth floor conference room. In attendance were members Jim Glock, Brooks Keenan, Carl Latimer, Chris Kaselemis, Deanna Mohr, Don Freeman, J.T. Fey, Jose Carballeira, Rob Soler, Tom Thivener and Vince Catalano. Project staff present included Andy McGovern and Janice Cuaron and consultant team staff Alejandro Angel, Angela Stith, Claudia Perchinelli, Darlene Danely, Dave Dobler, Edie Griffith-Mettey, Matt Kershner, and Jay Van Echo.

1. Welcome and Introductions

Janice Cuaron, project manager welcomed everyone and invited them to introduce themselves and tell of their affiliation. She explained that at this meeting the team would be presenting a revised version of the 22nd Street widening alternative 3 that focuses building the new bridge slightly north of the current bridge's position. The team will also present the traffic modeling for the Kino/22nd St. intersection

2. Summary of October 16, 2007 Meeting

Edie Griffith-Mettey from DMJM Harris, provided an overview of the last meeting. She explained that the team had taken the TAC's concerns and suggestions and revised alternative 3 to incorporate their feedback.

3. Overview of Revised Alternative 3

Edie had the TAC refer to a conceptual drawing handout representing alternative 3A and proceeded to explain the revisions incorporated into alternative 3A.

The first revision is that this alternative still focuses on constructing the new bridge north of the existing bridge but not as far north. Claudia Perchinelli from Structural Grace, explained that the new construction has shifted south and is only two feet north of the current bridge's edge. She described the three phases of bridge construction. Phase one would keep traffic on the existing bridge with two lanes in each direction while building the northern half of the new bridge. Phase two would detour westbound (WB) and eastbound (EB) traffic to the newly constructed northern half of the bridge and still maintain two lanes of traffic in each direction. Phase three would build the southern half of the new bridge thus complete the bridge construction and providing the ultimate lane configuration (3 lanes of traffic in each direction).

One of the TAC member asked why this same type of revised alternative was not made to the southern alternative 2. Jay Van Echo from DMJM Harris responded that it could be but alternative two had a greater impact on Union Pacific Railroad (UPRR) and after a recent meeting with the railroad, they had preferred the northern build alternative.

Edie continued explaining that the next change to the original alternative 3 was adding a connection under 22nd St. to allow traffic to move north and south by extending Campbell Ave. to connect to 21st St. Jay pointed out that this would require some right of way from the UPRR and communications with American Installation and Stainless (AIS). Brooks Keenan from Tucson Department of Transportation (TDOT), asked what the impact to AIS would be. Jay said that it looked like only their parking area would be impacted.

The next change Edie described was the addition of a one-way off ramp for eastbound (EB) 22nd St. traffic to access businesses along 22nd St. this would keep business access as it is today.

The fourth revision was to provide a cul-de-sac at Wilson. There already exists one at Warwick Vista and the neighborhood had requested an additional one at Wilson.

Next Edie explained the intersection of Plumer and 22nd would remain as is with the right in and right out only turning movements at Plumer and 22nd St. Left turn access would be eliminated. This matches the existing condition.

The next revision is the addition of a trap lane for EB 22nd St.. This trap lane is an extension of the EB ramp off Barraza Aviation Pkwy, and allows sufficient room for vehicles to merge onto 22nd St.. If the traffic does not merge over to 22nd St., it will be forced to turn right at Tucson Blvd. The trap lane configuration is necessary because the required weaving distance plus the required taper distance for a lane drop would force the improvements beyond Tucson Blvd. The trap lane will provide over 800ft. to merge into EB 22nd St. traffic. A bike lane will be provided between the trap lane and the outside travel lane on 22nd St. Alejandro Angel from PSOMAS pointed out that this is short-term because there will be an interchange at Barraza-Aviation & 22nd St. that will be designed to allow for the same turning movement that the EB ramp currently provides.

Brooks asked what happens with the bike lane at the start of the trap lane. Jay answered that it would most likely be a "blue" lane and would be between the eastbound 22nd St. traffic and merging trap lane traffic.

Vince Catalano from TDOT, suggested that a hawk signal may be appropriate at the crosswalks on the ramp east of Plumer to provide a safe pedestrian crossing to the sidewalk on the bridge and bicyclists concerned with traffic could use it as well.

Assistant Chief Ridings, a TAC representative for the Tucson Fire Department, stated that he liked the Campbell Ave. extension but wondered why Warren needed to remain open to 22nd St. access. Deanna Mohr representing the United Postal Service said that her vehicles use Warren to return to the post office.

Carl Latimer from Kalill Bottling Co. asked how many businesses would be affected by alternative 3A. Edie said that the UA warehouse would be and it may be tight for the Walsh Bros. It is too soon to say. Once the designs are more detailed we will know more, but that won't be for a while.

Tom Thivener from TDOT asked the team to look into connections for bikes to access Aviation Pkwy.

Janice asked the TAC if they were happy with the recommended alternative 3A and would approve it going forward to the Citizens Advisory Committee. The TAC gave an unanimous approval.

4. Intersection Alternatives
Edie announced that next year the TAC would start focusing again on the intersection alternatives. To refresh everyone, she explained that there was a Tight Diamond, Single Point Urban Interchange (SPUI) and Partial Clover Leaf. Jay noted that the approved 22nd St. widening alternative would be combined with the intersection alternative.

Edie explained that the Tight Diamond design was similar to those along I-10. The SPUI has better signal phasing and is tighter so doesn't impact land use as much. It is similar to the Kino/Barraza overpass single signal. The third alternative, the Partial Clover Leaf design was initially developed in the 1980's and therefore the City purchased the surrounding land for that concept and {the existing expansion of the Tucson Water facilities} (I don't think that Tucson Water was planning on using this area until recently). Edie also noted that the connections to ramps shown on the three alternatives are just for ideas and can be applied to any of the alternatives. They will be discussed in detail at next year's TAC meetings.

A TAC member asked what the current traffic volumes are. Alejandro said that both Kino and 22nd St. are similar, about 40,000 vehicles a day.

Another TAC member asked why Kino was designed as a throughway and not 22nd St. Jay replied that there were several reasons. The first is that Kino is not an arterial – it's a parkway, the second is that Kino at Barraza is elevated; the third reason is that the language of the Pima County Bond project saying that Kino will be the overpass, and the final reason is that Kino is access controlled.

5. Traffic Operations of Kino/22nd St. Intersection
Next Alejandro showed traffic simulations using 2030 traffic conditions with 60,000 thousand vehicles on 22nd St. and 70,000 on Kino.

He pointed out that the diamond has two signals at the ramps, which would be closer to Cherry, precluding signalization at that location. The ramps have connections to local streets. The RTA calls out a future SPUI for Barraza Aviation and 22nd St. This intersection configuration allows for left turns from Aviation in both directions, but no left turns from 22nd St. onto Aviation. At Cherry and 22nd all left turns would be prohibited, except for the westbound direction. Traffic waiting for a westbound left turn backs up at Cherry Ave. and interferes with the proposed interchange at 22nd and Aviation. The traffic also backs up at the ramp connecting USPS and therefore blocking Cherry north and southbound traffic. He also explained that there could be an issue of

spacing between the two interchanges on Kino so we may need to eliminate the northbound Kino access onto Aviation.

The next simulation was the SPUI. It has a similar layout to the diamond but is a single signal so easier to set timing. There is a half signal at Cherry for eastbound 22nd Street traffic and WB left turns onto Cherry. The intersection configuration currently has connections to allow for NB and SB through movements on Kino so is less efficient than a traditional SPUI would be. The simulation shows queues on eastbound 22nd St.

Jim Glock the Director of Transportation asked if the team took into account the redistribution of traffic volumes as a result of the EB left turn prohibition at Cherry. Alejandro said yes and traffic was reallocated to reflect the new traffic patterns.

Last, Alejandro presented a simulation of the Clover Leaf alternative. He said that southbound Kino to eastbound 22nd St. will need to go south then left and right on 22nd St. this alternative provides better access at Highland, which has been communicated as a preference by some businesses in the area. It provides greater traffic storage and if traffic is going west on 22nd St. to the post office would use the NB Kino on ramp and a small underpass to get to the post office. Larger trucks will also be able to make a right turn at Cherry and then use the connection under the 22nd St. bridge to get to the post office.

Vince noted that the cloverleaf is a simpler option for pedestrians and bicyclists. Matt from DMJM Harris stated that the ramps are designed for speeds of 25mph. Alejandro agreed that the team still needed to think about access and connections for pedestrians and bicyclists on Kino that want to access 22nd St.

6. Adjourn

Janice thanked everyone for attending and said that the TAC will meet again early next year to go through another matrix exercise on the Kino/22nd St. intersection.

Vince asked if next time, the TAC could see how the modeling of the alternatives will handle bikes and pedestrians. Alejandro said that could be done.

Janice adjourned the meeting at 11:10 am.