Cortaro Farms Road, Camino de Oeste to Thornydale Road
Community Advisory Committee
Meeting Summary
March 13, 2008

I. WELCOME & INTRODUCTIONS
Kevin Thornton, Psomas Project Manager, welcomed and thanked everyone for coming to the CAC meeting. Kevin Thornton is the new project manager for this project, since Joe Vaskovic has left Psomas. Project team members and CAC members introduced themselves. Project team members in attendance included: Bob Roggenthen, PCDOT; Rick Ellis, PCDOT; Dewayne Tripp, PCDOT/Psomas; Carol Brichia, PCDOT; Kevin Thornton, Psomas; Alejandro Angel, Psomas; Scott King, Psomas; Lori Woods, RECON; Colby Henley, RECON; Scott Stapp, HDR; and Carol Oaks, Kaneen Advertising & Public Relations.

II. ATTENDANCE

CAC Members:
David G. Philips
Dan Brader
Robert S. Crossland
Carolyn Pataconi for
Daniel Pataconi

Leonard Bike
Sy Lakosky
David Gittings

Members Absent:
Greg Ogden
Sandra Elliott
James V. Barnhart
Maeve O’Brien

Public Attendees:
Bruce Williams
HP Friedrichs
Lynn Friedrichs

Gene Lueth
Karen Henley
Nancy Nelson

III. TRAFFIC DISCUSSION – ALEJANDRO ANGEL
Alejandro Angel gave an overview of the differences in the projected traffic volumes from the 2002 traffic report and the new projections according to the Pima Association of Governments (PAG) traffic model.

Alejandro discussed the original traffic report completed in 2002 as follows:
- The original report assumes a 4% per year growth rate without a reduction in traffic for the Twin Peaks Traffic Interchange.

Since the year 2002, several projects have been added near the I-10/Cortaro interchange that change the assumptions made at that time. Alejandro then discussed the reasoning behind the new projections as follows:
- Traffic increased from approximately 17,000 to 18,000 average daily traffic (ADT) in the year 2000, to approximately 19,400 ADT in the year 2006. This represents a 2% growth rate per year.
- Over that same period, according to the Arizona Department of Economic Security (DES), Pima County increased in population by 2.5%.
- Population growth is expected to slow down and only increase by 1.6% over the next 20 years.
- Looking at the current land use and population in the area, most of the land that can be developed has already been developed.
- Most of the undeveloped areas are preserved under the Sonoran Desert Conservation Plan.
- The I-10/Twin Peaks Interchange project is expected to be under construction at the end of the year and will have a grade separation at the railroad tracks. This will attract some of the Cortaro Farms Road traffic.
- Ina Road will also be widened to 6 lanes, 3 lanes in each direction, and will have a grade separation at the railroad tracks.
- Prince Road will also have a grade separation at the railroad tracks. This will mean that Cortaro Farms will be one of the only at-grade railroad crossings in the vicinity, making it the least attractive to traffic.
- The original design showed Cortaro Farms west of Camino de Oeste to be 6 lanes. The Town of Marana constructed it with only 4 lanes due to the decrease in projected traffic volumes.

The above assumptions, along with a heavily revised PAG model due to the passing of the RTA, results in traffic being projected to increase at 2.5% with a decrease in ADT when the I-10/Twin Peaks Interchange opens. The projected traffic volumes will still require 4 lanes, however the roadway will not be as busy as first expected.

For vehicle composition, the 2002 Traffic Report assumed 4% heavy trucks. From a count done in January 2008, the traffic count showed: 97.5% passenger cars; SUVs, and pickups; 0.4% buses; 1.3% medium trucks; and 0.8% heavy trucks.

**CAC Questions and Comments on Traffic**

A CAC member commented that once Cortaro Farms Road is widened, the amount of trucks on the roadway will increase. Alejandro agreed, however he said large trucks will prefer to use Ina Road because of the large commercial developments and because of the proposed grade separation at the railroad tracks.

Another person asked about the status of widening Cortaro Farms Road, east of Thornydale Road. This section is now under design and will go to construction before 2011. Some of the CAC members commented that when Ina Road is under construction, motorists will use Cortaro Farms Road.
A CAC member expressed concern about the inaccuracy of the traffic projections of the PAG model and that the model could be off as much as 70%. Alejandro said the traffic model for this project uses not only the projections from the PAG model, but also the population projections and information from DES. The traffic projections in the model for the current project are started from actual 2006 volumes.

IV. Noise – Colby Henley

Colby Henley, from RECON Environmental Inc., started his presentation by providing the CAC with some basic noise behaviors and how noise works and how noise is perceived. Colby said that a doubling of noise energy produces a 3 dBA noise increase. For example: if a peak-hour volume of 1,000 cars produces a 63 dBA Leq, then 500 cars would produce 60 dBA. A change of 3 dBA is the range where the human ear will begin to detect a change in the noise. However, it takes a 10 dBA increase to be perceived as sounding twice as loud. Sound decreases with distance.

Some of the key noise factors that contribute to traffic noise include:

- Number of vehicles, tires on the road, exhaust and engine noise
- Mix of cars and truck
- Grade of the road
- Traffic control signals
- Speed of vehicles

Traffic noise at the residences along the roadway depends on:

- The amount of noise being generated
- The distance between the residence and the roadway
- The presence or absence of physical barriers
- Sonoran Desert vegetation has little to no effect on the noise.

Colby said that this project is using the current Pima County Traffic Noise Guidance, which utilizes the Federal Highway Traffic Noise Model. This guidance gives a 3 dBA noise reduction benefit for using rubberized asphalt. Pima County procedure allows consideration of noise mitigation only if all of the following criteria are met:

- Predicted noise level at the residence is 66deBA Leq or greater or predicted noise level increases 15 dBA or more above pre-project level
- Noise barriers would be effective for two or more adjacent receivers and achieve at least 5 dBA reduction
- The cost is reasonable (i.e., not exceeding $30,000 per benefited resident)
- Noise barriers cannot exceed 6 feet along an “Environmentally Sensitive Road”
- The majority of benefited property owners + 1 approve.

Colby explained that the original analysis for this roadway was done prior to the current Pima County Noise Guidance and prior to the design of the I-10/Twin Peaks Interchange. Traffic volumes on Cortaro Farms are now projected to be greatly reduced by the future Twin Peaks Interchange and reducing traffic volumes results in a reduction of noise levels.
The previous design did not account for rubberized asphalt, which will reduce the noise by 3 dBA.

Scott Stapp from HDR, who is working on the I-10/Twin Peaks Interchange project, says that the interchange will attract a large amount of traffic from both Cortaro Road and Silverbell Road. Scott also explained that the properties along Twin Peaks Road and Linda Vista Road currently do not have much traffic. However, there will be a large increase in traffic once the interchange is built. This increase in traffic will account for more than a 15 dBA increase in noise, which makes these properties eligible for noise walls.

Colby said the original analysis was completed prior to the design of the I-10/Twin Peaks Interchange and prior to the plans for a grade separation at the railroad on Ina Road. As a result, traffic volumes on Cortaro are now projected to be lower compared to the previous traffic projections. The noise model was re-run using the updated roadway design and reduced traffic projections for the year 2028.

The following results were compared to the Pima County Traffic Noise Guidance’s Abatement Criteria of 66 dBA or higher:

- The 2003 analysis with higher traffic volumes predicted future noise levels of 62-67 dBA at residential locations using rubberized asphalt.
- As a result of lower projected traffic volumes, future noise levels along Cortaro will generally be lower compared to previous predictions.
- With the use of noise-mitigating rubberized asphalt, noise levels at modeled residences are predicted to range from 59-65 dBA, during peak hours.
- All of the residential locations are predicted to have future (2028) noise levels of 65 dBA or less.
- No residential locations are predicted to have traffic noise levels that meet or exceed Pima County’s 66 dBA noise mitigation threshold, therefore no noise mitigation walls are warranted.

CAC Questions and Comments on Noise

Someone asked what the noise levels are now. Lori Woods said the previous study showed the noise levels between approximately 57 dBA and 60 dBA.

Does the noise model take into consideration that the roadway will be closer to the properties? Colby answered yes, the model takes the additional lanes and the distance from the residences into consideration.

How does the noise model, which was done in 2001, compare to what is going on right now? Colby explained that the measurements taken in 2001 were only used to determine the baseline and those noise values are not used in modeling future noise levels.
Will there be a post-construction noise study? Colby said that this is not normally done and the noise model is consistent and is calibrated with federal standards.

Dewayne Tripp added that the County is being conservative in several areas. Rubberized asphalt has been shown to lower noise by 5 or 6 dBA and this study is only crediting the noise projections by 3 dBA. The study is also being conservative in the truck traffic estimate.

What happens if several years after the road is built, the noise levels are found to exceed the 66 dBA? Bob Roggenthen said this has not happened in the past because the methodology has been used in other projects, and by other agencies, and these studies have been done on an equitable and conservative level.

V. Next Steps – Kevin Thornton

Kevin Thornton said the team is currently looking at enhancing and updating the roadway plans. The team is looking at lowering the roadway profile and reducing the width of the roadway, which should lower traffic noise. The team is finalizing project reports. There will be additional CAC meetings that are needed to review the design.

VI. Questions and Comments – CAC

- Will bike lanes be reduced? Kevin said the previous standard for bike lanes was 10 feet, but because people were using those lanes for passing, the new standard is 6 feet.

- Bob Roggenthen said that sidewalks may be moved closer to the roadway if that is acceptable. That will enable some of the trees to remain and will make the roadway more compact.

- Bob also said the County will need right-of-way acquisitions, and will contact property owners around the beginning of June 2008.

- A CAC member asked if the size of the median will be reduced – The preference is a 24-foot median because of traffic safety and visibility standpoint.

- Someone asked about lowering the roadway. Bob said they are looking at drainage issues. The preference is to build an all-weather road and that will involve raising the roadway from where it is today. An all-weather road will provide access for emergency vehicles.

- A CAC member said that Bayou floods during monsoon season, but it comes and goes very quickly.

- Someone asked about the access to Quail Run Elementary School – Bob said that they met with Quail Run School and they are happy with plan. There are similar models in Pima County area.
• Will the signals tie into City of Tucson system for timing and progression? Yes, it will be tied into the system that operates from Downtown Tucson.

• Will there be cameras for red light runners? There are no plans at this time to put a camera on Cortaro Farms Road.

• A CAC member questioned the integrity of the traffic model, which feeds into the noise model.

• A CAC member questioned the 15 dBA difference guidelines because Cortaro Road used to be quiet, and now that the road is more congested it is noisy. A 15 dBA difference is more difficult to achieve.

• An audience member mentioned that rubberized asphalt affects tire noise only. There is also engine acceleration, emergency vehicles and truck noise. Kevin Thornton mentioned that the location of traffic signals is taken into account in the noise model.

• The people who live along Cortaro want serious consideration of noise walls. Who can they talk to in order to get the walls? Bob Roggenthen said right now the County is in the middle of the public process. As the County finalizes the addendum to the plans, they will be working with the CAC. The County will hold a public open house for general public input. From there, the final addendum to the plans will go to the Board of Supervisors for a vote.

VII. CLOSING AND ADJOURNMENT

Kevin Thornton thanked everyone for attending. The CAC will be notified of the next meeting.

The meeting adjourned at 8:00 p.m.

END OF MEETING SUMMARY