



## **Technical Advisory Committee Meeting**

### **Harbor Bridge Replacement Project Improvements to US 181 at the Harbor Bridge over the Corpus Christi Ship Channel**

**June 21, 2012 – 2:30 – 4:30 pm**

**Oveal Williams Activity Center, 1414 Martin Luther King Drive, Corpus Christi, TX**

#### **Meeting Summary**

##### **Display Items**

1. Land Use Maps on an aerial photo background showing land use information and preliminary right of way lines for four reasonable alternatives.
2. The Project Location Map showing each of the four reasonable alternatives.

##### **Welcome and introductions**

Victor Vourcos, TxDOT project manager for the Harbor Bridge Project, opened the TAC meeting and welcomed participants and asked each member to introduce themselves. He introduced the project team and then introduced the meeting facilitator, Susan Springer.

Ms. Springer reviewed the TAC mission (accepted by the TAC at the January 2012 meeting) and meeting ground rules. She reiterated that the meeting was intended to be a conversation rather than a presentation, and that TxDOT and the Federal Highway Administration (FHWA) consider the TAC to be an important link with the community and conduit for information exchange. TAC members voiced no objections to the mission and ground rules of the committee. Ms. Springer then introduced Mr. Vourcos, who began the technical presentation.

## **Review/group Discussion of Project Need and Purpose**

Mr. Vourcos briefly reviewed the project background especially for new TAC members. He explained the project history and quick overview of the current status of the project.

Mr. Vourcos then explained to the group that the project Purpose and Need has been refined since the last meeting to reflect input from the public as well as FHWA and TxDOT. Mr. Vourcos explained that the project Purpose and Need explains why expenditure of funds is necessary and why impacts are acceptable based on the project's importance. The Purpose and Need is used to evaluate possible alternatives and ultimately make a selection of a preferred alternative.

The two needs for the project are:

- To maintain long-term operation of the Harbor Bridge
- To minimize safety risks caused by design deficiencies.

The first need is related to the fact that the Harbor Bridge is prone to corrosion (as a steel bridge over salt water) and is experiencing continued deterioration. The bridge is fracture critical, which means that the key structural elements supporting the bridge are not themselves supported by additional and redundant elements. Although this does not mean that the bridge is inherently unsafe, there is no second line of protection should one of these elements fail. Maintaining the Harbor Bridge over the next 30-45 years will require not only millions of dollars but also periods of time when the bridge would have to be closed to traffic.

The other need addresses the safety risks caused by design deficiencies on the bridge and its approaches. The current bridge does not meet current FHWA and TxDOT roadway and bridge design standards because of its lack of shoulders, steep grades on the bridge and sharp "s" curves on the north and south ends of the bridge, inadequate ramp lengths for acceleration/deceleration, all of which serve to reduce capacity and efficiency during a hurricane evacuation.

In addition to these project needs, Mr. Vourcos explained that there are three project objectives that will be used to evaluate project alternatives. These objectives have a lower level of importance during the evaluation process:

- Provide transportation infrastructure to expand economic opportunity
- Consider connection between the bridge/US 181 and local roadways
- Consider ability to meet future traffic demands on US 181.

TAC members asked:

- When was the bridge built? Response - It opened in 1959;
- What is the current standard for bridge grades? Response – There is a 5% grade on the approach to existing bridge. Any new bridge would have a 4% grade on the approaches to the bridge.
- What traffic capacity was the existing bridge designed for? Response - The design traffic volume is unknown but the original bridge was constructed with two lanes in each direction with shoulders. Several years later when traffic volumes warranted it, a third lane was added in each direction.

### **Review/group discussion of project alternatives analysis**

Mr. Vourcos next summarized the process of how TxDOT has analyzed the six possible alternatives for the bridge (in addition to the no-build alternative). As of the January, 2012 TAC meeting, six alternatives were being considered: the red, orange, green, blue, west, and tunnel. Two of these alternatives (west and tunnel) had been suggested during the public scoping process that took place last summer and fall.

During the alternatives screening process, TxDOT compared each of these alternatives to the two project needs, which resulted in two of the alternatives being dropped from further consideration. The Blue and Tunnel Alternatives were both eliminated because they do not meet the safety need for the project. In both cases, they do not meet TxDOT's standard for appropriate hurricane evacuation routes for the Corpus Christi area. In the case of the tunnel alternative, redundant pumping systems would be

needed in the event of flooding during a storm surge. The Blue Alternative would result in another causeway that could become impassable in the event of a storm surge.

TAC members had the following questions:

- One TAC member asked if all of the remaining four alternatives would be environmentally cleared. Response: All four alternatives would be carried through the environmental clearance process as part of the draft Environmental Impact Statement (EIS). It is anticipated that a preferred alternative will be identified in the draft EIS.

### **Review/group discussion of Harbor Bridge Project status**

Mr. Eddie Sutherland told the group that the scoping process for the Harbor Bridge project is now complete. The environmental analysis portion of the project is underway. Data is now being collected for potential impacts to land use, socioeconomics of the project area, neighborhoods, air quality, hazardous materials, historic resources, parks and recreational areas, and major existing or planned developments.

### **Review/group discussion of community impact analysis activities**

Mr. Sutherland reviewed the community impact assessment that will be taking place beginning later this summer. This assessment looks at the effect of the proposed project on local communities and is part of the EIS analysis process. Planned activities for this assessment include an outreach plan for reaching as many community groups and individuals as possible, evaluation of census and other socioeconomic data, questionnaires, and small group “listening sessions” in various neighborhood locations.

### **Questions and Comments from TAC members:**

- One member asked, how does TxDOT determine neighborhood boundaries for this assessment? Response: The consultant team will ask community members where they live, shop and work, and where they think their neighborhood boundaries are located.

- Another member suggested a robust awareness campaign to let them know about the project website. They thought that TxDOT almost needs an Awareness Campaign to educate people on the project; TV, radio, billboards; go to where people are and talk to them; reach out to community leaders.
- Another member stated that other groups have done surveys (Local Emergency Planning Committee; Texas A&M University Corpus Christi); use the Convention and Visitor's Bureau as a resource.
- One TAC member requested that TxDOT communicate with the public to let them know that the existing bridge is a "disaster waiting to happen."
- Another member suggested that TxDOT make use of the City's list of neighborhood organizations for this effort.
- Are there factors with alternatives that TxDOT/FHWA need to consider such as safety, homeland security, etc.)? It may help TxDOT/FHWA to coordinate with local industry representatives and organizations.

### **Group discussion of public outreach activities**

Ms. Nancy Gates reviewed public involvement activities taking place on the Harbor Bridge project and urged the TAC members to share information with the community and encourage them to get involved in the project. The next public meeting is anticipated to be held in the late fall of 2012 or early winter of 2013. The Harbor Bridge website will be updated continuously and a newsletter will be coming out this summer. Any ideas about reaching out to the public are welcomed.

- Comment: Keith Arnold - People will want to know what happens with the existing US 181 approaches and the bridge.
- Question: Tom Niskala – Is there some mitigation proposed for the existing barrier created by I-37/US 181 (freeway and approaches to the bridge) and the effect on community cohesion?

Response: There has been coordination with the City of Corpus Christi about removing the approach (on fill) to the bridge and part of I-37 and creating a boulevard type of facility as an entrance to central business district and the museum/entertainment district.

## **Public comments**

- Question: How will the bridge affect school district properties?  
Response: The consultant team is starting to study the affected environment in the project area such as neighborhoods and School districts. This will include coordination with school district representatives.
- Question: When will the public get a chance to look at possible bridge designs?  
Response: A bridge design guideline workshop will be held in 2013.
- Question: Will you be considering the look of the bridge from the various neighborhoods?  
Response: Yes, visualizations of the facility from the neighborhood perspective are being developed.

## **A group discussion of the four build alternatives yielded the following comments on the alternatives from TAC members:**

### **West:**

- Question: Could the West Alternative have a lower air draft clearance over the ship channel since the alignment is about a mile up the Ship Channel?  
Response: Air draft clearance would still be an issue since there is still a substantial amount of ship channel to the west of where the West Alternative would cross the Ship Channel. Height and location analyses are needed to see if the west alternative would allow more use of the main entrance to the Port without raising the bridge height.
- Comment from the Port: Cruise ship companies have not committed to the Port of Corpus Christi because of the current 138' air draft clearance. The Port is currently studying the potential for cruise ships to call at the Port. The minimum standard height of the bridge is currently 138 ft and the desired height is 205 ft. The cruise industry says that only 20-30% of their current fleet can fit below a 138-ft bridge.

- Comment: The West Alternative's proximity to refineries could be a concern for Dept. of Homeland Security; also would have wetland impacts.  
Response: Both issues will be coordinated and addressed in the DEIS.
- Comment: There may be safety issues associated with the west alternative coming into the Crosstown Expressway.
- Comment: On the north end of the west alternative are some environmentally sensitive areas (wetlands in Rincon Channel).
- Comment: Mr. David Krebs (Portland Mayor) – thinks the West Alternative has safety problems.

**Green:**

- Question: What is the Port's perspective on the effect on industry?  
Response: (By Port) Green Alternative affects existing development and some planned development.
- Question: Does the Green Alternative solve the slope issues?  
Response: Yes. It would reduce the grade from the current 5% to 4%.  
To get to desired bridge height, you have to start elevating immediately.
- Question: Does the green follow the same alignment as the current bridge and will it be within the existing right of way?  
Response: It would be parallel and to the west. The curvature would have to be addressed. It would be able to use some of the existing right of way but additional right of way would be required.
- Question: Would the green eliminate the blind entrance ramp on the south side?  
Response: Yes, the new bridge would have to be built to current design standards.
- Comment: The green is the only one of the four alternatives that would not benefit downtown Corpus Christi and invigorate the local neighborhoods by eliminating the existing barriers.
- Comment: Barry Wolfson - Bridge is a critical landmark. Some of the alternatives are pushing it away from the entrance to the Port. Would this affect the landmark

quality? Response: This will need to be part of the aesthetic analysis in the DEIS.

**Orange:**

- Question: What is the proposed elevation of the bridge?

Response: The design process will determine the elevation, working with the Port, the City and the Counties.

- Question: What are the effects on existing development (e.g., Whataburger Field)?

Response: We're very aware of these potential issues and have already been studying things such as the shadow effects of a new bridge on the Whataburger Field.

- Question: What heights are being considered for the new bridge?

Response: The height will be determined by the environmental process. (See responses from the Port under the Green alternative.)

**Red:**

- Comment: The MPO representative stated that the Red Alternative is most effective from a regional mobility perspective. The Port representative stated that right-of-way would be easier to acquire from them on the Red Alternative and might allow widening at the mouth of the Ship Channel for their future improvements.
- Question: Is the Red Alternative too far back to maintain the "landmark" status?  
Response: TxDOT is planning to prepare photo-simulations and a "signature structure" is anticipated for any new bridge.
- Comment: The Red Alternative is favored by the Port because it provides the best connection to the existing system. It would allow the Port to remove the narrow area at the mouth of the Ship Channel.

**Additional Comments from the Members:**

- Comment: City representative stated that the old alignment can be removed for all alternatives except the Green.

Response: The area can be used for tourism and would allow direct access to Convention Center and Bayfront Science Park with a boulevard design.

- Comment: There are traffic problems when there are multiple events downtown.

- Question: How long will it take to construct a new bridge?

Response: TxDOT is anticipating that it will take four years to build.

- Question: What percent of jobs in Corpus Christi are related to the Port activities?

Response: The Port representative stated that there are approximately 5,000 jobs directly related to the Port and approximately 20,000 total jobs in the Corpus Christi area.

- Question: When will engineering drawings be available?

Response: It is anticipated that they will be available in the fall of 2012.

- Question: Is there a list of business displacements?

- Response: Not yet, at this time the estimated additional right-of-way is very preliminary.

- Q: What are the cost differentials and heights for the four alternatives?

Response: We don't have those numbers yet but should be available once the preliminary schematics are available later this year.

### **Meeting summary and plans for next meeting**

The next TAC meeting will be held in the fall of 2012. TAC members requested additional information on the alternatives (along with ROW) and that information will be shared at this meeting.