

South Mountain Citizens Advisory Team Meeting

October 23, 2008, 6:00–8:30 p.m.

Location: South Mountain Community College, 7050 S. 24th Street, Phoenix (Student Union Hall)

Agenda Topic	Discussion Lead(s)	Expected Outcome(s)	Action Item(s)	Time
<ul style="list-style-type: none"> • Welcome and introductions • SMCAT role and responsibilities • Upcoming SMCAT meeting topics • SMCAT questions and comments 	<ul style="list-style-type: none"> • Tom Keller • All 	<ul style="list-style-type: none"> • Introductions of all new participants (if any) • Knowledge of proposed upcoming meeting topics • Ask questions/clarification on issues, articles, press information since last meeting 	<ul style="list-style-type: none"> • N/A 	6:00 p.m.
Cumulative and secondary impacts	<ul style="list-style-type: none"> • ADOT/HDR 	<ul style="list-style-type: none"> • Knowledge of SMF cumulative and secondary impacts issues 	<ul style="list-style-type: none"> • TBD 	
Public comments	<ul style="list-style-type: none"> • ADOT 	<ul style="list-style-type: none"> • Knowledge of SMF public comments 	<ul style="list-style-type: none"> • TBD 	
Break				
Air quality panel	<ul style="list-style-type: none"> • Tom Keller • All 	<ul style="list-style-type: none"> • Discussion about air quality topics and membership 	<ul style="list-style-type: none"> • TBD 	
SMCAT communication process	<ul style="list-style-type: none"> • Tom Keller • All 	<ul style="list-style-type: none"> • Discussion about the SMCAT communication process 	<ul style="list-style-type: none"> • TBD 	
Visitor comment session	<ul style="list-style-type: none"> • Tom Keller 	<ul style="list-style-type: none"> • Questions/comments documented and addressed or added to future parking lot issues memorandum 	<ul style="list-style-type: none"> • TBD 	
Adjourn				8:30 p.m.



**South Mountain Corridor Study
Citizens Advisory Team
Meeting Summary**

Date: September 25, 2008
Time: 6 p.m.
Location: South Mountain Community College

SMCAT Members Attending:

Ahwatukee Foothills Chamber of Commerce, Carola Tamarkin
Ahwatukee Village Planning Committee, Laurel Arndt
Arlington HOA, Camilo Acosta
Arizona Public Health Association, Al Brown
Calabrea HOA, Brian Smith
City of Avondale, Carnell Thurman
Estrella Village Planning Committee, Peggy Eastburn
Foothills Club West HOA, Michael Hinz
Foothills Reserve HOA, Jim Wesley
Kyrene Elementary School District, Terry Tatterfield
Lakewood HOA, Chris Boettcher
Laveen Citizens for Responsible Development, Laurie Prendergast
Laveen Village Planning Committee, Wes Lines
Maricopa County Farm Bureau, Clayton Danzeisen
Phoenix Mountains Preservation Council, Michael Goodman
Sierra Club, Sandy Bahr
South Mountain Village Planning Committee, Tamala Daniels
Southwest Valley Chamber of Commerce, Woody Thomas
The Foothills HOA, Gary Reny

SMCAT Members Absent:

Arizona Trucking Association, Dave Williams
Bougainvillea HOA, Timmothy Stone
City of Tolleson
East Valley Partnership, Jack Sellers
Gila River Indian Community–District 4
Mountain Park Ranch HOA, Diane Kreckler
Pecos Road/I-10 Landowners Association, Nathaniel Percharo
Silverado Ranch
South Mountain/Laveen Chamber of Commerce, Lisa Bray
Valley Forward, Steve Barclay

Staff and Consultants

Michael Bruder, ADOT
 Mark Hollowell, ADOT
 Larry Langer, ADOT
 Timothy Tait, ADOT
 Nan Wilcox, ADOT
 Bill Vachon, FHWA
 Michael Book, HDR
 Amy Edwards, HDR

Pat Higgins, HDR
 Heather Honsberger, HDR
 Ben Spargo, HDR
 Fred Erickson, KCA
 Tom Keller, KCA
 C. Murphy Hebert, PDG
 Dean Howard, PDG
 Andy Jacobs, PDG

Citizens:

Bill Coates
 William Diekmann
 Kerry Fehr-Snyder
 Steve Johnson
 Tim Lank
 Pat Lawlis
 Doug Murphy
 William Ramsay

Sergio Sanchez
 Robbie Sherwood
 Connie Scurrin
 Arthur Suler
 Geri Thompson
 Linda Varragel
 Irene Wesley

Meeting Agenda	Speaker
Welcome and introductions	Tom Keller, KCA
SMCAT role and responsibilities	Tom Keller, KCA
Upcoming SMCAT meeting topics	Tom Keller, KCA
SMCAT questions and comments	All
SMCAT membership discussion	All
Pre-Draft Environmental Impact Statement SMCAT position statement discussion	All
Social conditions	Mark Hollowell, ADOT Pat Higgins, HDR
Estimated costs	Mike Bruder, ADOT Ben Spargo, HDR
Cumulative and secondary impacts	Mark Hollowell, ADOT Jack Allen, Jacobs
Visitor comment session	Tom Keller, KCA Public

Meeting began at 6:06 p.m.

Tom Keller: Good evening everyone. Can we begin please?

Welcome to the September 25 Citizens Advisory Team meeting for the proposed South Mountain Freeway. At the moment, we are one member short of a quorum. Should another member arrive, I will announce that we have a quorum. Funny, we had the highest number of member confirmations and we are still one person short of a quorum.

For the information of those members of the public that are attending for the first time, seated at the table are the SMCAT members. Seated near the wall are members of the ADOT study team. As we progress through tonight's agenda, should you have any questions, please write them down on one of the blue question cards that we have located in the back of the room. At the end of the meeting, your questions will be addressed. You can either pass in the card and I will read your question or you can read the question yourself. If by some chance there is a great amount of questions submitted and we are unable to address them all at this meeting, then the answer will be provided as part of the parking lot issues memorandum. The parking lot issues memorandum is made available on the ADOT Web site.

It looks like another SMCAT member just arrived. We now have a quorum.

It is important to note that the SMCAT is a body that will make a recommendation and not a decision. The recommendation will be one of two choices—building or not building this proposed freeway. The SMCAT is governed by an operating agreement, which was developed in April 2007. The operating agreement addresses a number of issues. One thing to remember is that all SMCAT members, and members of the public, treat each other with respect. Please make sure that if you are asking a question to someone, give them time to answer that question.

There is already an adjustment to tonight's agenda. The presenter of the cumulative and secondary impacts section had a family emergency, so he is unable to attend tonight's meeting. In your packets, the PowerPoint presentation slide number nine shows the October 23 meeting topics. Cumulative and secondary impacts will be added to the agenda for that meeting.

Before we begin the presentation for social conditions, there is one last item for discussion. We will probably complete most of the topics short of the release of the Draft EIS. Because of this, there will be some amount of time between the October 23 meeting and the first air quality panel meeting. What happens between now and then reminds me about when Fred and I became a part of this process in April 2007. At that point, there had been a period of time where the SMCAT members had not been meeting. It seemed that there was quite a bit of information that had to be revisited and, from a facilitation standpoint, it was a difficult process. Is there a way for this body to put a bookmark in time? If we were to reconvene in February or March 2008 or sometime further down the road, will your organization be able to keep up to speed? I say this because there is the chance that when we reconvene, there could be changes and you may not be the member representing your organization. I just want to ensure that the process can keep its continuity and have no transition issues.

What are your thoughts?

SMCAT Member: I am not sure what you mean when you say we should put a bookmark in time.

Tom Keller: I am asking that the information you have received at these meetings doesn't end with you and that there are other people in your organization who are up to speed.

SMCAT Member: Is this something in which you want us to vote?

Tom Keller: No. I just want to make sure that everyone is at a point where they could hand it off to another representative of their organization with few transition issues, if necessary.

SMCAT Member: We have gone through this before. If a SMCAT member is going to jump off then their organization should lose their role in the recommendation-making process. I don't think we should ask someone to come in new with only a few topics left to cover. I would hate to lose someone over the holiday break so I would just have to appeal to the members who are here now that they should just stick with this process to the end.

Tom Keller: That's a great sentiment, but you can't always control what is going on in other people's lives.

SMCAT Member: In my case, there was someone else who was representing my organization and some difficulties arose, which is why I am now the representative.

Tom Keller: Are there any other thoughts?

SMCAT Member: There are meeting minutes that exist from all of the past SMCAT meetings. I think the organizations could have someone review these notes to see where we are.

SMCAT Member: I think if we are going to make this recommendation then we should all just stick with it. It seems at every meeting I have attended, we spend too much time backtracking over past topics. Now, seven years after we began this membership, we are discussing this issue again. We can't keep going back to past topics. I am very tired of readdressing past issues. Once we have discussed a topic, it should be over and done.

Tom Keller: I am hearing a similar theme from your comments. There will be no need for a bookmark in time. Is that the feeling?

SMCAT Member: I would prefer that we just jump in and discuss air quality right now.

SMCAT Member: I think it is important that the person representing the organization that is making a recommendation on this freeway has been a part of the process and is not coming in at the last moment. Any new people coming on would not have the full understanding of the study.

Tom Keller: During the break between meetings, I anticipate that you will still have regular communication from the ADOT study team. Tim, is that correct?

Timothy Tait: Yes, the SMCAT will hear from us on a monthly basis.

SMCAT Member: If there is a SMCAT member who wants to remove his or herself from the process, we should require that the organization state their position on this proposed freeway before the change.

SMCAT Member: If the SMCAT membership changes, the affects would be different depending on the length of the break between meetings. If the break is short, we may not lose too much headway. Also, there could always be special meetings scheduled to get members who are added late, up to date.

Tom Keller: Yes, that is a possibility. We are just trying to ensure that the SMCAT remembers all the information that has been presented, the way that we remember it. If there happens to be any new members who join who are replacing current representatives, we want to make sure that it is a seamless transition. In April 2007, the transition was not smooth.

SMCAT Member: When is the facilitator's contract complete?

Tom Keller: Our intent is to be a part of the process until it is completed.

SMCAT Member: Well, does your contract end on a certain date? If you are not a continual part of these proceedings then that would also be something which would slow this process.

Tom Keller: Our contract is month-to-month. If our contract should happen to expire, there is a process in place so that these meetings could continue.

SMCAT Member: I would like to advocate that you be involved until this process is complete.

SMCAT Member: I understand the break around the holidays, but we may need to continue to meet to discuss special issues that may arise prior to the Draft EIS being released. We could consider meeting every other month to discuss these issues.

SMCAT Member: Yes, if we have enough special issues that would require a discussion, I think these meetings should continue.

Tom Keller: Regarding SMCAT membership, should you realize that you cannot continue representing your organization, let them and us know as soon as possible so we can work on getting a replacement as soon as possible.

SMCAT Member: I would like to add that it seems that we have the framework in place so should we have a new SMCAT member, we should be fine.

Tom Keller: Yes, that is certainly our intent. Can we move on?

No response

Tom Keller: For tonight's meeting, Gary Reny is taking the place of Chad Blostone for The Foothills Homeowners Association. You may recall that you voted last meeting to begin including Michael Hinz with Foothills Club West Homeowners Association as a part of the SMCAT. He is in attendance tonight. Also, you remember that Chris Boettcher is the new member from the Lakewood Homeowners Association.

SMCAT Member: In the minute notes from the previous meeting, I think I found one minor mistake on page 17. Halfway down the page, there is a comment from Ben Spargo, which reads, "To the best of my knowledge, the E1 Alignment that is shown here is the same one that is on the original. Much of the acreage from the park that was saved was along First Avenue." I believe that the acreage that was saved was at 51st Avenue.

Tom Keller: Did you get that, Mike?

Affirmative response from Michael Book, who was recording the meeting notes

Tom Keller: Does anyone have any questions or comments from anything that they have seen in the press since our last meeting?

SMCAT Member: Can I ask a question about the responses that ADOT has given us regarding the parking lot issues?

Tom Keller: Yes.

SMCAT Member: I was really disappointed with the first three pages of the September 25th Parking Lot Issues memorandum. There are many questions that are inadequately answered. I was hoping that some of the responses would contain actual hard numbers. I don't see many numbers shown to support the response. It seems that ADOT either cannot or will not quantify these items. You gave us a dollar figure for the time associated with someone who would be sitting in freeway traffic. Why can't you

give us numbers related to other study issues? In general, I feel the responses ADOT has provided are nebulous.

Tom Keller: Well, tonight's topics are social conditions and estimated costs. We are moving cumulative and secondary impacts to the October meeting. Will any of his questions be answered in tonight's presentation?

Mike Bruder: The answers to his questions wouldn't be addressed in tonight's topics.

Tom Keller: So can you give us a specific example of a question you do not feel was fully addressed?

SMCAT Member: Yes. One question reads, "What should be expected for the loss of home values and the associated loss of property taxes and tax revenues for the state, city and schools?" I would think that ADOT could provide dollar figures related to this. ADOT would just need to determine the number of homes that would be needed for this proposed freeway and then figure out what the property tax loss would be. The ADOT response provided to us reads, "The effects on loss of property tax are addressed in the economic section of the Draft Environmental Impact Statement. Because the number of homes being impacted is relatively negligible in the context of the total number of homes in the City of Phoenix, as well as the fact that many residents would likely relocate within the city, the effects on city revenues were deemed negligible when considering the W55 and E1 alternatives." I would say that my determination of what is considered negligible is different from what ADOT considers negligible. I want ADOT to provide hard numbers to this and the other questions in the Parking Lot Issue memorandum.

Tom Keller: Does anyone care to respond?

Amy Edwards: So you want to know the direct impact of ADOT purchasing property for this proposed freeway?

SMCAT Member: Yes. The question was basically skirted.

Amy Edwards: This information was reported in the technical report summary.

Ben Spargo: So you are just looking for more of a breakdown for the City of Phoenix impact?

SMCAT Member: I would like to see quantified amounts for the questions that have been asked. A topic from July was economic impacts. I thought that this would have included a presentation that would have given us information in dollar amounts.

I also don't think ADOT has been accounting for the value of the South Mountains.

SMCAT Member: In the July presentation, ADOT reported the estimated reduction of revenue based on future land use. I guess he is asking for harder numbers. Recently, an area school had a bond issue meeting. I wonder if they took into consideration that ADOT could be removing some homes from the area. I think for the topics that have associated hard numbers, ADOT should report those numbers.

Bill Vachon: We can take a look at that.

SMCAT Member: Here is another question that was asked in the Parking Lot Issues memorandum. "What about the loss of the community's desirability due to the freeway 'locking in' the community?" The ADOT response was, "Ahwatukee is defined by geographic, political and transportation boundaries. The South Mountains, Gila River Indian Community, Pecos Road and Interstate 10 serve as those boundaries, respectively. In essence, the proposed action would replace Pecos Road." This was the response to the effect that a 10-lane freeway replacing Pecos Road would have in Ahwatukee.

Tom Keller: ADOT has agreed to take a look at those questions and reevaluate the responses.

SMCAT Member: This proposed freeway will have a substantial impact to the community. ADOT has used the word, "negligible". They need to provide some frame of reference for this word. ADOT's definition of this term is much different than mine on my monthly budget.

Tom Keller: Are there any other issues?

SMCAT Member: There is a statement in our documents that needs to be revisited. That is the statement that a 10-lane freeway will replace a four-lane road. Anyone who reads this at a federal level will think that Pecos Road is already a major roadway. I think a descriptor needs to be added to make this clear.

SMCAT Member: I have an issue on page seven of the Parking Lot Issue memorandum. I asked a question about Desert Vista High School not being identified as a Section 4(f) property. My recollection was that ADOT was going to go back and update this. I am confused by the statement that was given. It seems that this statement is sticking to the information in last month's presentation rather than what we were told during that meeting.

Ben Spargo: At the last meeting, we were presented with information from the Kyrene School District regarding this issue. The investigation is still ongoing because it requires some field investigations. We will update this information as appropriate. However, the presentation material still holds true that a school is a Section 4(f) property depending on the availability of athletic facilities to anyone who walks on campus after hours.

SMCAT Member: Can we leave this question in the Parking Lot Issues memorandum until the issue is resolved?

Amy Edwards: We have a letter from the Kyrene School District that will assist with the investigations regarding this issue.

Tom Keller: So we can possibly update the response to this question with information from the letter.

Let's move on. Before we start the social conditions presentation, I would like to remind the SMCAT members that I will be handing out the session feedback forms at the break. Please complete both sides of this form and return by the end of the meeting.

Ben Spargo: Before we begin the presentation, there is one other item. In the Parking Lot Issues memorandum, there was a question about where a Storm Water Pollution Prevention Plan can be viewed. We have a sample report from the U.S. 93 project, which is located at the back of the room.

With that, we will now begin the social conditions presentation. Mark Hollowell from ADOT's Environmental Planning Group will present the general overview and Pat Higgins from HDR will present the specifics as they relate to this study.

Mark Hollowell: Thank you Ben. Good evening everyone. Once again, I am Mark Hollowell, an environmental planner with ADOT. There are several related topics in this proposed National Environmental Policy Act study that are analyzed to determine the impacts to the human and natural environment. One of these topics is social conditions. Tonight, Pat Higgins and I will share with you an overview of this topic.

Social conditions encompass a broad range of human activities and social interactions. Some of the important definitions related to this topic are demographic characteristics and community character. Demographic characteristics are key elements that give us information about race, income, employment and population growth in the Study Area. You recognize a community's character as you drive through it. Though it has experienced incredible development these past few years, Laveen still retains a distinct rural feel. Ahwatukee, on the other hand, displays a distinct, more urban community characteristic as you drive through it. These community characteristics are clearly evident.

What are social conditions? Social conditions are the results of human interaction with one another, over time, and the patterns and characteristics they create. They include the recognition of demographic characteristics, community character and public facilities used for social gatherings, such as schools or churches.

So, why do we study social conditions? We have seen the Valley grow tremendously over the years. This growth has contributed to the creation of various communities and

their neighborhoods. Issues such as mobility, continuity and maintenance of a sense of place become important aspects to residents in those communities. It appears that land use and development patterns tend to attract persons with similar wants and needs. These patterns are an expression of what is important to the residents—a sense of place. We will see that distinct communities share common traits in the Study Area.

In analyzing the various alignment alternatives during the planning phase, environmental planners identify such communities to develop ways to avoid, minimize or mitigate impacts that might occur during both the freeway construction and operation. In the Study Area, we identified five unique and identifiably distinct communities. Pat Higgins of HDR will now discuss those communities, their characteristics and how the proposed freeway might impact them.

Pat Higgins: I see there is already a question.

SMCAT Member: I am sorry to steal your thunder here. We are here to discuss the Eastern Section. Looking through the hardcopy of the presentation, I see there is quite a bit of information related to the Western Section. I would like to make a request that this presentation focus only on the Eastern Section.

Pat Higgins: Well, when we analyze the freeway corridor, we look at the freeway as a whole. We wouldn't want to neglect any information.

SMCAT Member: The Western Section social conditions topic has already been presented to the SMCAT. When it was presented, the representatives from the Eastern Section sat here quietly. I understand what you are saying, but we have already received the Western Section information on this proposed corridor.

Amy Edwards: Perhaps we could just quickly present information about the Western Section.

Tom Keller: Are there any other comments about this? Does anyone have a problem with just focusing on the Eastern Section?

SMCAT Member: I am sorry. I wasn't a member of the SMCAT a year ago. Was the reason the information about the Eastern Section wasn't presented was because the material wasn't prepared at that time?

Ben Spargo: No. In 2005, the SMCAT was meeting specifically to make a recommendation on the Western Section alternatives and that was the focus at that time. I think Pat can tailor this presentation to focus on the Eastern Section.

SMCAT Member: I would appreciate that. I think all the homeowner association representatives in the Eastern Section would like to hear about how this 10-lane freeway will rip through their communities.

SMCAT Member: I think this points to what a huge mistake this was to divide this proposed freeway between the Eastern and Western sections. You can feel the tension here. Dividing this freeway may be a good way to get it constructed, but it is not a good way to build a community's trust.

SMCAT Member: Most of these slides tend to have more information regarding the Western Section. This has happened during all these meetings. I guess the overall view has been presented because some people think it is fair. But the presentations have been heavily weighted for the Western Section. We aren't seeing the detail in the Eastern Section like we did for the Western Section.

Tom Keller: How shall we proceed?

SMCAT Member: Just have him talk fast.

SMCAT Member: Don't present the Western Section information.

Tom Keller: Pat, can you work with this sentiment?

Pat Higgins: Yes. On the screen, you see that we looked at five distinct communities. There are four in the Western Section and one in the Eastern section. The City of Tolleson and Santa Maria communities would not be directly affected. The remaining communities would be affected: Laveen, Dusty Lane and Ahwatukee.

SMCAT Member: What about the Estrella Village?

SMCAT Member: It isn't listed here as a distinct community.

Pat Higgins: The City of Tolleson is six square miles in size. Laveen has the largest area in which we are dealing. Over the years, industrial development has provided local employment to this community. In this area, the City of Phoenix has zoned the land to accommodate future freeway activities. Santa Maria is an 80-acre townsite development first developed in the early 1900s. The Dusty Lane community is an area of residences on the south side of the South Mountains, accessible from Dusty Lane and 51st Avenue. Ahwatukee is landlocked by Interstate 10 to the east, the South Mountains to the north and west and the Gila River Indian Community to the south. It is composed of contemporary master-planned communities with desert landscaping, golf courses and lakes. The character is modern and unified.

This map shows the public facilities and services located near proposed freeway alignments.

What are the potential construction-related impacts? An issue in Ahwatukee would be the visual and noise impacts, and you have already heard the presentations on those issues.

Existing neighborhoods could be temporarily divided and internal street systems disrupted, while access to public facilities could be temporarily altered. Temporary detours may affect police, fire and emergency travel routes and response times.

This slide shows the potential displacements for the Action Alternative. Here they are segregated by the Eastern and Western sections. In the Eastern Section, there are more single-family folks being affected.

ADOT would go through the process and purchase the necessary right-of-way, if needed. Nan Wilcox with ADOT's Right-of-Way Group is here, if there are any questions regarding property acquisitions.

SMCAT Member: How does the required residential properties right-of-way break down between Ahwatukee and Dusty Lane?

Ben Spargo: There are approximately 20 residential properties in the Dusty Lane community that would be affected. The impacts on the Dusty Lane community are included in the E1 Alternative information.

SMCAT Member: Going back to slide 28, the graph shows that the E1 Alternative would have an affect on one community facility. Is this a school?

Pat Higgins: No. The community facility affected is a church.

SMCAT Member: So the United Methodist Church that is further west wouldn't be affected? It appears to have a portion of its property in the right-of-way.

Ben Spargo: The only church I am aware that would be affected is the church at 24th Street and Pecos Road.

SMCAT Member: I think that we should have updated information regarding facilities for the Western Section. The map on slide 25 is not showing everything. There has been a great amount of development that has occurred over the past few years, including homes and businesses.

Ben Spargo: So you are saying this is located within the W55 alignment? The table is only quantifying what would be directly impacted.

SMCAT Member: How long ago were the numbers presented on slide 28 updated?

Ben Spargo: We looked at an aerial in preparing this.

SMCAT Member: How long ago?

SMCAT Member: On the slide, it lists the last date of the aerial photography being April 2006.

Ben Spargo: Yes, that was the original date that the properties were quantified. We continue to update this information as we get newer aerials.

SMCAT Member: There is a video flyover available on the study Web site. On this video, the corridor boundaries are hard to determine. It appears that the park-and-ride lot is in the right-of-way. I also think Los Lagos School is within the boundary.

Ben Spargo: I don't think the video flyover is 100 percent accurate as far as the boundaries shown. The right-of-way footprint that was presented in the November 2005 public meetings hasn't changed.

SMCAT Member: What about the brand new storage facility near Pecos Road?

Ben Spargo: I believe it is located on Gila River Indian Community land, so it wouldn't be affected.

SMCAT Member: It is located 10 feet from Pecos Road. It wouldn't be affected?

Ben Spargo: No. And there wouldn't be a freeway interchange at 32nd Street so their access would remain.

SMCAT Member: I noticed that the numbers on slide 28 for the W55 businesses has gone up. Is this due to the shift in alignment due to the tank farm?

Ben Spargo: Yes. By shifting the alignment we are impacting more businesses.

SMCAT Member: I remember the numbers when Amy Edwards first presented the tank farm shift in alignment. I am amazed it has gone up even more.

Ben Spargo: As we do the field research, we continue to find more information regarding this.

SMCAT Member: The loss of these businesses will impact the workers in the West Valley. Some of these people don't have high paying jobs and they take busses to work. This will be a big impact.

Ben Spargo: I have been in some of the meeting with the businesses who could potentially be acquired. In some cases, they should be able to relocate to nearby land.

SMCAT Member: That's what I am pushing for. I'm sorry. I know we are supposed to be discussing the Eastern Section.

Amy Edwards: That brings up a good point. I know it was discussed that the Western Section information was already presented to the SMCAT over two years ago. What you have just seen is that this information has already changed somewhat.

SMCAT Member: Since you are including the Dusty Lane community as a part of the E1 Alternative, I wonder if you have told us that you are waiting to do the design on this section because you are unsure about how this freeway will affect their utility access. Are you considering purchasing everyone's property in this community?

Ben Spargo: The plan is to provide access by keeping the road Dusty Lane as it is now and constructing an overpass at Ivanhoe Street.

SMCAT Member: Does this mean there will be a giant wall?

Ben Spargo: No, not necessary. There may be a wall at the freeway, an embankment and then an ADOT fence. At Ivanhoe Street, there would be an underpass.

Pat Higgins: Are there any other right-of-way questions?

Tom Keller: Are there any right-of-way questions for Nan Wilcox?

No response

Pat Higgins: Okay. We have already talked about some of the construction impacts. After construction, increased road capacity from the proposed freeway could improve overall traffic circulation and accessibility in the region.

SMCAT Member: I am sorry to interrupt. On slide 31, the second bullet states information about the Western Section. Where is the bullet for the Eastern Section? What about the affects on Pecos Road?

Pat Higgins: This slides emphasis is actually on the first bullet point since most of the land in the Eastern Section is already established.

SMCAT Member: I understand that. I am asking you to add a bullet to address the Eastern Section for continuity.

SMCAT Member: Does this information include drainage? Where is the runoff water going to go? Are these locations going to be included with the impacts after construction?

Ben Spargo: The drainage facilities will be contained within the right-of-way footprint.

SMCAT Member: When ADOT clears a swath from the residential homes they are purchasing, there will be a significant amount of water runoff. Where would it all go? Where would the water retention facility be located?

Ben Spargo: In the Eastern Section, there are no plans for large retention basins. ADOT would try to keep the existing conditions in place as they are now with the water passing south through a number of culverts. ADOT may construct some small retention basins, but they would be located with the freeway right-of-way.

Tom Keller: We have this documentation in the drainage presentation from a few months ago.

SMCAT Member: What about the potential impact on a community? With the loss of 100 houses, is that included when evaluating the impacts?

Ben Spargo: Do you mean the community's loss of the homeowners association's fees from these properties?

SMCAT Member: Yes.

Ben Spargo: This would be negotiated during the acquisition process. The ADOT Right-of-Way Group is currently developing a policy for this.

Pat Higgins: If the freeway were not constructed, there would be no direct impacts on community character. Major portions of the Study Area would continue changing in character due to population growth and land development, depending on the economy.

Certain impacts could be reduced or eliminated. The timing of construction impacts could be considered to minimize social impacts. The proposed alignment would be evaluated so that it doesn't bisect established communities. ADOT would coordinate with local jurisdictions to address and correct impacts on internal road networks. Noise barriers and landscaping would be used to reduce noise and visual intrusions.

SMCAT Member: The statement on slide 32, "Increasing congestion on local street network would be expected..." seems incorrect. Ahwatukee is fairly built out and people would not be traveling through it. Is this really an accurate statement?

Pat Higgins: Traffic congestion may not increase in Ahwatukee as much as in the Western Section.

SMCAT Member: You need to add a bullet to that slide explaining that.

SMCAT Member: How is this proposed freeway not going to also increase traffic congestion in Ahwatukee on local streets?

Pat Higgins: The freeway will assist in providing a regional traffic flow for the area.

SMCAT Member: But you said that this proposed freeway will drive development. I agree.

SMCAT Member: Is there anything quantified about how much residential and commercial development would accompany the construction of this freeway?

Ben Spargo: The City of Phoenix General Plan has designated which land near this proposed freeway would be zoned residential versus commercial.

SMCAT Member: Is it outside of the scope of this study to identify the traffic volumes on the local streets?

Ben Spargo: We have already presented much of this traffic information in past SMCAT meetings.

SMCAT Member: The City of Phoenix did a traffic study, but they could not model what would happen to traffic during construction of a freeway on Pecos Road. It seems the traffic will all go to Chandler Boulevard.

Ben Spargo: You are talking about during construction of the proposed freeway?

SMCAT Member: Yes.

Ben Spargo: The project team is developing an implementation plan that will most likely allow traffic to continue on Pecos Road or a similar facility through the construction process. The construction would be done on the north half, or westbound lanes, of the freeway first, keeping Pecos Road intact. When the north half was complete, traffic would be shifted from Pecos Road to those lanes. How access is provided to the area west of 17th Avenue would be an issue. It may be something where Chandler Boulevard might need to be extended.

SMCAT Member: On slide 27, the bullets seemed to run out and then the subject was changed on the following slide. There isn't a bullet that says how ADOT will address the major impact of the Ahwatukee traffic being rerouted. This would account for the thousands of people that live in this cul-de-sac community. The construction impact would be huge. You explained on a slide about the wonderful Ahwatukee community character. You give it lip service but didn't seem to fully evaluate the impacts.

Ben Spargo: As presented previously, a number of alignments were evaluated in the Eastern Section. This was the same with the Western Section. We used the social conditions analysis when we made decisions regarding which alignment would have the least amount of impacts. In the Eastern Section, that was the alignment along Pecos Road. In the Western Section, we shifted the alignment around the Santa Maria community, and a major factor in the overall decision was the fact that the W101 Alternative would have bisected Tolleson and greatly impacted their community.

SMCAT Member: We have 27 square miles. I don't think it was fair.

SMCAT Member: I thought the topic was social conditions. Not mobility or traffic congestion issues, correct?

Pat Higgins: Yes.

SMCAT Member: I would like a clarification about a statement made in the social conditions technical report summary on page 5. The text reads, "The E1 Alternative would not substantially alter the character of Ahwatukee Foothills Village." There are many editorials that contradict that statement. It continues, "As mentioned, Ahwatukee is nearly fully developed." This goes back to the discussion we had earlier about mobility and the additional traffic that you say would be added to the local streets. And further, "While the proposed South Mountain Freeway would introduce additional noise impacts along the southern edges of the village, this type of impact would not be new, considering I-10 borders the village to the east." I don't understand this argument. Because you think the noise already exists in this area, adding more noise wouldn't cause a substantial impact?

Needless to say, this report on social conditions did a rather poor job of reporting the overall general impact to Ahwatukee. It does not mention anything about loss of property values, added traffic congestion to our area and additional crime that would be introduced to this area. All you have to do is look at the local crime log to see that the closer you get to Interstate 10, the more crime is happening. You haven't even addressed the crime issue and how it relates to freeways in the Western Section communities.

Tom Keller: Is your question that the actual area social conditions don't match the technical report summary?

SMCAT Member: The social conditions being reported don't address the current conditions in Ahwatukee.

SMCAT Member: I brought up a social condition in a SMCAT meeting a few years ago. I was thinking about it this morning. The Ahwatukee area has a serious recreational component for bicyclists. I was riding this morning at about 5:15 a.m. when I saw some triathletes training. This is an area amenity and should be included in the social conditions report. As you enter the Ahwatukee area and see the welcome sign, there is even a bicyclist on it. That is why we are questioning the broad statement that was given in the technical report summary that the E1 Alternative would not substantially alter the character of the Ahwatukee Foothills Village.

Tom Keller: It is now 7:25 p.m. Let's take a break and reconvene at 7:35 p.m.

Break taken at 7:25 p.m.

Tom Keller: Okay. Let's get started.

As we get back to our seats, I have a couple things to mention. The cumulative and secondary impacts section will be rolled into the October meeting. Also, I had someone ask about when additional input can be given to us about who you would like to see as part of the air quality panel in a future, currently unscheduled meeting. At this time, anyone who has additional input on this subject can share his or her information.

SMCAT Member: When I was at the Ahwatukee Village Planning meeting, I made a request to see if anyone in the community knew someone who could be a part of the air quality panel. I was given the name of Rick Haddow. He has worked in the past as an environmental coordinator in ADOT's Globe District and has experience with air quality issues. I can send his contact information to you.

Tom Keller: Please send the contact information to Fred.

SMCAT Member: I think there should be a representative from Maricopa County Air Quality and Nancy Wrona from the Arizona Department of Environmental Quality. I think Maricopa County Air Quality has a new director, but they haven't announced who it is.

SMCAT Member: Yes. They have, but I don't know his name.

SMCAT Member: Well, the name of the new director is not on their Web site. Also, there should be a representative from the Maricopa Association of Governments. I think the air quality expert with MAG is Lindy Bauer.

Tom Keller: Thank you. I want to remind you that members of the public can submit blue question cards near the end of this meeting and SMCAT members now have the feedback session forms. Please make sure that you turn these completed forms in at the end of this meeting. The meeting feedback is always quite helpful for us.

Let's now continue with the estimated costs presentation.

Mike Bruder: For those of you who do not know me, my name is Mike Bruder. I am with ADOT's Valley Project Management Group and am the manager of this study.

Basically, there are two entities that ADOT uses to estimate these potential project costs: the Arizona Transportation Research Center and the Bureau of Labor Statistics. The Arizona Transportation Research Center administers ADOT's research activity and the publication of results. The Bureau of Labor statistics is a unit of the U.S. Department of Labor that collects, processes, analyzes and distributes a broad range of data associated with labor economics and statistics.

So where have we been? Slide 39 shows the project cost information that was presented to the SMCAT on April 6, 2006. As you know, the estimated total project cost at that time was \$1.7 billion.

Looking at the price trends for freeway elements, some of the materials being evaluated include diesel, gasoline, asphalt, lumber, plastic and labor. These items are evaluated for the short-term, or one year, and long-term, or 5 to 10 year, changes in price.

Slide 41 shows the short-term track of what has been going on. From July 2006 to July 2007, you can see the moderate price increase of about 4 percent, which is about the rate of inflation. When you look at July 2007 through July 2008, you can see that there was a huge jump of about 19 percent. This included the price of diesel fuel rising by 85 percent and asphalt rising by 53 percent.

Looking at the long-term trends, you can see that over the past five years prices have gone up by about 71 percent. Over the past 10 years, prices have gone up by about 89 percent. As you can tell, this is a huge increase. The biggest increases were in the prices for diesel, gasoline and asphalt. ADOT checks with the Association of General Contractors, who compares prices from the national with the local levels. In Arizona, when the prices spiked over 71 percent in the past five years, the national jump for these materials over the same time period was 77 percent.

In addition to national material price trends, ADOT monitors local material costs by reviewing construction project bid tabulations. Every time ADOT receives bids from contractors, they are evaluated to make sure the estimates are in line with other recent construction bids.

These graphs show the changes in prices since 2003 in roadway excavation, noise walls, concrete surfacing and reinforcing steel. ADOT has seen that costs for these items and almost all other materials costs have this upward trend in price. It seems that now the curve has reached a stabilizing point and has actually started to decline since the economy has softened. The price of fuel is still volatile since this can fluctuate on such factors as hurricanes and projected shortages. For all of these items, there is an escalation clause in our contract, which is the mechanism to recoup some of these items that have increasing prices. With that, Ben will continue the presentation.

Ben Spargo: Thanks Mike. The construction and right-of-way cost estimates include costs for some of the design refinements that have been made. We evaluated the latest unit prices that Mike discussed. All the costs that we will be showing are in existing dollars and are not projected costs for a future construction date.

In reviewing each element, I want to try to relate this information to some of the previous topics that have been discussed by the SMCAT. The bridge costs include the bridge that would span the Salt River. The length of the bridge would be determined by the

regulations discussed in the water resources presentation. As discussed in the cultural resources presentation, the freeway would span the historic railroad and RID canal. The biology presentation included a discussion about potential wildlife crossings. The bridges associated with all of these are included in this category. The drainage costs include the items that were discussed in the roadway profile presentation including basins, culverts, and a channel. Earthwork costs, including the excavation of the South Mountains, were discussed in the geotechnical presentation. The pavement cost includes the cost of paving the roadway surface with rubberized asphalt, which although it cannot be officially used for noise mitigation, has been found to be a very good deterrent for noise. Traffic costs include safety features common to freeways around the region including guide signs, striping, lighting and freeway management systems. The utility costs include potential relocations of utilities discussed during that presentation, including city facilities and power lines. Wall costs include predominantly the sound walls that were presented during the noise presentation. Roadway appurtenances are safety features, such as barriers, guardrails and fencing. The “other costs” represent a large portion of the overall construction cost and include items such as landscaping, contingencies and contractor-related costs such as mobilization, quality control, construction engineering, and surveying.

The table on slide 49 presents an estimate of the construction costs broken down for the entire corridor, including the W55 and E1 alternatives, by element. The construction costs have increased 25 percent from the 2006 estimate. This is fairly in line with the national trends for unit prices.

The right-of-way costs include acquisition, relocation and demolition costs for each property. Descriptions and a list of assumptions are included in the cost estimate technical report summary so I will not get into them in detail. The original field studies were done in December 2005 and original cost estimates were developed in January 2006.

Based on experience with other ADOT projects in the region, the right-of-way estimate has been increased to account for anticipated costs associated with the acquisition and condemnation process. This includes: legal fees, appraisals, court settlements and survey costs. So we have added some so that the costs are reflected more accurately to the conditions of the marketplace.

Slide 52 shows the overall right-of-way costs based on each element. These costs are 50 percent higher than the 2006 estimate.

SMCAT Member: You don't have it broken down. What do you mean 50 percent higher?

Ben Spargo: The total right-of-way costs are 50 percent higher than the 2006 estimate.

Mike Bruder: The cost was about \$600 million in the 2006 estimate.

SMCAT Member: In 2006, some property in Laveen was going for \$200,000 an acre. Now the same property is \$80,000 an acre. I wonder why the costs would go up instead of down.

Mike Bruder: The prices don't seem to have dropped for commercial land.

SMCAT Member: You need a new real estate appraiser.

Mike Bruder: These are not appraisals; they are value-level estimates.

SMCAT Member: It seems that in the 2006 estimate, the other costs you have added as a part of this estimate were not included. So really, the 50 percent increase is related to the additional costs.

Ben Spargo: This last slide summarizes the construction, design and right-of-way costs to represent the overall cost for this proposed freeway. The total of \$2.4 billion is 40 percent higher than the 2006 estimate.

SMCAT Member: I have a clarification. For the estimated right-of-way total of \$930 million, utilities are included, correct?

Amy Edwards: No, utilities are included as part of the construction cost.

SMCAT Member: Yes, but the slide titled, "What is included in the right-of-way cost estimate" states "includes acquisition, relocation and demolition costs for each property."

Ben Spargo: The bullet point there is stating that the relocation costs associated with a particular parcel where ADOT would need the right-of-way. Utility relocation costs are included in the construction cost estimate.

Nan Wilcox: If a utility facility would need to be purchased by ADOT, this would be included in the right-of-way cost estimate.

SMCAT Member: I would like some clarification on the date when you developed the study's purpose and need for a 10-lane facility. Was this done in 2003? Anyway, I would like to ask why this estimate of \$2.4 billion is only for a 6-lane roadway?

Mike Bruder: Well, that is what is currently funded.

SMCAT Member: Doesn't the study purpose and need say a 10-lane freeway is required?

Ben Spargo: No. A 6-lane roadway is what is funded. The 10-lane roadway would be the ultimate build out.

SMCAT Member: Can you provide us with the current costs to construct this freeway with 10 lanes, rather than 6?

Ben Spargo: We could provide you with this, if needed.

SMCAT Member: When can we see this? Is this something we can see right now or is this something that needs to go into the Parking Lot Issues memorandum?

Ben Spargo: It would need to go into the Parking Lot issues Memorandum.

SMCAT Member: I don't understand why these costs were only presented to us for the 6-lane roadway.

Ben Spargo: The additional cost for the four lanes would only be related to the cost of paving for the 22-mile length of the freeway.

Tom Keller: The answer to your question is that ADOT will be providing the answer to your question in the Parking Lot Issues Memorandum.

SMCAT Member: We started the SMCAT meeting process a few years before I became involved. Obviously there was a high spike in the prices of everything. I can only imagine what the cost to build this freeway will be by the time it is built, maybe in 2020. By the time it is built, the numbers that ADOT is estimating will be invalid. So by asking what the cost will be for the full 10-lane roadway seems unnecessary.

Mike Bruder: You are correct. All the costs shown in this cost estimate are in today's dollars. There is a contingency for the revenue stream, but there is no way to anticipate inflation. Every time ADOT receives new bids, the new numbers are rolled into what you see here today.

SMCAT Member: I guess as residents, we need to ask Congress for earmarks.

Tom Keller: Are there any other questions?

SMCAT Member: I have a technical question regarding the price of the Interstate 10/South Mountain Freeway interchange. Will it still be 28 lanes and is this included in this cost estimate?

Ben Spargo: Where the South Mountain Freeway would connect with Interstate 10, there would be six lanes each way plus the auxiliary lanes. I think it would equal a total of 16 roadway lanes, not 28.

SMCAT Member: Was there ever a project cost estimate done when the Regional Transportation Plan was approved?

Ben Spargo: At the time of the Regional Transportation Plan, it was estimated that the proposed South Mountain Freeway would cost \$1.1 billion. As we reported earlier, the construction costs over the past five years have increased by 71 percent. Any project around the region is most likely having these same funding issues.

SMCAT Member: If we would have built it years ago, there wouldn't have been the development that is in the area now.

SMCAT Member: I would like to have clarification about a response in the Parking Lot Issues memorandum. The question asked how much money has already been spent on this study. The answer was \$106.7 million. How can so much money already have been spent?

Mike Bruder: That cost includes a portion of the construction of the system interchange connecting Pecos Road to Loop 202 (Santan Freeway) and Interstate 10. That accounts for \$43 million so far.

Ben Spargo: There is an attachment in the back of the cost estimate technical report summary that has a table associated with the construction costs that Mike is mentioning.

SMCAT Member: I don't see it.

Ben Spargo: There should be two attachments.

SMCAT Member: I don't have it.

Ben Spargo: The information in the attachments provides more detail. We will include them as an attachment in the next Parking Lot Issues memorandum.

Tom Keller: Is there anything else?

In your packet, you have the presentation slides for the cumulative and secondary impacts section. Are there any specific issues in which you think we should be focused?

SMCAT Member: Are you looking at these impacts only for the Eastern Section?

Ben Spargo: I don't think that cumulative and secondary impacts information is presented as an Eastern versus Western basis. We could try to incorporate more examples from the Eastern Section.

SMCAT Member: Yes, that would be a good idea.

Tom Keller: Are there any other items in regards to the cumulative and secondary impacts topic so we can get a heads up?

No response

Fred Erickson: If you have time to read through the cumulative and secondary impacts presentation and have suggestions, please e-mail either Tom or me and we will forward the request to the presenters.

Tom Keller: I have two blue question cards that have been turned in. Are there any more?

No response

Public Written Question: At the July SMCAT meeting, I requested the raw cut-line traffic data developed by the Maricopa Association of Governments for the regional mobility study. How can I follow up on this request?

Ben Spargo: I have contacted the Maricopa Association of Governments to follow up on this request. I am working with them because I don't believe actually reviewing the MAG model is possible. I am trying to find out what they could provide to the public.

Tom Keller: When you requested this, did you give us your contact information?

Public Comment: I don't know.

Tom Keller: Please write your contact information down on your blue question card so we can get back to you.

Public Written Question: Does ADOT have the money to build this freeway? What would be the source of the money?

Mike Bruder: We currently have about \$200 million in Phase 1 and \$900 million in Phase 2 of the RTP for this proposed freeway..

Public Written Question: If construction were to begin, when would it start and when would it end?

Mike Bruder: After we receive a Record of Decision, assuming the decision is to build this freeway, ADOT would require 24 months for design. This 6-lane roadway would be constructed in about four years.

Public Written Question: Is it true that those tall power lines poles along the south side of Pecos Road would be moved to the north side?

Mike Bruder: No. At this time, it is too cost prohibitive to move them. It would cost about \$1 million per pole to move.

Public Question: Someone else started to touch on subject that got me thinking. Will ADOT continue to want to build this freeway if the costs keep increasing as they have been over the past five years? What about the economy being down?

Mike Bruder: The economy is cyclical. Three years from now, the situation may be different.

Ben Spargo: At the regional level, ADOT is having discussions with MAG to see if their long-range plans are still accurate. It's difficult to make short-term changes to a long-term plan. I am not sure if these discussions are only focused on interstate freeways.

Mike Bruder: No, they are also concerning regional freeways.

Public Question: So will the South Mountain Freeway be a 6- or a 10-lane roadway?

Ben Spargo: ADOT would be purchasing the right-of-way needed to construct a 10-lane freeway. The construction of the freeway would be 6 lanes; the remaining 4 lanes would be constructed at a later point.

SMCAT Member: So how much money is available to construct this freeway?

Mike Bruder: We have about half the necessary money needed.

SMCAT Member: So how will it get built if ADOT doesn't have the money?

Mike Bruder: I was waiting for someone to ask that question. Typically, there are various strategies used when revenues are not matching the construction cost. We could reduce the project scope, scale back on the facility we are building or phase project construction.

As project manager, the first thing I do is ask for additional money. Sometimes new funding sources are created. I know that the TIME initiative was unable to be approved, but there may be other sources for revenue. It may come down to removing this project from our list or not building it at all.

Tom Keller: It is 8:30 p.m. The next SMCAT meeting is scheduled for October 23.

SMCAT Member: I make a motion that we adjourn.

Tom Keller: Is there a second?

SMCAT Member: I second the motion.

Tom Keller: All in favor?

Majority of hands were raised

Tom Keller: The next SMCAT meeting is scheduled for October 23. Thank you for your attendance.

The meeting is adjourned.

Meeting ended at 8:30 p.m.

Two blue comment/question cards submitted by the public were not read during the meeting. The information contained on the cards is as follows:

- Please include the social aspect of bicycles on Pecos Road in the social conditions.
- Please include on page 5 of the social conditions a more complete description of altered character of Ahwatukee Foothills (i.e., impact to visual and social community conditions).



South Mountain Freeway Study

October 23, 2008

Citizens Advisory Team Meeting

South Mountain Community College
Student Union

Agenda

Agenda Topic	Discussion Lead(s)	Expected Outcome(s)	Action Item(s)	Time
<ul style="list-style-type: none"> Welcome and introductions SMCAT role and responsibilities Upcoming SMCAT meeting topics SMCAT questions and comments 	<ul style="list-style-type: none"> Tom Keller All 	<ul style="list-style-type: none"> Introductions of all new participants (if any) Knowledge of proposed upcoming meeting topics Ask questions/clarification on issues, articles, press information since last meeting 	<ul style="list-style-type: none"> N/A 	6:00 p.m.
Cumulative and secondary impacts	<ul style="list-style-type: none"> ADOT/HDR 	<ul style="list-style-type: none"> Knowledge of SMF cumulative and secondary impacts issues 	<ul style="list-style-type: none"> TBD 	
Public comments	<ul style="list-style-type: none"> ADOT 	<ul style="list-style-type: none"> Knowledge of SMF public comments 	<ul style="list-style-type: none"> TBD 	
Break				
Air quality panel	<ul style="list-style-type: none"> Tom Keller All 	<ul style="list-style-type: none"> Discussion about air quality panel topics and membership 	<ul style="list-style-type: none"> TBD 	
SMCAT communication process	<ul style="list-style-type: none"> Tom Keller All 	<ul style="list-style-type: none"> Discussion about the SMCAT communication process 	<ul style="list-style-type: none"> TBD 	
Visitor comment session	<ul style="list-style-type: none"> Tom Keller Public 	<ul style="list-style-type: none"> Questions/comments documented and addressed or added to future parking lot issues memorandum 	<ul style="list-style-type: none"> TBD 	
Adjourn				8:30 p.m.



Welcome and Introductions

- Facilitators
 - Tom Keller, KCA
 - Fred Erickson, KCA
- ADOT
- FHWA



SMCAT Membership

Organization Name	Representative Name(s)	Attended	Total	%
Ahwatukee Foothills Chamber of Commerce	Carola Tamarkin	13	15	87
Ahwatukee Village Planning Committee	Laurel Arndt	12	15	80
Arizona Trucking Association	Dave Williams	1	15	7
Arlington Estates HOA	Camilo Acosta	7	11	64
AZ Public Health Association	Al Brown	9	11	82
Calabria HOA	Brian Smith	10	11	91
City of Avondale	Carnell Thurman	10	15	67
City of Tolleson	TBD	3	15	20
Cottonfields Community HOA	Timothy Stone	10	11	91
East Valley Partnership	Jack Sellers	6	11	55
Estrella Village Planning Committee	Peggy Eastburn	12	15	80
Foothills Club West HOA	Michael Hinz	1	1	100
Foothills Reserve HOA	Jim Wesley	11	11	100
Gila River Indian Community	TBD	0	15	0
Kyrene Elementary District	Terry Tatterfield	12	15	80
Lakewood HOA	Chris Boettcher	12	15	80
Laveen Citizens for Responsible Development	Laurie Prendergast	10	15	67
Laveen Village Planning Committee	Wes Lines	13	15	87
Maricopa County Farm Bureau	Clayton Danzeisen	9	15	60
Mountain Park Ranch HOA	Diane Kreckler	3	11	27
Pecos Road/I-10 Landowners Association	Nathaniel Percharo	4	15	27
Phoenix Mountains Preservation Council	Michael Goodman	15	15	100
Sierra Club	Sandy Bahr	15	15	100
Silverado Ranch	TBD	3	11	27
South Mountain Village Planning Committee	Tamala Daniels	7	15	47
South Mountain/Laveen Chamber of	Lisa Bray	11	15	73
Southwest Valley Chamber of Commerce	Woody Thomas	11	15	73
The Foothills HOA	Chad Blostone	11	15	73
Valley Forward	Steve Barclay	10	15	67



SMCAT Purpose Statement

The South Mountain Citizens Advisory Team (SMCAT) will **provide a forum for communication** between the Arizona Department of Transportation (ADOT), Federal Highway Administration (FHWA) and the local community regarding the proposed South Mountain Freeway.

The SMCAT is a **voluntary advisory team, not a decision-making body**, and it will not be responsible for decisions made by the State of Arizona or the FHWA. The SMCAT **will meet regularly to review project status and provide input on issues** that are relevant to the project.

The single purpose of the SMCAT is to provide a **Build** or **No-Build** recommendation for the South Mountain Freeway.



SMCAT Meeting Protocol

- Welcome and introductions
- Establish a quorum
- Agenda
- Timekeeping process
- Standards for behavior notification
- “Discussion, debate, recommend” process
- Welcome visitors
- Parking lot issues
- Breaks



SMCAT Behavior

- SMCAT members are expected to treat each other with mutual courtesy, respect and dignity.
- Since the SMCAT is a voluntary advisory team, it is important that individual SMCAT members abide by accepted standards of behavior.
- Unacceptable or disruptive behavior will not be tolerated and will be grounds for exclusion from further participation in SMCAT activities.
- Any SMCAT member who acts disrespectfully toward other members, disrupts the SMCAT process or is unable to attend meetings on a consistent basis may be required by the third party facilitator, the ADOT public involvement team or a majority of the other SMCAT members, to leave or resign from the SMCAT.



Session Feedback Forms

SMCAT Members: Please complete **both sides** of the Session Feedback forms and return them before you leave.

Thank You.



Meeting Schedule and Topics

Date	Subject	Topics
October 23, 2008	E1 Alternative Draft EIS – Impacts	Cumulative and secondary impacts Public comments Air quality panel discussion (continued) Discussion of SMCAT communication process

Meeting Schedule and Topics

Date	Subject	Topics
TBD	Air Quality Panel	Air quality (nonproject-specific)
TBD	Draft EIS for public review and comment	
TBD	Air Quality Panel	Air quality (project-specific)
TBD	Draft EIS Open Discussion	Discussion of action versus No-Action Alternative Discussion of mitigation SMCAT discussion regarding the Draft EIS
TBD	SMCAT Recommendation	SMCAT recommendation regarding Action versus No-Action Alternative

Project Coordination

ADOT coordinates with agencies regarding cumulative and secondary impacts.



City of Avondale



City of Chandler



City of Goodyear



City of Phoenix



City of Tolleson



**Council on
Environmental Quality**



**Federal Highway
Administration (FHWA)**



**Gila River Indian
Community (GRIC)**



Project Coordination

ADOT coordinates with agencies regarding cumulative and secondary impacts.



Maricopa Association of Governments (MAG)



Maricopa County



U.S. Department of Transportation (USDOT)

Tonight's Topics

Tonight's topics include cumulative and secondary impacts and public comment.

- **What is the issue and why do we study it?**
- **Where are they located in the Study Area?**
- **What are the impacts of the Action Alternative?**
- **What are the impacts of the No-Action Alternative?**
- **How can we reduce or mitigate the impacts?**

Cumulative and Secondary Impacts

ADOT/HDR

- **Cumulative and Secondary Impacts**
 - **Induced Travel and Induced Growth**
 - **Greenhouse Gas Emissions**

- **Cumulative and Secondary Impacts**
 - Induced Travel and Induced Growth
 - Greenhouse Gas Emissions

- **Cumulative Impact**

- Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. The impact on the environment that results from the incremental impact of the action when added to the other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions.

(40 CFR 1508.7)

Definitions (continued)

- **Secondary, or Indirect, Impact**
 - Changes that are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect impacts may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air, water, and other natural systems, including ecosystems. (40 CFR 1508.8)

Why study cumulative and secondary impacts?

- To understand and disclose ALL potential impacts as mandated by NEPA
- To better understand the overall condition of each resource
- To understand where impacts may occur elsewhere or later in time as a result of the project



Why study cumulative and secondary impacts?

- Public disclosure
- Understand the project's contribution to impacts on the environment
- Determine if distinctive differences would occur among the alternatives

Other Key Definitions

- Reasonably foreseeable
 - actions that are likely to occur or probable
- Speculative
 - the “opposite” of reasonably foreseeable
 - not probable even if possible

Study Parameters

- Identify “at-risk” resources
- Establish geographic boundaries for each resource
- Establish a timeframe for past, present, and future reasonably foreseeable actions
- Identify past and existing relevant actions affecting the resource
- Assess action’s contribution to overall resource impact

Cumulative impact severity classification

Impact Category	Impact Classification	Description
Type^a	Neutral or negative	Compares the final condition of a given resource with its existing condition (assumes that the expected impact occurs)
Severity	Minor, moderate or substantial	Considers the relative contribution of the proposed action to a given impact
Duration	Temporary or permanent	Permanent is assumed unless otherwise noted

^a The project can have positive impacts

Resources Studied*

- **Biological Resources**
- **Water Resources**
- **Air Quality**
- **Cultural Resources**
- **Land Use**

*Summary tables of conclusions have been provided in the draft technical report summary



Resources Studied*

- **Biological Resources**
- **Water Resources**
- **Air Quality**
- **Cultural Resources**
- **Land Use**

*Summary tables of conclusions have been provided in the draft technical report summary

Biological Resources

Habitat Loss Component

- Geographic boundaries: generally Maricopa County
- Past actions contributions:
 - From 1975 to 2000, the proportion of land in a built environment condition increased an estimated 15 percent (most rapid conversion from 1975 to 1986)

Biological Resources Cont.

Habitat Loss Component

- Contributing past, present and reasonably foreseeable actions include:
 - On-going planned and permitted residential, commercial, and transportation development
 - In 2005, 213 development proposals, largely consisting of new residential subdivisions, were identified in the Study Area
 - Anticipate similar conversion rates into the foreseeable future

Biological Resources Cont.

Habitat Loss Component

- The type of the habitat impact from past, present and reasonably foreseeable actions would be *negative*
- The severity of the proposed action to the cumulative impact would be *moderate*
 - Direct loss, increased competition among species members, population reduction, habitat isolation, and native plant loss

Agricultural Lands Component

- Geographic boundaries: generally Maricopa County
- Past actions contributions:
 - Farmland has decreased from over 50 percent in 1975 to just over 35 percent in 2000
 - Between 2,500 – 5,000 acres of farmland converted annually in Valley

Agricultural Lands Component

- Contributing past, present and reasonably foreseeable actions include:
 - Planned and permitted residential, commercial, and transportation development (213 development proposals, largely consisting of new residential subdivisions)
 - 29 percent of the land use in the Study Area is currently in agricultural use (9 percent is planned for future agricultural uses)
 - Anticipate similar conversion rates in the foreseeable future

Agricultural Lands Component

- The type of the farmland impact from past, present and reasonably foreseeable actions would be *negative*
- The severity of the freeway to the cumulative impact would be *minor*
 - Direct conversion, remnant parcel conversion
 - Much of the conversion occurring now and in the future has been planned

Secondary Impacts Considerations

- The action *caused* by the Proposed Action must be reasonably foreseeable
- Other influences causing the reasonably foreseeable action must be accounted for
- Consider if the reasonably foreseeable action would have occurred anyway but elsewhere
- Many reasonably foreseeable actions have been facilitated through local and regional planning

Secondary impact severity classification

Impact Category	Impact Classification	Description
Type^a	Neutral or negative	Compares the final condition of a given resource with its existing condition (assumes that the expected impact occurs)
Severity	Minor, moderate or substantial	Considers the relative contribution of the proposed action to a given impact
Duration	Temporary or permanent	Permanent is assumed unless otherwise noted

^a The project can have positive impacts

- **The same severity classification is applied as that applied to cumulative analyses**

Resources Studied*

- **Biological Resources**
- **Water Resources**
- **Air Quality**
- **Cultural Resources**
- **Land Use**
- **Economic Conditions**

*Summary tables of conclusions have been provided in the draft technical report summary

Resources Studied*

- **Biological Resources**
- **Water Resources**
- **Air Quality**
- **Cultural Resources**
- **Land Use**
- **Economic Conditions**

*Summary tables of conclusions have been provided in the draft technical report summary

Cultural Resources

Disturbance to historic and prehistoric sites

- The freeway would contribute to an increased rate of planned land conversion
- Private developments may result in the conversion of undisturbed land leading to discovery of previously unidentified cultural resources
 - Viewed as an informational benefit [*positive, moderate (subjective)*]
 - Viewed as disturbance detrimental to the resource [*negative, moderate (subjective)*]

Cultural Resources Cont.

Disturbance to historic and prehistoric sites

- The freeway would contribute to *negative, minor* secondary impacts - even though the conversion of undisturbed lands to human-based development would be expected with or without the proposed action

Changes in Land Use Patterns and Ownership

- The freeway would not induce reasonably foreseeable changes in the pattern of planned land use, population density or projected growth rate that are planned for but would facilitate an increase in the rate of conversions to planned use
- The Action would improve the regional transportation network and enhance opportunity to expand the future planned regional transportation network OUTSIDE of the Study Area, which in turn could enhance access to agricultural areas not already planned for development
- The freeway would contribute to *negative, minor* secondary impacts

Proposed Mitigation

- Direct impact mitigation can reduce cumulative impacts
- Impacts caused by others – either secondary or cumulative – are the responsibility of others
- Information disclosure about resource effect AND other agencies' possible mitigation actions are a form of mitigation

What if the project were not constructed?

- No project-specific impacts would be experienced
- Impacts generated by other actions would occur, but may be displaced further in time and location
- No action would not preclude other activities from affecting resources in a similar matter; most cumulative impacts would continue from ongoing conversion of land to other development

General Conclusions

- The project would contribute to secondary and cumulative impacts
- The project's contributions will be disclosed in accordance with the NEPA process
- The overall project's contributions to secondary and cumulative impacts would be minor
- None of the alternatives present distinct differences in contribution to secondary and cumulative impacts

- **Cumulative and Secondary Impacts**
 - **Induced Travel and Induced Growth**
 - **Greenhouse Gas Emissions**

- Induced travel
 - Indirect effect – increased traffic observed on a new highway after it has opened
- Induced demand
 - Increased traffic observed later in time that increases demand for freeway use
- Induced growth
 - Unplanned growth or “urban sprawl”

Would the freeway cause induced travel and demand?

- Existing traffic congestion has already decreased travel speeds in the regional network
- Some travel would represent new trips
- Most of the traffic increase is expected to come from trips already being made
- Traffic from induced demand is expected from planned land development
- Induced travel and demand would occur and is accounted for in the MAG regional traffic model

Induced growth factors

- Improved access may make land more attractive for development
- Other variables contribute to where and how development would occur
- Historical demographic growth rates and land planning patterns must be accounted for

Induced growth factors

- Valley growth rates 1950s-1980s (pre-freeway conditions) have been the same or exceeded growth rates from the 1980s to current, and match rates projected into the future
- Regional freeway system initially laid out, in part, to match land use planning patterns
- Land uses have been planned in conjunction with the transportation network since first introduced

Would this freeway cause induced growth?

- Would not provide new or substantially improve access to a large undeveloped geographic area where growth is not accounted and planned for
- Would occur in an area planned for urban growth as established in local jurisdiction land use planning activities for as much as the last 20 years

Would this freeway cause induced growth?

- Purpose is not to promote economic development, but to respond to growing need for additional transportation capacity
- Would facilitate “planned” growth and contribute to a faster rate of planned development
- Would not alter in any substantial way land use patterns in the Valley or Study Area

- **Cumulative and Secondary Impacts**
 - Induced Travel and Induced Growth
 - **Greenhouse Gas Emissions**

Background

- Greenhouse Gas (GHG) is a growing national and international concern - inherently a global issue
- Transportation is a major source of greenhouse gases, particularly of carbon dioxide (CO₂) emissions - the predominant GHG
- Impact determination and nature of the concern do not fit well to an analysis at a local level
- Current tools at the project level are not sophisticated enough

Background Cont.

- Regional level analysis may be more meaningful than attempting to address a global issue at a project level
- No national standards have been established by EPA
- GHG issues are evolving

Additional Questions



Public Comments

ADOT/HDR



Why include the public in the Draft EIS process?

- To assist the study team in determining the scope of the study
 - Important to understand the public's issues and concerns
- To identify key issues to consider during the process and address in the Draft EIS
- To provide the team with input as issues and concerns evolve over time



How has the public been involved?

This effort represents one of ADOT's most extensive public involvement programs undertaken in the Phoenix area. Highlights since 2001:

- More than 790 news articles
- More than 200 presentations
- Ten public meetings
- One meeting notice flier
- Five newsletters
 - (next one in November 2008)
- Study Web site
 - www.ValleyFreeways.com
 - www.SouthMountainFreeway.com
- E-mail address (ADOT@PolicyDevelopmentGroup.com)
- Study hotline (602.712.7006)





What are the issues with the highest public concern?

More than 5,000 comments have been received. The following are the public's common questions and concerns:

Alternatives

- The support of one of the alternatives (W55, W71, W101, E1)
- The support of the No-Action Alternative
- The support of another alternative



What are the issues with the highest public concern?

Community

- The freeway would cause increase in traffic congestion to local streets.
- Does ADOT account for loss of homeowner's association fees?

Construction

- Why wasn't the freeway constructed years ago, when there wasn't as much development in the area?
- When would construction begin?



What are the issues with the highest public concern?

Design

- What is the profile option ADOT is recommending and would it affect noise levels and visual quality?
- Where would the interchanges be located?

Environmental

- The freeway would cause increased air, noise and light pollution.
- The freeway should not be constructed in the Phoenix South Mountain Park/Preserve



What are the issues with the highest public concern?

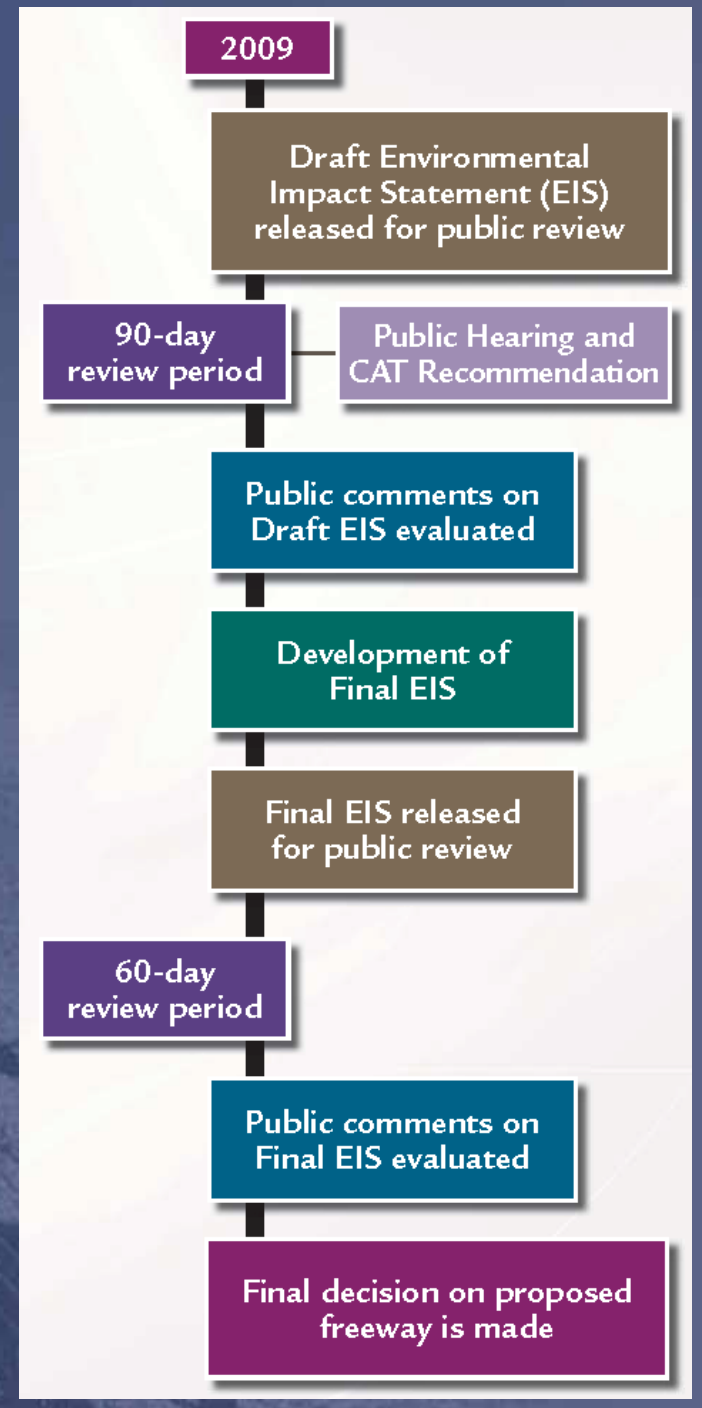
Miscellaneous

- When will the Draft EIS be released for public review?
- When will the decision regarding whether the freeway will be constructed be made?
- This freeway will only be a truck bypass route
- What is the latest projected total cost?



Future Public Comment Opportunities

- Emails, letters, phone calls, attending meetings
- Draft EIS
 - 90-day review period
 - Public hearing
- Final EIS
 - 60-day review period
- If the freeway is built, public outreach will continue through design and construction



Additional Questions

Break



Air Quality Panel Discussion

KCA/SMCAT



Air Quality Panel Sessions

1) Air quality panel discussion

- Panel to include groups determined by the SMCAT
- Discussion of topics determined by the SMCAT
- Could include discussion of what is typically studied in the EIS process (not project specific analysis)

Draft EIS issuance

2) Project specific air quality presentation

- Panel to include SMCAT specified panelists
- Panel to include MAG, ADOT, FHWA, Maricopa County, and other air quality technical staff
- Discussion of what the impacts are with and without the project, what type of mitigation is being proposed



Air Quality Panel Recommendations

August 28, 2008 Meeting

Pre DEIS Release

- Research on health impacts near schools, modeling of air quality vs. the standards and actual
- Impact on animals, plants in South Mountain, ASU College of Sustainability
- Address freeway air blown by winds to South Mountain
- Current Valley conditions of air quality
- Meteorological discussion on South Mountains & Salt River
- Dust generated by “dirt” manufacturing adds to air quality issues



Air Quality Panel Recommendations

August 28, 2008 Meeting Continued

Post DEIS Release

- ADEQ, Maricopa County Air Quality Department Air quality modelers
- Current update on Valley air quality compliance
- New ozone standards

September 25, 2008 Meeting

- Recommended Rick Haddow, ADOT Globe District
- Recommended Nancy Wrona & Ira Domsy (ADEQ), Ben Davis, Maricopa Co. Air Quality Dept. Director, Lindy Bauer, MAG



SMCAT Communication Process Discussion

KCA/SMCAT



SMCAT Recommendation Process Discussion

KCA/SMCAT



Session Feedback Forms and Questions from the Public (time permitting)

SMCAT Members: Please complete **both sides** of the Session Feedback forms and return them before you leave.

Thank You.



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Cumulative and Secondary Impacts

What are cumulative and secondary impacts?

Federal guidance defines cumulative impacts as “the impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 CFR 1508.7). In more basic terms, cumulative impacts occur where several actions in an area combine to create an impact on a given resource greater than any one individual activity. An example of this is when individual cars added together in one general location lead to a traffic jam. Cumulative impacts result from spatial (geographic) and temporal (time) crowding of environmental impacts. The effects of human activities would accumulate when a second impact occurs at a site or in a region before the environmental system can fully rebound from the effect of the first impact.

Secondary impacts (sometimes referred to as indirect impacts) are “caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate and related effects on air and water and other natural systems” (40 CFR 1508.8). An example of this is when a new highway interchange is constructed, a cross street can attract development, such as a gas station.

The draft technical report follows two principles outlined by the Council of Environmental Quality (CEQ) guidance (1997) in considering secondary and cumulative analyses: (1) focus only on the effects and resources within the context of the proposed action; and (2) present a concise list of issues that have relevance to the anticipated effects of the proposed action or eventual decision.

Why study cumulative and secondary impacts in the Environmental Impact Statement (EIS)?

The Phoenix metropolitan area is growing rapidly and has been since the 1950s. The Valley has gone from a set of small agricultural towns to a major metropolitan area over the last 100 years. The rapid growth is expected to continue well into the future, which would result in cumulative effects on natural resources in the area, communities, residents, infrastructure and economic conditions. Evaluating cumulative impacts from the proposed action and other activities on various resources provides an understanding of the overall health, or condition, of each resource and the proposed action’s contribution to effects on the resource. The proposed action may also result in impacts which occur elsewhere or later in time; therefore, secondary impacts are evaluated to identify if such effects are occurring.

The primary purpose of presenting these types of impacts in an EIS is specifically for public disclosure—to inform the public through this process the health of resources affected, the contribution of the action’s impacts on the resources, and what other non-project related impacts are affecting the resources.



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Cumulative and Secondary Impacts

What other activities are considered in evaluating cumulative impacts?

The definition of cumulative impacts requires consideration of past, present and reasonably foreseeable changes that could result in cumulative impacts when combined with the environmental effects of the proposed action. Specifically, activities are identified when, in combination with the potential impacts of the proposed action, they could result in substantial cumulative impacts. In accordance with precedence set by court cases, other projects deemed reasonably foreseeable were limited to those that are planned and/or funded. The following types of activities that could result in cumulative impacts were reviewed:

- Other highway projects
- Planned mass transit projects in the Study Area
- Major utility projects in the Study Area
- Other general development patterns

Other proposed transportation projects in the proximity to the Study Area include light rail on Interstate 10 (I-10), the I-10 Median and Outside Widening projects (State Route [SR] 303L to SR 101L [Agua Fria Freeway]), the I-10 Outside Widening project (SR 101L [Agua Fria Freeway] to I-17), the SR 801 project, the I-10 Corridor Improvement Study (SR 51 to SR 202L [Santan Freeway]) (local and express roads), and the Avenida Rio Salado project. No major utility projects were identified aside from local distribution system extensions to service existing growth.

What kind of impacts would occur from the proposed action?

Critical resources warranting secondary impact analysis are presented in this section. To address the potential impact severity, classifications in accordance with Federal Highway Administration (FHWA) guidance are presented in Table 1.

Table 1. Secondary and Cumulative Impact Severity Classification

Impact Category	Impact Classification	Description
Type^a	Neutral or negative	Compares the final condition of a given resource with its existing condition (assumes that the expected impact occurs).
Severity	Minor, moderate or substantial	Considers the relative contribution of the proposed action to a given impact.
Duration	Temporary or permanent	Permanent is assumed unless otherwise noted.
^a The project can have positive impacts		

Tables 2 and 3 summarize anticipated secondary and cumulative impacts, respectively, that can be reasonably foreseeable as they relate to the proposed action.



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Cumulative and Secondary Impacts

Table 2. Secondary Impacts

Resource	Proposed Action Impact	Reasonably Foreseeable Impact	Impact Classification
Biological resources	Habitat loss from direct conversion to transportation use	Habitat loss from urban development	Neg/Mod
	Vehicle-animal collisions	Wildlife population reduction	Neg/Mod
	Loss of native vegetation	Increased rate of land conversion	Neg/Mod
Water resources	Loss and/or alteration of natural drainage features	Loss from urban development	Neg/Min
	Modification of groundwater tables from pumping to drain a depressed facility; eventual impact on the water table by removing this water from use	Groundwater drawdown from continued development	Neg/Mod
Air quality	Particulate matter due to construction activities	Reduced air quality from construction activities related to continued rapid urban growth in the region	To be included with air quality report summary
Cultural resources	Disturbance to known historic and prehistoric sites	Loss due to enhanced access to undisturbed land	Neg/Min
Land use	Conversion of agricultural land to other uses	Conversion from ongoing urban development	Neg/Min
	Land use ownership conversions	Conversion of zoned parcels to more intensive land uses	Neu/Min
	Alteration of community character	Change in character from ongoing urban development and its effect on community character	Neu/Min
Economic conditions	Enhanced movement of goods, materials, and services	Projected growth in land values and economic activity in study area	Neu/Min
Neu = neutral; Neg = negative; Min = minor; Mod = moderate; Sht-Trm = short-term			



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Cumulative and Secondary Impacts

Table 3. Cumulative Impacts

Resource	Proposed Action Impact	Reasonably Foreseeable Impact	Impact Classification
Biological resources	Habitat loss from direct conversion to transportation use	Habitat loss from urban and transportation development	Neg/Mod
	Habitat isolation and fragmentation	Habitat loss and isolation from urban and transportation development	Neg/Mod
	Vehicle-animal collisions	Wildlife population reduction	Neg/Mod
	Loss of native vegetation	Future construction of residential, industrial, commercial and transportation projects	Neg/Mod
	Introduction of noxious weeds	Future nonfederal and nonstate-funded projects' contributions to the spread of invasive species; federally funded and state-funded projects' reductions in this spreading	Neu/Min
Water resources	Increased runoff and flushed contaminants from impervious surfaces	Increased runoff volumes from other projects and higher potential for pollutant discharges into receiving water bodies	Neg/Min
	Loss and/or alteration of natural drainage features	Loss from urban development	Neg/Min
	Modification of groundwater tables from pumping to drain a depressed facility	Future construction of residential, industrial, commercial and transportation projects	Neg/Min
	Increased demand on water availability	Ongoing development in the region	Neg/Min
Air quality	All predictable measures below federal and state standards; mobile source air toxics (MSATs) being evaluated	Reductions in on-highway emissions of air toxics due to attainment requirements and source emission requirements as established by air quality programs implemented by such agencies as the Maricopa Association of Governments and the Environmental Protection Agency	To be included with air quality report summary
Cultural resources	Disturbance to known historic and prehistoric sites	Enhanced access to undisturbed land; permanent loss due to proposed action and ongoing urban growth; preservation of some cultural resources in place as a result of the proposed freeway	Neu/Min



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Cumulative and Secondary Impacts

Table 3. Cumulative Impacts

Resource	Proposed Action Impact	Reasonably Foreseeable Impact	Impact Classification
Land use	Conversion of agricultural land to a transportation use	Conversion from ongoing urban development	Neg/Min
Land use (continued)	Loss of recreational lands	Ongoing residential, industrial and commercial development and other transportation and public infrastructure projects	Neg/Min
	Residential and business displacements	Proposed project and other transportation and public infrastructure projects' contribution to displacements	Neg/Min
	Land use ownership conversions	Ongoing residential, industrial and commercial development and other transportation and public infrastructure projects	Neu/Min
	Alteration to community character and cohesion		Neg/Min
Neu = neutral; Neg = negative; Min = minor; Mod = moderate			

How do the alternatives differ in cumulative and secondary impacts?

The action alternatives would have comparable effects. The various activities affecting resources and people in the Study Area and the proposed action can have localized variations at a project level, depending on the specific location of a given effect. However, applying a broader view to the cumulative and indirect effects on affected resource, each action alternative has comparable effects.

What if the project were not constructed?

If the South Mountain Freeway were not implemented, the incremental effects contributed solely by the proposed action would not occur. However, no action would not preclude other activities from affecting resources in a similar manner. Most cumulative impacts would result from ongoing conversion of land to more intensive human-based development. These effects, such as the permanent loss of cultural resources and the permanent loss of agricultural lands would occur without the proposed action in place.

Secondary effects would not occur as such effects must be tied directly to the proposed action.

What could be done to reduce cumulative or secondary impacts?

Disclosure of secondary and cumulative impacts does not require the project proponent to propose and implement mitigation to address such impacts. Project-specific mitigation as proposed to mitigate direct impacts inherently addresses reductions in reported cumulative impacts. However, impact disclosure primarily is for informative purposes. By disclosing these



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Cumulative and Secondary Impacts

types of impacts, those concerned are provided a mechanism to contact responsible parties either contributing to such impacts or having regulatory authority pertaining to such matters. For example, the Environmental Protection Agency has enacted rules to reduce vehicle emissions at the national and regional levels. Local jurisdictions governing land development have enacted local zoning ordinances to control and regulate development.

Will the proposed action induce additional travel to occur?

Induced travel is a phrase often used to describe observed traffic volume increases occurring on a new highway after it is opened to traffic. The observation is prominent in areas where congestion is already evident (the Phoenix metropolitan area is a prime example) for the reasons summarized below.

The proposed action would be constructed where existing traffic congestion has already decreased travel speeds throughout much of the regional freeway system and the major arterial network. To avoid the congestion, over time, some travelers have diverted to alternative routes, changed the time they make their trips, switched to different travel modes, traveled to other destinations or decided not to make a particular trip at all. Because the proposed action would carry substantially more traffic before it would become congested, many of these travelers may switch to the new facility when opened to take advantage of decreased travel times. Some travelers using transit as a choice may also switch and further, some may choose to travel to a different (more distant) destinations (e.g., for shopping) or take a trip that they previously avoided altogether, because it was previously "too much trouble" to make. The behavior driving this switch is often associated with drivers' perception in resulting decreases in the generalized cost of travel, including both travel-time and out-of-pocket costs. However, it is commonly recognized the cause of this 'switch' is more complex; involving various travel behavior responses, evolving individual needs, residential and business location decisions and changes in regional population and economic growth.

Some induced travel would represent 'new trips' or 'induced demand.' However, most of the increase in traffic caused by induced travel is expected to come from trips already being made before the proposed action were put into operation (predictable traveler behavior accounted for in the travel demand forecasts conducted for the proposed action). The resulting traffic increase on the South Mountain Freeway is also expected to be largely offset by decreases in traffic volumes on parallel routes and at other times of the day. It is fully expected the net effect on daily vehicle miles of travel in the Valley as a result would be minimal. Examples in the Valley where this phenomenon has been experienced include the recent openings of the Pima Freeway in Scottsdale and Red Mountain Freeway in Mesa. Studies by the cities of Scottsdale and Mesa found substantial reductions in traffic volumes on parallel arterials within two miles of the freeways.

The results of both studies provide insight to general driver behavior. At the time of opening, both freeways represented to drivers a savings in time and/or cost in travel. Consequently, drivers moved from the arterial network to the freeway system. Over the course of time, it would be expected that some drivers would return to the arterial network as more vehicles traveled on the freeways. For the South Mountain Freeway project, a net reduction on the arterial network is



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anticipated through the design year 2030 as projected traffic volumes on the arterial network are projected to be less with the proposed action in place than without the proposed action.

For the proposed action, the minimal contribution to overall traffic use by induced travel is expected to have both positive and negative consequences (positive effects on the neighboring roadway network have been previously addressed). Changes in driving behavior leading to the use of the proposed action would be the result of perceived benefits which could include reduced total daily travel time and cost or an increased value associated with a new destination (e.g., a previously 'inaccessible' shopping area with more variety or lower costs).

As a negative consequence, each user of the proposed action would contribute to increased congestion on the freeway. As congestion grows on the new facility, the benefit attributable to potential travel time savings would be expected to decline. Congestion-related impacts (e.g., reduced air quality) would also increase over time. However, it is important to note the overall contribution to projected traffic volumes on the proposed action is anticipated to be minimal (some of which is accounted for in regional traffic models).

It is important to consider that improvements proposed for any type of transportation system (e.g., a new bus route, rail transit line or commuter rail service) would likely lead to changes in travel behavior, which in turn would lead to increased use of the particular system. It is the purpose of 'improvements' made to a given transportation system—to attract new users to the improvement. If this were not a primary goal, the improvement would not be effective nor warranted. For the proposed action, a goal is to attract users of other segments of the regional freeway system and the local arterial network, now and in the future, to the project to optimize, in part, the entire regional transportation system. Further, it is important to consider that as improvements are made to all transportation systems, cyclical benefits and impacts would occur. For example, as auto trips are diverted to transit (either due to direct improvements or increased congestion), traffic congestion on parallel highway facilities may lessen, at least temporarily. The resulting reduction in highway traffic congestion may, in turn, attract additional highway trips, similar to an increase in highway capacity.

The FHWA's current position relative to induced travel is consistent with the consensus of the transportation planning and travel behavior research community—induced travel is neither more nor less than the cumulative result of individual traveler choices and land development decisions made in response to an improved level of transportation service. Many of the travel choice decisions are accounted for in current travel forecasting models or land use transportation interaction models.

Will the proposed action lead to unplanned growth?

Unplanned growth is often termed urban sprawl. Generally, the reference is made in the context of the rapid and uncontrolled urban growth onto previously undeveloped land—usually on the outskirts of an existing urban area. Construction of projects like the proposed action is pointed to as a major contributor to urban sprawl. Freeway projects are often cited as making land at the urban fringe more accessible and therefore more attractive for development.

But as with issues surrounding induced growth, the relationship between transportation improvements and land development is complex. Land accessibility in a particular area as a



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result of a freeway project may make land more attractive for development, but other factors such as utility infrastructure, quality of public services, land acquisition and development costs, economic conditions and entitlement costs contribute major roles in determining where and how development would occur. And in fact, in many cases, new development being attracted to one part of a metropolitan region often represents development that has been redirected from other parts of the region.

The proposed action would occur in an already quickly urbanizing area (most noticeably in the Western Section of the Study Area). As such, the proposed action would not provide new or substantially improved access to a large undeveloped geographic area. The proposed action would occur in an area planned for urban growth as established in local jurisdiction land use planning activities for as much as the last 20 years. The purpose of the project is not to promote economic development but to respond to a growing need for additional transportation capacity as a result of Valley growth occurring now and as projected into the future.

Are the conclusions presented in this summary final?

Findings relative to impacts could change. Potential changes would be based on outcomes related to the following issues and will be presented to the public as part of publication of the Draft EIS, Final EIS and, if an action alternative were selected, in the final design process. The issues include:

- refinement in design features through the design process
- updated aerial photography as it relates to rapid growth in the Western Section of the Study Area
- ongoing communications with the City of Phoenix, Gila River Indian Community (GRIC) and other stakeholders to finalize measures to minimize harm to the South Mountains
- ongoing communications with the GRIC regarding granting permission to study action alternatives on GRIC land
- ongoing consideration of public comments
- potential updates to traffic forecasts as regularly revised by the Maricopa Association of Governments
- New previously unavailable data, studies, or analytical methods that would provide further insight to impact analysis and add value to the decision making element of the EIS process
- potential changes regarding updated census data
- regularly updated cost estimates for construction, right-of-way acquisition, relocation and mitigation

Even with these factors possibly affecting findings, the study team anticipates effects would be equal among the alternatives and, consequently, impacts would be roughly comparable. This assumption would be confirmed if, and when, such changes were to occur.



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Cumulative and Secondary Impacts

As a member of the Citizens Advisory Team, how can you review the entire technical report?

The complete technical report is available for review by making an appointment with Mike Bruder at 602-712-6836 or Mark Hollowell at 602-712-6819.



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Public Comments

Why request public comment in the Environmental Impact Statement (EIS) process?

As part of the National Environmental Policy Act (NEPA), requirements are established for public input during the preparation of an EIS. On this study, the Arizona Department of Transportation (ADOT), with the concurrence of the Federal Highway Administration (FHWA), has established an extensive public involvement plan, soliciting input throughout the process. The purpose of seeking public input is to assist the study team in identifying any new data pertinent to the EIS process and to gauge the understanding of the study status. Over the course of time, public issues and concerns regarding a project can change and seeking input throughout the process provides awareness of changes to the study team.

What are the goals of this public involvement program?

The goals of this public involvement program are to:

- Obtain public input to assist in a well-planned and researched EIS for the proposed action
- Provide ongoing information on the study and obtain input from the primary stakeholders and broader public
- Identify key issues and concerns of the public and ensure that these are appropriately considered during the process
- Develop and implement a process that maintains an open and continuing communication among the public, ADOT, FHWA and the study team
- Use multiple communication tools to effectively engage the public as a whole, thereby ensuring equal access to the NEPA process

How has the public been involved during this process?

Due to the importance of the proposed freeway to the region's transportation network, the potential impacts, and the level of public interest, ADOT and FHWA developed and implemented a comprehensive, inclusive and adaptive public involvement strategy for this project. This effort represents one of ADOT's most extensive public involvement programs undertaken in the Phoenix area. The following sections summarize activities since 2001.

More than 200 presentations have been made to community groups, homeowners' associations, chambers of commerce, village planning committees, trade associations, Citizens Advisory Team meetings and other interested parties.

Ten public meetings have been held. Fifteen days prior to each meeting, display advertising was placed in *The Arizona Republic*, the *Ahwatukee Foothills News*, the *Gila River Indian News*, the *Tribune*, *La Voz* and the *West Valley View*. (A total newspaper circulation of approximately 260,000 carried an announcement of each public meeting.)

One meeting notice flier and four newsletters have been distributed throughout the Study Area in the following quantities (per distribution per meeting): 28,500 door hangers; 5,000 inserts in the *Gila River Indian News*; and 28,000 inserts in the *Ahwatukee Foothills News*. In addition, newsletters and fliers were sent to over 4,500 individuals on the project mailing list. In



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Public Comments

November 2008, a newsletter updating the public about the study will be distributed to the Study Area and mailing list.

A study Web site (www.ValleyFreeways.com or www.SouthMountainFreeway.com) and e-mail address (ADOT@PolicyDevelopmentGroup.com) was provided so that the public could receive the latest study information and provide feedback. Approximately half of the comments that have been received were submitted electronically through the Web site or by e-mail. Over 5,000 comments have been received.

More than 790 news articles have been published in the region's newspapers.

A study hotline number (602.712.7006) was established so that the public could provide feedback on the study. The hotline is checked daily, with messages forwarded to the appropriate individuals for a response. Over 480 calls have been received.

What are the issues that have the highest public concerns?

This document summarizes public comments received from November 2005 to October 2008. Previous documents have summarized the comments received prior to November 2005. Comment topics were categorized by the study team as being related to the alternatives, community, construction, design, environment, process, right-of-way and miscellaneous:

- Alternatives—comments that identified an alternative preference (including No-Action) or specifically related to the Eastern or Western sections
- Community—comments regarding area issues, such as economics, relocations, growth, character and cohesion, facilities and services
- Construction—comments related to potential project cost and schedule
- Design—comments related to proposed interchanges, operations and safety
- Environment—comments concerning air and noise pollution, health concerns, traffic, energy, utilities, land use, water, floodplains, geology, visual, farmlands, secondary and cumulative Impacts
- Process—comments concerning the public, agency and alternatives screening processes
- Right-of-way—comments concerning properties and facilities in the Study Area and the right-of-way process
- Miscellaneous—other comments received

Below is a summary of the frequently received questions and comments regarding each of the identified issues. Please note that additional specific comments and questions were received and are considered throughout the NEPA process.

Alternatives

- Support of one of the alternatives (W55, W71, W101, E1)
- Support of the No-Action Alternative
- Support of another alternative (such as on Gila River Indian Community [GRIC] land)



South Mountain Transportation Corridor Study

Citizens Advisory Team
Draft Technical Report Summary

Public Comments

Community

- Concern that the freeway would cause an increase in traffic congestion on local streets.
- Does ADOT account for the lost homeowner's association fees from properties that they purchase?
- What should be expected for the loss of property taxes due to ADOT purchasing properties?
- The freeway would lock in Ahwatukee causing degradation to the community.
- How do impacts to residences in this area compare to those for the other freeways that have been recently constructed?

Construction

- Why wasn't this freeway constructed years ago, when there wasn't as much development in the area?
- When would construction begin and how long would it last?
- What procedures does ADOT follow when blasting rock near residential neighborhoods?
- What would be done with the excess material from the excavated rock from the South Mountains?

Design

- What is the profile option that ADOT is recommending (aboveground, belowground or surface level) and would it affect noise levels and visual quality?
- The level of engineering design is not adequate to determine the feasibility of the project; the freeway should be designed to 100 percent to determine the full extent of the impacts.
- When will information be released to the public regarding the drainage data and the proposed locations for retention or detention basins?
- Where would the interchanges be located for this proposed freeway?
- Where would the noise walls be located?
- Would rubberized asphalt be used on the freeway?
- Would any utilities need to be relocated, and if so, where?
- Could a parkway be considered along the proposed alignment, rather than a freeway?
- How many lanes would this freeway contain, six or ten?
- High-occupancy vehicle lanes should be included in the initial construction and not added later.



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Environmental

- This freeway would cause increased air, noise and light pollution to the area.
- What would be the health effects of a freeway in this area with the South Mountains trapping some of the air pollution in Ahwatukee?
- What are the health and noise impacts of having this proposed freeway adjacent to several schools on Pecos Road?
- How much would noise increase in the Study Area?
- Would this freeway impact any cultural sites?
- How were the cultural sites identified?
- Why would ADOT propose an alternative that would require excavation in the South Mountains?
- The proposed freeway should not be constructed in the Phoenix South Mountain Park/Preserve.
- What is the definition of a Section 4(f) facility?
- Can the list of identified hazardous materials sites in the Study Area be provided to the public?
- Would this freeway impede Salt River water flow?
- What level of flood protection was evaluated?
- What would ADOT do to accommodate wildlife?

Process

- Can the public make formal comments on the study before ADOT and FHWA make their recommendation on this proposed freeway?
- What is the Maricopa Association of Governments' role in this process?
- When is the next public meeting scheduled?
- Request for ADOT to present the latest study information at a homeowner association meeting.
- ADOT did not take the SMCAT Western Section alignment recommendation into account when they selected the W55 Alternative as the preliminary preferred alternative.

Right-of-way

- Would the proposed freeway alignment impact a particular property (or a property that someone is considering purchasing)?
- What is the ADOT right-of-way purchasing process and are property owners given fair market value for their land?



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- What is ADOT doing for those individuals who can't sell their homes because of the location to the proposed freeway?
- Is ADOT maintaining the properties that they have already purchased in the Study Area?
- When purchasing property, how does ADOT compensate the loss of homeowner association dues?
- What are ADOT's criteria for early buy out of properties that are located in the proposed right-of-way?
- How does ADOT compensate owners of wells in the proposed right-of-way?
- Why isn't ADOT preventing development in the proposed right-of-way?
- Does ADOT compensate property owners for a loss of visual quality, due to a freeway or noise wall related to a freeway?
- Does a home adjacent to a freeway lose property value?

Miscellaneous

- When will the Draft EIS be released for public review?
- When will the decision, regarding whether this freeway will be constructed, be made?
- Information regarding development on GRIC land is not being incorporated into the study. Concern that ADOT is making decisions on this freeway without all the necessary information.
- Is this proposed freeway a part of the CANAMEX Corridor?
- Concern that the proposed freeway will be a truck bypass route.
- How is this freeway being funded?
- How are increases in energy costs affecting this proposed project?
- What is the latest projected total cost?
- How often is the information in the working copy of the Draft EIS updated?



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Citizens Advisory Team
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Public Comments

What is the relevance of this information?

The understanding of public comment is an integral component of the NEPA process. This document summarizes public comments received from November 2005 to October 2008. The study team will continue to use public input to “mold” the scope of this study. Additionally, ADOT and FHWA will continue to seek input from the public, agencies and jurisdictions regarding the proposed freeway through the EIS process, and, if an action alternative is selected in the Record of Decision, through the design phase and construction.

What opportunities will be offered to the public when the Draft and Final EIS is released for public review?

During the public release of the Draft EIS, there will be a 90-day public comment period (a 45-day comment period is the minimum requirement). The public comments received during the comment period will be evaluated and addressed in the Final EIS. The public will also have the opportunity to comment on the Final EIS. When this document is released for public review, the public will have a 60-day public comment period to submit their final comments (a 30-day comment period is the minimum requirement). Copies of the Draft EIS and Final EIS will be made available to the public during the comment period through a variety of methods, including online access through the project Web site and advertised information repositories (e.g., libraries, FedEx/Kinkos)

As a member of the Citizens Advisory Team, how can you review the entire technical report?

The complete technical report is available for review by making an appointment with Mike Bruder at 602-712-6836 or Mark Hollowell at 602-712-6819.



The following questions or issues were brought forward as part of recent South Mountain Citizens Advisory Team (SMCAT) meetings and designated as parking lot issues because the study team needed to conduct research to address the question or issue accordingly. In addition, questions submitted on blue question cards by SMCAT members and the public are answered below. Each comment received on a blue question card is written in this document as submitted. Each parking lot issue is addressed by presenting the question asked, followed by the Arizona Department of Transportation’s (ADOT) written response.

This document is divided into three sections. The first section lists the questions from the August 12 meeting that a member of the CAT requested additional clarification in the ADOT responses. The subsequent sections contain ADOT responses to a carry-over question from the August 12 meeting and a new question from the September 25 meeting.

Questions addressed from the August 12 meeting with revised responses

Topic	SMCAT member/public question	ADOT response
Economic impacts	What should be expected for the loss of home values and the associated loss of property taxes and tax revenues for the state, city and schools?	<p>The annual loss of property tax revenue due to the conversion of land to a transportation use was reported in the Economics Draft Technical Report Summary. Based on existing land uses in the E1 Alternative the impact for the City of Phoenix would be \$199,646. Using the same assumptions and current tax rates for other tax districts, the annual loss of property tax revenue for the following groups were also calculated.</p> <ul style="list-style-type: none"> • Maricopa County—\$96,444 • Maricopa County Community Colleges—\$92,234 • Tempe Union High School District—\$227,809 • Kyrene Elementary School District—\$308,198 • Flood control—\$16,596 • Central Arizona Water Conservation—\$12,141 • Fire—\$643 • Library—\$4,286 • Health Care—\$10,392 • East Valley Institute of Technology—\$6,070 <p>(continued on next page)</p>

Topic	SMCAT member/public question	ADOT response
Economic impacts (continued)	What should be expected for the loss of home values and the associated loss of property taxes and tax revenues for the state, city and schools?	It is not possible to assign a monetary value for the change in property values of individual homes with the freeway constructed. Many variables contribute to home values including location, comparative pricing, economic conditions, growth markets and personal preferences. Studies to assess freeway effects on home values have had variable conclusions. In general, homes located closest to the freeway are negatively impacted while homes located farther away are positively affected. The net result is a non-impact on the total property tax revenues. A case study done by the Arizona Transportation Research Center on US 60 (Superstition Freeway) is attached.
	What about the loss of the community's desirability due to the freeway "locking in" the community? It would be a degradation to the entire Ahwatukee community.	It is not possible to determine a monetary value for changes to the desirability of a community. Similar to home values, many variables contribute to a community's desirability.
	What about the cost of air quality and the health issues created for residents and schoolchildren?	Air quality impacts associated with the Action and No-Action alternatives will be discussed at the SMCAT air quality panel meetings. A discussion of whether those impacts are quantifiable will be included.
	What about the loss of value of the South Mountain Park and the ridgelines, which would be destroyed?	The real estate value of the parkland is included in the right-of-way cost estimate. It is ADOT's policy to not publish individual property information because the appraisal and acquisition process is still pending. The South Mountains as a natural resource are not assigned a monetary value. Their importance as part of a public park, as a historic site, and as a traditional cultural property are addressed in detail in the Section 4(f) evaluation in the DEIS.
	What about the loss of value and future tax revenue on state trust land? There should be an amount for the value of the state trust land, which will be devalued.	ADOT would compensate the State Land Department for the acquisition of its property. This cost is included in the right-of-way portion of the project cost estimate. It is ADOT's policy to not publish individual property information because the appraisal and acquisition process is still pending.

Topic	SMCAT member/public question	ADOT response
Economic impacts (continued)	ADOT has put a monetary figure on time. Can they put a monetary value on vision or view? Do you have a value that takes this into account? The loss of monetary value is huge for the people who are left behind.	It is not possible to assign a monetary value for the change in vision or view for individual properties with the freeway constructed. Many variables contribute to the value of a view that would be subjective in nature based on individual preferences. A general discussion of visual impacts is presented in the Visual Resources Technical Report Summary. The methodology used quantifies the impact through assignment of numeric values to visual quality and character to allow for meaningful comparison of impact. However, it is not the intent of the National Environmental Policy Act (NEPA) to comprehensively assign monetary value to impact analyses. Several aspects of the environment (i.e., social conditions and visual quality) typically require a qualitative assessment of impacts because of the variables associated with variations in human perception.

Questions addressed from the August 12 meeting

Topic	SMCAT member/public question	ADOT response
Traffic projections/economics	Where can I get the detailed projected traffic volume data (cut-line analysis) for the South Mountain Freeway? This would be the traffic volume on which the \$400 million per year in time savings at \$16.25 per hour is based. Please provide enough source reference for a Freedom of Information Act request. I think it would be interesting seeing some of that cumbersome data.	<p>Traffic data related to the South Mountain Freeway was previously presented to the CAT during the December 2007 meeting. A cut-line graphic as well as other traffi-related sources are included in the meeting materials and presentation.</p> <p>The economic analysis (travel time savings) was based on the statistical output from the Maricopa Association of Governments' (MAG) regional travel demand model. The comparison was between the region's hours of traffic delay with and without the proposed freeway. The model output showed that there would be over 47 million less hous of delay in 2030 with the proposed freeway. A person's time was estimated at \$16.25 per hour. 47 million hours times \$16.25 per hour equals \$772 million. This value was then discounted to today's dollar (3%/year) to get the \$400 million per year savings.</p> <p>Due to the proprietary software used and the complexity of the system, MAG is not able or obligated to release the full travel demand model. References and materials related to the model (socioeconomic data, plots, volumes) are available from the MAG Web site (http://www.mag.maricopa.gov) or can be requested from MAG (contact Bob Hazlett, bhazlett@mag.maricopa.gov). The MAG model is regularly reviewed by peer agencies and the U.S. Environmental Protection Agency. It continually receives high marks within the industry.</p>

Questions addressed from the September 25 meeting

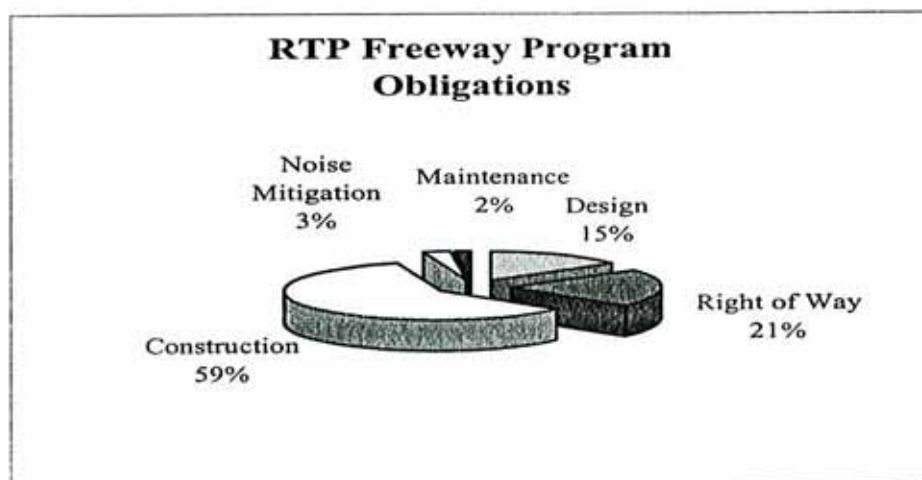
Topic	SMCAT member/public question	ADOT response
Cost Estimate	Can you provide us with the current costs to construct this freeway with 10 lanes, rather than 6?	<p><i>The cost to widen from the interim 6-lane freeway to the ultimate 10-lane freeway is still being developed as part of the Design Concept Report development.</i></p> <p>The recently awarded construction project to widen the median of I-10 (Papago Freeway) between Sarival Avenue and SR 101L by two lanes cost approximately \$13 million per mile. The conditions (adding 1 general purpose lane and 1 HOV lane, long river bridge at Agua Fria River, at-grade/elevated profile) are similar to the second phase proposed for the South Mountain Freeway. Given that, the second phase (median widening) of the 22-mile South Mountain Freeway would cost approximately \$300 million.</p>

Obligations

Obligations by phase and corridor are listed in the table below. These figures are through June 30, 2008. Regional Transportation Plan Freeway Program (RTPFP) obligations since the last certification increased \$336 million, from \$1,171 million to \$1,507 million.

Regional Transportation Plan Freeway Program Obligations Through June 30, 2008 (dollars in millions)

Corridor	Design	Right of Way	Construction	Noise Mitigation	Maintenance	Total
I-10, Papago & Maricopa	\$21.2	\$12.8	\$117.5	\$0.0	\$0.0	\$151.5
I-10 Reliever (SR801)	\$0.0	\$15.0	\$0.0	\$0.0	\$0.0	\$15.0
I-17, Black Canyon	\$12.1	\$92.2	\$267.3	\$0.0	\$0.0	\$371.6
SR51, Piestewa	\$3.5	\$0.0	\$47.6	\$0.0	\$0.0	\$51.1
US60, Grand Ave	\$5.5	\$1.0	\$6.1	\$0.0	\$0.0	\$12.6
US60, Superstition	\$2.3	\$0.0	\$123.7	\$0.0	\$0.0	\$126.0
SR74	\$0.0	\$1.0	\$0.0	\$0.0	\$0.0	\$1.0
SR85	\$32.1	\$19.9	\$44.2	\$0.0	\$0.0	\$96.2
SR87, Duthie-Martin	\$2.5	\$0.4	\$21.5	\$0.0	\$0.0	\$24.4
SR88, Apache Trail	\$0.2	\$0.0	\$0.2	\$0.0	\$0.0	\$0.4
US93	\$0.0	\$10.3	\$32.3	\$0.0	\$0.0	\$42.6
101L, Agua Fria	\$0.7	\$0.0	\$26.4	\$0.0	\$0.0	\$27.1
101L, Pima	\$8.6	\$4.0	\$132.2	\$0.0	\$0.0	\$144.8
101L, Price	\$5.0	\$0.0	\$55.6	\$0.0	\$0.0	\$60.6
SR153, Sky Harbor	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
202L, Red Mountain	\$4.3	\$0.0	\$7.7	\$0.0	\$0.0	\$12.0
202L, Santan	\$0.0	\$0.0	\$0.5	\$0.0	\$0.0	\$0.5
202L, South Mountain	\$8.3	\$12.0	\$0.0	\$0.0	\$0.0	\$20.3
SR303L, Bob Stump Memorial Parkway	\$46.1	\$95.4	\$0.0	\$0.0	\$0.0	\$141.5
Williams Gateway	\$0.0	\$24.3	\$0.0	\$0.0	\$0.0	\$24.3
Systemwide	\$77.5	\$22.7	\$9.2	\$50.6	\$23.3	\$183.3
TOTAL	\$229.9	\$311.0	\$892.0	\$50.6	\$23.3	\$1,506.8



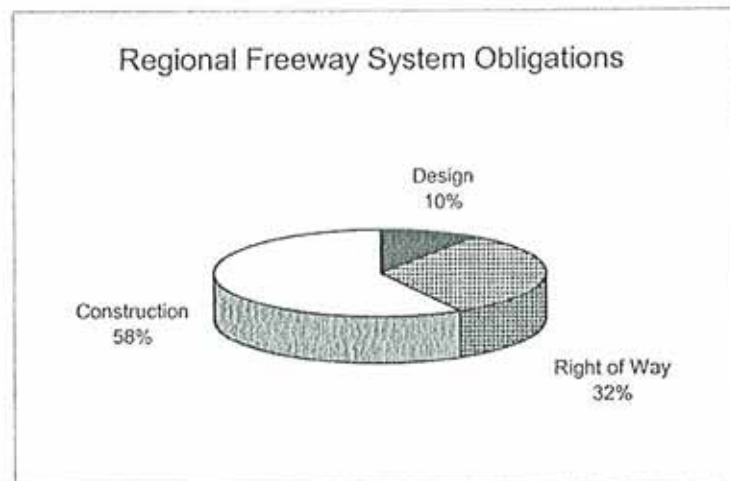
Obligations

Obligations by phase and corridor are listed in the table below. These figures are through June 30, 2007 and include obligations made prior to 1986 using 15% controlled access monies. Regional Freeway System obligations since the last certification increased \$37 million, from \$5.696 billion to \$5.733 billion.

Regional Freeway System Obligations Through June 30, 2007 (dollars in millions)

Corridor	Design/Utility	Right of Way	Construction	Totals
Agua Fria	\$64.1	\$260.0	\$356.7	\$680.8
Bob Stump Memorial Parkway (303L)	\$4.6	\$1.6	\$6.7	\$12.9
Grand Ave	\$24.0	\$71.8	\$145.9	\$241.7
Hohokam	\$22.2	\$61.1	\$105.7	\$189.0
Paradise*	\$4.1	\$33.1	\$0.0	\$37.2
Pima	\$117.9	\$500.0	\$694.7	\$1,312.6
Price	\$53.6	\$59.0	\$208.1	\$320.7
Red Mountain	\$82.3	\$364.0	\$827.0	\$1,273.3
Santan	\$45.9	\$303.5	\$676.1	\$1,025.5
Sky Harbor	\$9.4	\$18.2	\$34.0	\$61.6
South Mountain	\$11.1	\$32.0	\$43.3	\$86.4
State Route 51	\$27.0	\$146.8	\$205.7	\$379.5
System Wide	\$85.2	\$21.0	\$5.9	\$112.1
Total	\$551.4	\$1,872.1	\$3,309.8	\$5,733.3

* Paradise Corridor was deleted from the Regional Freeway System and right of way was sold.



Impact of Highways on Property Values

Case Study of Superstition Freeway Corridor

Jason Carey and John Semmens

The effects of freeway development on land use and property values were examined. A case study was prepared for the Superstition Freeway (US-60) corridor in Mesa and Gilbert, Arizona. Among the findings were the following observations. First, access benefits are transferred from highway users to nonusers through changes in property values. Freeway construction may have an adverse impact on some properties, but in the aggregate, property values tend to increase with freeway development. Second, freeways do not affect all properties' values in the same way. Proximity to the freeway was observed to have a negative effect on the value of detached single-family homes in the US-60 corridor but a positive effect on multifamily residential developments (e.g., condominiums) and most commercial properties. Finally, the most important factor in determining negative impact on property values appears to be the level of traffic on any major roads in the proximate area, which implies that regional traffic growth is more significant than the presence of a freeway per se.

Freeway development can have an impact on highway users and nonusers alike, and most opposition to freeway development has traditionally come from existing residential property owners. Although all highway benefits are derived from lower transportation costs, they can also be represented as changes in the real incomes (i.e., value of environmental amenities, safety, and other goods not normally provided in the marketplace) of individuals, which may in turn be capitalized into asset values such as the value of land (*I*). Property owners who oppose freeway development often feel that they will be adversely affected by environmental consequences of freeways (e.g., noise and air pollution) that may not be offset by their gains from lower transportation costs.

This research was intended to examine the impact of freeways on property values by examining the case of the Superstition Freeway in the Phoenix, Arizona, metropolitan region. Property sales data were used to estimate the net impact of the Superstition Freeway on a sample of properties in the freeway corridor.

BACKGROUND AND METHODOLOGY

The Superstition Freeway was constructed along the $\frac{1}{2}$ -mi street alignment between Southern Road and Baseline Road. Construction began in 1969 and was completed to Power Road in east Mesa in 1985. The freeway was widened from four to six lanes in 1983 to 1984. The freeway is a depressed design with limited access at increments of approximately 1 mi. The depressed design typically has

been associated with the most positive impact on surrounding residential land values (2). Depressed-grade freeways not only are less visible to surrounding properties but also provide an added buffer for freeway noise and air pollution, both of which have been shown to disperse in an upward pattern from depressed sites (3, 4).

Several impact mitigation strategies were implemented during construction of the Superstition Freeway. These include a vegetated right-of-way barrier between freeway and residential property lines, a barrier wall 8 to 10 ft high for noise mitigation and privacy for abutting residential locations, and pedestrian walkways connecting abutting neighborhood parks and school sites in some neighborhoods (5). During subsequent widening and improvements, the Arizona Department of Transportation adopted the policy of raising or reconstructing existing noise walls along the corridor, or adding new noise walls as necessary, to mitigate noise (4).

Properties to be examined for this study were selected from a property sales database from the most recent records on file at the Maricopa County Assessor at the time of collection. Properties were selected from the metropolitan area on the basis of distance from the Superstition Freeway. Sufficient paired sample data were available only for two subsets of residential properties: (a) detached single-family homes and (b) condominiums. Insufficient data were available for comparison of price appreciation for vacant (unimproved) land and commercial properties.

SUPERSTITION FREEWAY CASE STUDY RESULTS

Property sales data were collected for parcels located in an area from Price Road to Power Road (12 mi west to east), within 5 mi north or south of the Superstition Freeway (Figure 1). Sales results were subcategorized according to property type and zone. Zone A refers to properties on streets immediately adjacent to US-60. Zone B refers to properties located within $\frac{1}{2}$ mi of US-60, exclusive of properties classified as Zone A. "Major street" refers to properties in the control zone (Zone C) that were located on major mile streets. These streets generally exhibit the largest amount of traffic of surface streets in the metro area. Table 1 summarizes the number of transactions recorded for each property type. Sales recorded for nonresidential locations were limited to the impact area (Zone B) and control area (Zone C). No nonresidential sales records for Zone A were identified in the sample.

Due to the small number of nonresidential sales recorded and the scarcity of data related to these transactions, only general comparisons were made for commercial and industrial property classes. The larger numbers of recorded transactions for residential properties and the completeness of residential data sets allowed for greater detail in the analysis of results.

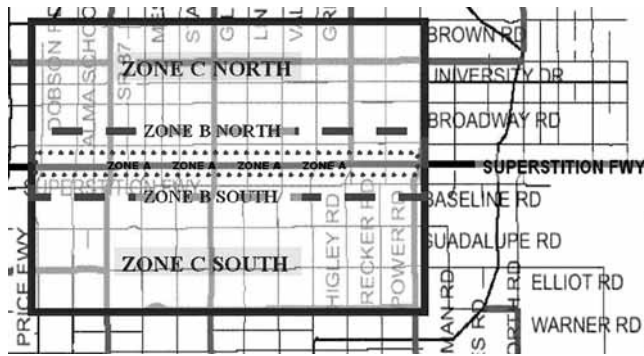


FIGURE 1 Superstition Freeway corridor study area. (Source: Maricopa Association of Governments, 2003.)

Detached Single-Family Housing Sample Results

The effects of freeways on the value of detached single-family residential properties have been among the most documented of property value effects related to freeway development. Previous research methods used in the comparison of residential properties have ranged from simple comparisons of average price per square foot (5) to multivariate regression models (3, 6). Because the sample of residential properties in the Superstition Freeway corridor was sufficiently large, multiple methods were used to compare the properties selected for the study.

Detached Single-Family Housing Descriptive Statistics by Zone

The sample distribution of structure size was quite similar for all zones, with average home size ranging from 1,545 ft² to 1,571 ft². The range of structure size increased with the zone sample size, Zone C having the largest range of values and Zone A the smallest. However, all structure-size measures for the three zones were generally similar, and a *t*-test revealed no statistically significant difference in home size between pairs of zone locations.

Homes in the control zone tended to be oldest at the date of sale, as measured by the difference between the sale date and the year the home was built. Average age at date of sale was 6.2 years for properties in Zone A and 6.7 years for Zone B, whereas homes in Zone C averaged 8.3 years of age. Median structure age was 5 years in both Zone A and Zone B, while median structure age in Zone C was 7 years. Statistically, no age difference was observed between

TABLE 1 Property Sales Transactions by Zone and Type

Property Type	Zone A	Zone B	Zone C	Total
Residential				
Detached single-family	403	1,896	1,358	3,657
Condominiums	124	214	271	609
Vacant land	2	3	3	8
Nonresidential				
Office and financial	0	3	21	24
Retail and services	0	8	47	55
Restaurants	0	7	6	13
Apartments	0	4	16	20
Industrial	0	1	1	2
Agricultural	0	1	15	16
Total sales records	529	2,137	1,738	4,404

structures in Zone A and Zone B, but a significant difference was observed between structures in the impact zones and the control zone.

Despite the difference in structure age, average and median adjusted residential sales prices recorded for the three zones were highest in Zone C. No statistically significant difference in adjusted price was observed between Zones A and B. However, Zone C average sales prices were sufficiently higher than those in the impact zones to be statistically significant at a 95% level of confidence. These results tend to match the earlier Tempe findings (5), with properties in Zone C selling for a larger amount per square foot and properties in Zone A selling for the least per square foot, in most years observed.

However, sales price per square foot is not an ideal measure of value. Many other factors can influence sales price. Multiple variables acting in tandem can offset the effects of others. To determine the net effect of a given variable, such as location, on housing price, a more sophisticated analysis must be undertaken.

Sales Price Regression Results for Detached Single-Family Homes

Regression analysis was used to determine the net effect of individual variables on housing prices when all other variables were held constant. Three regression analyses were run. The first identified properties by zone, specifying Zone A (adjacent) and Zone B (impact area) as property characteristics, with Zone C left as the control. The first analysis thus attempted to identify any net effect on property value associated with location by zone.

The second analysis attempted to determine whether net effects (e.g., noise, access) from the freeway were comparable with the net effects of large, heavily traveled surface streets. The second regression used only properties in Zone A and Zone C, but split Zone C into “traffic-affected” properties located on major thoroughfares (i.e., mile-grid streets) and a “traffic-insulated” control zone. Because some freeway impact on property values was assumed to exist for the properties located in the impact area (Zone B), Zone B was excluded from the street-based analysis to avoid the possibility of confounding results by mixing the impacts of multiple “environmental” variables. Regression results for the “zone-based” and “major streets” analyses are shown in Table 2.

Both regression models had nearly the same explanatory value, as measured by the *r*-squared statistic. The zone-based and street-based regression analyses both explained approximately 80% of the variation in prices for detached single-family homes. Despite a smaller sample size, the overall explanatory value of the regression comparing Zone A and control zone properties located on major through streets was nearly the same as that of the zone-based comparison. However, the smaller sample for the latter analysis also resulted in a larger standard error.

The street-based model had a comparable explanatory value (*r*² = 0.789) to that of the zone-based model (*r*² = 0.795), but the smaller sample led to larger fluctuations in variable coefficients. Despite these differences in sample size and significance, however, comparable results were reached using the street-location regression. Most coefficients had values similar to the results of the zone-based analysis, although confidence intervals tended to be slightly larger and thus somewhat less reliable.

Structure depreciation, represented by housing age at date of sale, was found to have a deleterious effect on home value. Reduction in housing price due to depreciation was estimated at \$613 current dollars per year of age. Housing location was also found to

TABLE 2 Regression Coefficients for Detached Single-Family Housing

Variable	Coefficient ¹	Standard Error	t-Stat	P-Value ²	Confidence Interval	
					Lower 95%	Upper 95%
Zone-Based						
Intercept	0	N/A	N/A	N/A	N/A	N/A
Bldg. Sq. Ft.	\$40.86	\$0.96	42.5341	0.000000000	\$38.98	\$42.75
Lot Sq. Ft.	\$2.26	\$0.11	20.6043	0.000000000	\$2.05	\$2.48
Pool Sq. Ft.	\$13.80	\$1.48	9.3119	0.000000000	\$10.89	\$16.70
Bath Fxtrs.	\$2,498.41	\$222.76	11.2158	0.000000000	\$2,061.67	\$2,935.15
Age	-\$613.36	\$35.50	-17.2796	0.000000000	-\$682.95	-\$543.77
Porch/Patio	\$2,090.60	\$558.40	3.7439	0.000184003	\$995.78	\$3,185.41
Air Cond.	\$25,073.99	\$1,799.29	13.9355	0.000000000	\$21,546.27	\$28,601.71
Evap. Cool	\$24,264.22	\$3,246.40	7.4742	0.000000000	\$17,899.28	\$30,629.17
Quality Good	\$10,307.53	\$836.62	12.3205	0.000000000	\$8,667.25	\$11,947.82
Carport	\$2,670.10	\$630.64	4.2339	0.000023529	\$1,433.65	\$3,906.54
Garage	\$5,604.54	\$610.42	9.1814	0.000000000	\$4,407.74	\$6,801.34
Zone A	-\$6,299.45	\$790.83	-7.9656	0.000000000	-\$7,849.96	-\$4,748.93
Zone B	-\$3,245.93	\$502.53	-6.4591	0.000000000	-\$4,231.21	-\$2,260.66
Street-Based						
Intercept	0	N/A	N/A	N/A	N/A	N/A
Bldg. Sq. Ft.	\$42.21	\$1.45	29.1580	0.000000000	\$39.37	\$45.05
Lot Sq. Ft.	\$2.20	\$0.17	12.6102	0.000000000	\$1.86	\$2.55
Pool Sq. Ft.	\$12.80	\$2.26	5.6622	0.000000017	\$8.37	\$17.23
Bath Fxtrs.	\$3,126.73	\$340.08	9.1940	0.000000000	\$2,459.72	\$3,793.74
Age	-\$565.28	\$52.05	-10.8597	0.000000000	-\$667.37	\$463.19
Porch/Patio	\$1,708.27	\$928.29	1.8402	0.065902361	-\$112.40	\$3,528.94
Air Cond.	\$18,803.58	\$2,773.99	6.7785	0.000000000	\$13,362.90	\$24,244.25
Evap. Cool	\$18,259.28	\$4,290.32	4.2559	0.000021922	\$9,844.59	\$26,673.97
Quality Good	\$7,970.00	\$1,302.20	6.1204	0.000000001	\$5,415.97	\$10,524.04
Carport	\$3,309.60	\$1,008.81	3.2807	0.001055849	\$1,331.01	\$5,288.19
Garage	\$6,201.22	\$965.28	6.4243	0.000000000	\$4,308.00	\$8,094.44
Zone A	-\$6,573.78	\$861.99	-7.6262	0.000000000	-\$8,264.42	-\$4,883.13
Major Street	-\$3,521.83	\$1,490.44	-2.3629	0.018239645	-\$6,445.07	\$598.59

¹ Coefficient refers to the estimated dollar effect associated with a one-unit change in the variable when all other variables were held constant.

² Based on a 95% level of confidence, P-values less than 0.05 were considered statistically significant.

be a significant determinant of sales price, with homes in the impact area selling for less than comparable homes in the control area. The impact of location was more pronounced for homes abutting the Superstition Freeway than for homes in the remainder of the 1/2-mi impact area. Homes in Zone A sold for an estimated \$6,300 less in current dollars relative to comparable properties in the control zone. Homes in the remaining impact area (Zone B) sold for an estimated \$3,246 less than control zone properties, all other variables being equal.

The regression model results suggest that proximity to the Superstition Freeway does have a negative impact on property values for detached single-family residences. At a 95% level of confidence, developed residential properties abutting the freeway could be expected to incur a reduction in value of \$4,749 to \$7,850 in current dollars, based on location. Homes in the broader impact area (Zone B) incurred a discount to constant value ranging from \$2,261 to \$4,231 in current dollars at a 95% level of confidence. Although these results do not guarantee that proximity to the freeway had a negative impact on residential property values, the results strongly suggested that this was the case for sampled homes having characteristics within the ranges measured.

While homes in proximity to the freeway sold for less than homes in the control area, the question remained as to whether some unmea-

sured variable, unrelated to the freeway, accounted for the observed variation in sales prices by zone. To clarify the results obtained by the first regression, the second analysis was run using only abutting properties (Zone A) and control zone properties (Zone C). However, control zone properties were subdivided into homes located on major surface streets and those located on smaller streets. The former were identified according to the mile-grid streets in the metropolitan area and were hypothesized to suffer some of the same environmental effects attributed to the freeway. The latter category was assumed to be a control area insulated from these effects.

Both Zone A and major street property locations were found to sell at a statistically significant discount to control area properties. Zone C properties located on major streets were estimated to sell for \$3,522 less than comparable properties in the control area. The p-value measured for the major streets variable was considerably larger than the p-value for Zone A but was well within the range of 95% confidence. Nonetheless, this produced a relatively larger range of coefficients for the confidence interval. The negative effect of a major street location was between \$599 and \$6,445 in current dollars at a 95% level of confidence. However, these results, as well as the traffic analysis, suggested that traffic volumes and the accompanying noise and air pollution were in fact the determinants of the price differential observed for impact area residential properties.

The longer-term effects of this impact were examined using appreciation indexes of changes in actual sales price for single-family housing prices. An index of price appreciation was created for each detached single-family residence for which repeat sales could be identified. The original value of each parcel was scaled to a value of 1.00, and subsequent sales were assigned index values relative to the change from the starting price using the following formula:

$$INDEX_{END} = \left(\frac{PRICE_{END}}{PRICE_{START}} \right) \times INDEX_{START}$$

All index values were assigned on the basis of change from the original sales price, regardless of the number of sales for a given parcel. Index values could then be aggregated to create an unweighted price appreciation index for each zone in the Superstition Freeway corridor.

Price index values for each zone are shown in Figure 2. Average appreciation in sales prices tended to be lowest for homes abutting the freeway. Average year-over-year price appreciation for homes in the entire metropolitan statistical area was 3.73% from 1980 to 2000. Over the same period, year-over-year price appreciation for homes in Zones A and B was significantly lower, averaging 2.81% and 2.89%, respectively. In contrast, sales prices for homes in Zone C increased by an average of 4.32% year over year from 1980 to 2000. Properties in Zone B increased in value most rapidly in the early years (1980 to 1985) but slowed considerably after the freeway was completed to the eastern edge of the study area. The slower appreciation in the areas most proximate to the freeway suggests that, in the aggregate, property owners in Zone C experienced comparable benefits of proximity to the freeway without having to experience deleterious effects of traffic noise and pollution levels. The price differential among traffic-affected and traffic-insulated Zone C properties in the major streets analysis (Table 2) provides support for this hypothesis.

Because the results of the street-based regression indicated that traffic levels in general, regardless of type of thoroughfare, may have

a significant effect on residential property sales, a third regression analysis was done to examine the effects of changes in traffic on US-60 on detached residential sales prices by zone. Average daily traffic (ADT) on US-60 from 1980 to 2000 was allocated to Zone A and Zone B properties in lieu of the yes/no responses for each zone. Hence, the possible values were zero (a “no” response) or the section length ADT for that year. The study area ADT values were estimated by using the total daily vehicle miles of travel for each US-60 segment divided by the total length of the Superstition Freeway study area. This was done to avoid double-counting vehicles that remained on the freeway for multiple segment lengths.

The results of this traffic-based analysis are given in Table 3. The *r*-square statistic for this analysis was 0.794, indicating that the regression model explained 79% of the variability in housing price. All variable coefficients were found to be statistically significant at the 95% level of confidence. Proximity to the freeway was found to have a more deleterious effect on property values when freeway traffic levels were higher across the study area boundaries. For the abutting properties in Zone A, ADT across the length of the study area freeway sections corresponded with a \$0.052 drop in detached single-family property values per vehicle. Property values in Zone B fell by \$0.027 per vehicle. All dollar amounts were standardized to year 2000 levels.

The reduction in housing prices as freeway traffic increased suggested that the drawbacks of proximity to the freeway were attributable to vehicle traffic. This would indicate that noise and air pollution did have a negative effect on property values that was not explained by differences in other housing characteristics. However, as indicated in the street-based analysis, these impacts were not the product solely of the freeway. Traffic on any street might be expected to have a negative impact on housing prices nearby. The incremental influence of each vehicle may or may not exhibit a linear relationship. Traffic data were not collected for the street-based analysis, so the possibility of a differential in traffic impacts between the freeway and surface streets could not be tested. However, given the depressed grade and noise mitigation improvements of the Superstition Freeway, it is

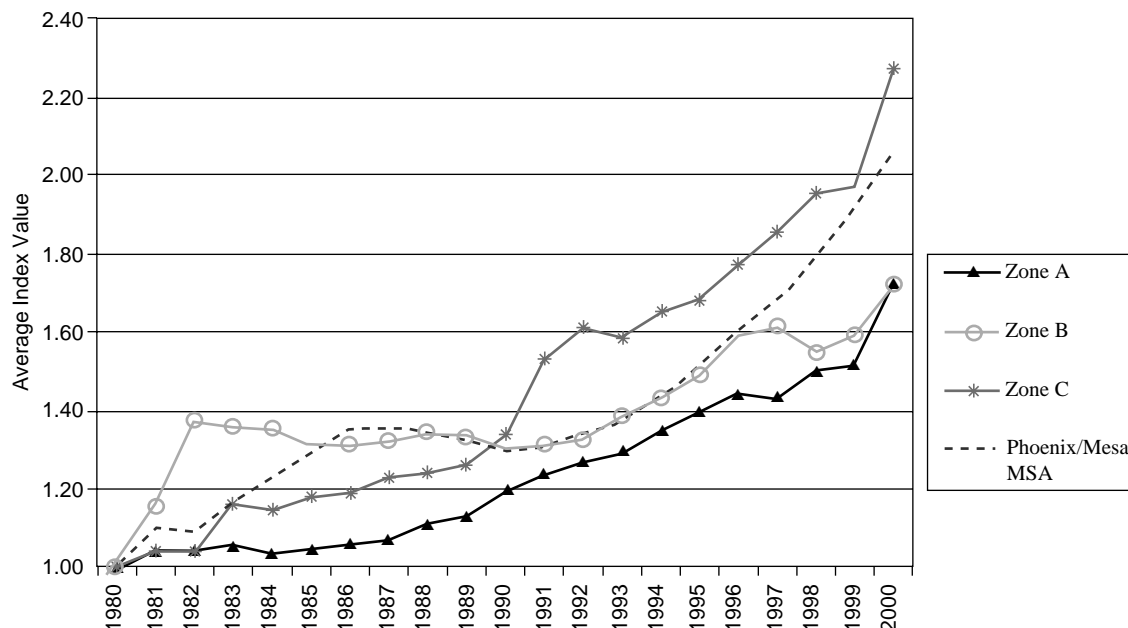


FIGURE 2 Residential price appreciation indexes, Superstition Freeway corridor.

TABLE 3 Traffic-Based Regression Coefficients by Zone for Single-Family Housing

Variable	Coefficient	Standard Error	t-Stat	P-Value	Confidence Interval	
					Lower 95%	Upper 95%
Intercept	0	N/A	N/A	N/A	N/A	N/A
Bldg. Sq. Ft.	\$40.92	\$0.96	42.4676	0.000000000	\$39.03	\$42.81
Lot Sq. Ft.	\$2.20	\$0.11	19.8614	0.000000000	\$1.98	\$2.41
Pool Sq. Ft.	\$13.66	\$1.49	9.1857	0.000000000	\$10.74	\$16.57
Bath Fxtrs.	\$2,651.06	\$226.03	11.7288	0.000000000	\$2,207.90	\$3,094.22
Age	\$510.34	\$36.95	-13.8124	0.000000000	-\$582.78	-\$437.90
Porch/Patio	\$2,296.20	\$556.87	4.1234	0.000038159	\$1,204.40	\$3,388.00
Air Cond.	\$22,459.49	\$1,771.91	12.6753	0.000000000	\$18,985.46	\$25,933.52
Evap. Cool	\$21,089.60	\$3,259.53	6.4701	0.000000000	\$14,698.91	\$27,480.30
Quality Good	\$10,127.94	\$838.28	12.0818	0.000000000	\$8,484.40	\$11,771.49
Carport	\$2,666.66	\$632.74	4.2145	0.000025641	\$1,426.11	\$3,907.21
Garage	\$5,941.95	\$613.83	9.6801	0.000000000	\$4,738.46	\$7,145.44
Zone A (ADT) ¹	-\$0.05177	\$0.01	-6.5168	0.000000000	-\$0.06734	-\$0.03619
Zone B (ADT) ¹	-\$0.02731	\$0.01	-5.3995	0.000000071	-\$0.03722	-\$0.01739

¹ Coefficients represent change in property value by zone (current dollars) given annualized US-60 ADT over entire length of study area.

plausible that the impact per unit of traffic on local surface streets might be greater than the impact per unit of freeway traffic.

Sample Results for Condominiums and Townhomes

Multiple-unit residential properties were evaluated by using the same *t*-test and regression procedures as for detached single-family homes. However, a smaller sample of recorded sales was collected for condominiums in the study area, which led to greater variance in the test results. Several variables were also omitted from the multiple-unit residential analysis, as these were either not relevant or not recorded. For example, the minimal lot size (if any) and planned amenities of these developments generally preclude swimming pools for individual units—none was recorded in the property sample. Similarly, properties had either air conditioning in the vast majority of cases, or no cooling system in a few cases, so evaporative cooling was not considered for the analysis.

Comparisons of the most influential variables are shown in the following section. As in the case of detached single-family residences, a *t*-test was used, when applicable, to determine whether observed differences in general characteristics were statistically significant. These general comparisons are then followed by zone-based and street-based regression analyses to determine the effects of location on multiple-unit housing prices. However, the smaller number of recorded sales made the regression analyses less reliable than those done for detached residential property.

Condominiums and Townhomes: Descriptive Statistic by Zone

Statistically significant differences in structure and lot size were observed between multiple-unit residential properties in all zones. Structures in Zone A tended to be smallest, with an average size of 917 ft². Zone B condominiums were largest, averaging 1,148 ft². Zone C condos averaged 1,060 ft² in size. Median structure size was virtually identical to average size for all zones, indicating that condos were normally distributed by structure size.

Differences in structure age at the time of sale were not found to be statistically significant between zones. Average structure age ranged from 5.15 years in Zone B to 6.03 years in Zone C. Median age was 4 years in Zone A, 3 years in Zone B, and 5 years in Zone C. Condos in Zone B had the largest adjusted sales price on average. Average and median adjusted sales prices were lowest in the control zone at \$62,384 and \$61,790, respectively. Properties in Zone A sold for an average of \$65,759 in current dollars, and Zone B properties averaged \$74,073. Observed differences in size and sales price were statistically significant at the 95% confidence level.

Condominiums: Regression Analysis

The regression model results for condominiums were not generally as reliable as the results recorded for detached single-family residences. This is likely a result of the smaller sample size for condos. A total of 609 sales transactions were recorded for condos. The data were more evenly distributed among the three zones, with 20.3% of sales in the abutting zone (A), 35.1% in the impact zone (B), and the remaining 44.6% in the control zone (C). The explanatory value (i.e., *r*²) of this model was 64.6% for the zone-based analysis and 54.6% for the street-location analysis.

Regression results for condos shown in Table 4 had fewer variables than for detached single-family residences. Insufficient housing quality data were available to distinguish between condominium structures, and none of the units tested had swimming pools or cooling systems other than air conditioning, so these variables were removed from the analysis. As in the case of detached single-family residences, the coefficients for condominiums generally reflected the expected contribution of each housing component. However, the relative magnitude of each component tended to be quite different from that found in the detached single-family analysis. Note that results for condos were not directly comparable with results for detached residences because of the differences in the number of variables considered in the analysis.

In contrast to detached single-family residential property results, several variables were determined not to be statistically significant in the zone-based condo regression. *P*-values for number of bath fixtures, carport size, and the zone locations were all > 0.05, indicating

TABLE 4 Zone-Based Regression Coefficients for Condominiums and Townhomes

Variable	Coefficient	Standard Error	t-Stat	P-Value	Confidence Interval	
					Lower 95%	Upper 95%
Zone-Based						
Intercept	0	N/A	N/A	N/A	N/A	N/A
Bldg. Sq. Ft.	\$65.95	\$3.63	18.1681	0.00000000	\$58.82	\$73.08
Lot Sq. Ft.	\$1.41	\$0.32	4.42767	0.00001132	\$0.78	\$2.04
Bath Fxtrs.	\$581.19	\$553.90	1.04928	0.29447366	-\$506.62	\$1,669.01
Age	-\$836.53	\$86.82	-9.6355	0.00000000	-\$1,007.03	-\$666.02
Porch/Patio	\$8,217.61	\$1,096.91	7.49161	0.00000000	\$6,063.36	\$10,371.87
Air Cond.	\$7,899.88	\$1,957.61	4.03548	0.00006155	\$4,055.27	\$11,744.48
Carport	\$1,492.57	\$1,482.60	1.00672	0.31447353	-\$1,419.15	\$4,404.29
Garage	\$7,106.48	\$1,254.13	5.66645	0.00000002	\$4,643.45	\$9,569.51
Zone A	\$2,705.99	\$1,735.05	1.5596	0.11938316	-\$701.54	\$6,113.51
Zone B	\$2,780.06	\$1,441.49	1.92861	0.05425182	-\$50.92	\$5,611.04
Street-Based						
Intercept	0	N/A	N/A	N/A	N/A	N/A
Bldg. Sq. Ft.	\$63.37	\$4.69	13.5085	0.00000000	\$54.14	\$72.59
Lot Sq. Ft.	\$1.31	\$0.40	3.2777	0.00114169	\$0.52	\$2.10
Bath Fxtrs.	\$379.87	\$738.82	0.51416	0.60743400	-\$1,072.75	\$1,832.49
Age	-\$917.34	\$110.40	-8.3095	0.00000000	-\$1,134.39	-\$700.28
Porch/Patio	\$5,836.08	\$1,799.57	3.24304	0.00128580	\$2,297.87	\$9,374.29
Air Cond.	\$6,959.82	\$2,757.72	2.52376	0.01201212	\$1,537.75	\$12,381.89
Carport	\$4,649.24	\$2,015.00	2.30732	0.02156671	\$687.47	\$8,611.02
Garage	\$12,248.78	\$2,045.57	5.98795	0.00000000	\$8,226.89	\$16,270.67
Zone A	\$5,161.74	\$2,443.36	2.11255	0.03528220	\$357.73	\$9,965.74
Major Street	\$4,653.80	\$1,513.15	3.07557	0.00225099	\$1,678.73	\$7,628.87

that there was >5% likelihood that the coefficients for these variables were the product of random variation. However, the *p*-value for Zone B locations was only slightly greater than 0.05, so a less-stringent confidence interval (e.g., 90%) would likely have produced statistically significant results.

Also notable in the zone-based analysis are the positive values associated with each zone. Although these numbers were not statistically significant, the coefficients suggested that buyers of attached residential property had different priorities for housing amenities. However, at the level of confidence chosen, no conclusion could be reached about the value of location in the zone-based analysis.

Regression results comparing the Zone A properties with control area (Zone C) locations on and off major surface streets indicated that higher condominium property values were associated with major thoroughfares. Although the street-based analysis had a lower explanatory value overall, statistically significant results were reached for a greater number of variables. In the street-location analysis, only bath fixtures had a *p*-value that was not significant at the 95% level of confidence.

Most variables that were statistically significant in both regressions (e.g., structure and lot size, age) fell within the confidence intervals predicted by the other model. However, the smaller sample size and slightly larger *p*-values for most variables in the street-location analysis made the confidence intervals for estimated values of each housing characteristic quite large. Nonetheless, the street-location analysis resulted in statistically significant coefficients at the 95% level of confidence for differences in location.

The street-based regression results indicated that access was a positive amenity for buyers of attached residential units. Condo sales both in Zone A and on primary streets in Zone C were valued at a premium compared with control zone properties located on smaller

thoroughfares, all other characteristics being equal. A slightly higher premium was placed on locations adjacent to the freeway than on locations located on major (mile) streets, as indicated by the coefficients for these variables. In year 2000 housing-price dollars, the estimated premium was \$5,162 for Zone A locations and \$4,654 for primary-street locations, relative to the control properties. The 95% confidence interval for the Zone A location premium ranged from \$358 to \$9,966 (in 2000 dollars), while the primary-street locations had a premium ranging from \$1,679 to \$7,629 at the same level of confidence.

While the price differences observed in the zone-based analysis may have been primarily the result of lot size and housing style discussed in the previous section, the primary-street location analysis for condominiums suggested that buyers of these properties place a greater emphasis on immediate access to a major thoroughfare. However, the nature of these types of developments is such that an individual unit may be sheltered from the impacts of traffic and still have an address location on the through street. More so than detached residential units, condominiums benefit from community landscaping, perimeter walls, and the close proximity of other units as a potential buffer from traffic-induced noise and other effects. Therefore, some degree of caution should be used in assessing these results.

Because the analysis did not distinguish between individual units in a complex by actual distance from the thoroughfare, it is possible that some units actually experienced some differential in pricing based on this distance. The relatively low explanatory value of this analysis suggests that better means of distinguishing between units would have yielded superior results. Nonetheless, the overall picture indicates that major streets, including freeways, present a more desirable location for the development of multiple-unit communities. This may reflect some difference in consumer preference for

locational amenities between buyers of detached and attached residential properties.

Nonresidential Summary

The analysis of nonresidential property was limited by the availability of commercial sales data and transaction details. No statistically significant results were obtained for nonresidential properties, but a few tentative assessments were made from the information on hand. First, the Superstition Freeway appeared to exert a greater influence on the development of commercial property sites than industrial property sites in Mesa. This may be due to the greater reliance of many commercial establishments on a single transportation mode (i.e., automobiles). The observed values per square foot for vacant commercial land suggest that demand for commercial space was slightly greater in the impact zone (B) than in areas farther from the freeway (Zone C).

Results for office and retail properties also appear to support this observation. However, results for restaurant properties showed a bias toward higher values in Zone C, which would not be expected if the freeway afforded some locational advantage. Apartment buildings tended to have higher sale values in Zone B, which corroborated findings for condominiums. It appears that buyers of attached residential property place a greater emphasis on access to surrounding facilities than do buyers of detached residential property. This observation rests on the assumption that the value of apartment communities is based on the expected rental income from tenants, which would reflect tenants' willingness to pay for the amenities associated with the apartment community. It should be emphasized that, despite the observation of these weak trends, none of these cases can be considered conclusive given the limited scope of commercial property sales data.

CONCLUSIONS

Freeway development confers benefits to highway users in the form of reduced transportation costs. This reduction in transportation costs can have a variety of spillover effects on highway users and nonusers alike. Previous research has identified a number of population, economic, and land use effects that tend to accompany freeway development. Improving the access to locations along the freeway corridor makes these sites more attractive to development.

The effects of these changes in access are usually observed in an increase in population and commercial activity in the freeway corridor (7). As individuals and firms relocate to areas served by the new freeway, economic activity tends to rise in the corridor. This increased demand for homes and commercial land has generally been associated with an increase in property values in the transportation corridor, as savings from reduced transportation costs are capitalized into asset values (1). However, most researchers caution that gains in one area are frequently losses in another, and a broader impact assessment should evaluate the changes brought about by migration of firms and individuals from other areas.

Freeway development can also impose costs on users and nonusers. Highway users may suffer in the short term as construction diverts traffic onto smaller local streets. All drivers share the added costs of congestion in the form of lost time and higher vehicle operating costs (8). Property owners may also suffer, both in the short term as construction reduces access to local homes and businesses and in

the longer term as added traffic noise and pollution adversely affect properties closest to the highway. Considered in conjunction with the benefits that accrue to property owners from freeway development, these negative impacts generally have been interpreted as evidence that freeways impose costs on certain property owners that may not be offset by gains.

A substantial body of research has been devoted to the examination of this distribution effect, in which the benefits and costs of freeway development are not distributed equally among property owners. Most research has focused on changes in single-family residential properties, probably for two reasons. First, data on residential property sales are easily gathered, and housing characteristics are more comparable than for many commercial properties. Second, residential property owners tend to be the most vocal opponents of freeway development, as commercial property owners generally welcome the benefits of proximity to a freeway (2).

Freeway construction has been shown to stimulate migration to freeway corridors (8) and to increase the amount of residential and commercial development in the corridor (9), but it may lead to a decline in marketability for existing residential units (10). Previous research has identified a persistent negative impact on homes located closest to freeways, though in many cases these effects are small (6, 11) or more than offset by net gains in the surrounding area from increased accessibility (3).

This research identified similar results for residential properties located in the Superstition Freeway corridor. However, additional analysis of different types of residential property and the general influence of all traffic yielded new insights. Among the findings were the following:

- Detached single-family homes were adversely affected by proximity to the freeway. The negative effects on sale prices were greatest for homes adjacent to the freeway, but a reduction in property values was also observed in the impact area (within $\frac{1}{2}$ mi of US-60).
- Price appreciation was also lower for single-family homes nearest the freeway, indicating that negative impacts were not transitory, but lasting.
- Overall price appreciation in the Superstition Freeway corridor suggested that the negative impacts to some property owners were more than offset by housing price appreciation in the surrounding areas. Average sales price appreciation for Mesa and Gilbert single-family homes within 5 mi of the freeway (including adversely affected properties) was higher than housing price appreciation in the metropolitan area.
- The negative impact on single-family housing values associated with proximity to the freeway was also found to exist for homes located on major surface streets. An inverse relationship (i.e., negative correlation) between freeway traffic levels and housing prices was observed as well.
- Multiple-unit residential developments appeared to benefit from proximity to the freeway and from locations on major surface streets, suggesting that owners of these types of properties had different preferences for locational amenities than owners of detached single-family homes. Condominium owners were found to experience a slight rise in property values when the property was located in the zone adjacent to the Superstition Freeway or on a major mile street.

The data available permitted only a cursory comparison of commercial and other nonresidential properties in the Superstition Freeway corridor. Vacant commercial land appeared to be valued more highly than expected. While comparable property values were observed for

restaurants and office properties in the impact and control areas, retail properties appeared to command higher prices closer to the freeway. A pricing differential was also observed for large apartment buildings, which were priced at a premium to apartments in the control zone, reinforcing the results obtained for condominiums. However, none of the nonresidential property results was statistically significant, and these observations should be interpreted with caution.

Perhaps the most important finding of this research is the correlation between traffic and residential property values. Although researchers have traditionally focused on freeway corridors to evaluate property value effects, the implicit assumption is that proximity to traffic is at the root of any negative impact on residential properties. Viewed in this context, the freeway itself is nothing more than a conduit for traffic effects. The same negative effects were observed for single-family homes located on major mile streets more than $\frac{1}{2}$ mi from the Superstition Freeway.

Motor vehicle traffic on a particular route is a complex derivation from a number of related influences, including local population, automobile ownership, driver preferences, the number and characteristics of alternate routes or modes of transportation, and the amount of commercial activity in an area. If there is traffic generated by the freeway, the net impact of traffic in general will be greater (12). If sufficient alternate routes exist, property owners may experience smaller accessibility benefits from freeway construction (3). However, freeways tend to concentrate traffic in a more localized area. If a region experiences growth in traffic without the benefit of freeway development, traffic will be dispersed over a wider area. Although this may have less of an impact on a specific group of property owners, it is probable that more properties will be exposed to the negative effects of traffic.

Freeway development is a trade-off between accessibility and traffic growth. But the same can be said for construction of any roadway. The effects of traffic form the basis for changes in property values—whether positive, as might be hypothesized for commercial establishments serving a mobile population, or negative, as expected from residential proximity to traffic noise and air pollution. Whether a thoroughfare is classified as a highway or a local street may not be as important as the volume of traffic carried. Assessments of the net effects of freeways on nearby property values are limited, in that opposition to freeway development is typically the impetus for further research. However, in recognizing that the freeway is simply another means of carrying traffic, the analysis shifts to the benefits and costs of the road system in general; in other words, the impact of

traffic. It is recommended that further research examine the changes in property values with respect to differences in traffic volumes to clarify the relationship between these variables.

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Loop 202 freeway costs double

[By Doug Murphy](#)

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Construction costs for the South Mountain Loop 202 freeway have more than doubled since the voters approved funding in 2004, according to figures released by the Arizona Department of Transportation on Thursday.

The freeway, which was originally budgeted at \$1.1 billion is now estimated to cost \$2.4 billion, a 40 percent increase in two years and a 120 percent increase in roughly five years.

At the same time, the estimated amount of money raised by Proposition 400, a twenty year half-cent sales tax dedicated to transportation plans from freeway expansion to light rail and mass transit improvements, has sunk by over \$1 billion in the tepid economy, from \$15.7 billion to \$14.5 billion.

That leaves the Maricopa Association of Governments, which manages the valley's transportation plans, with few options.

"We are going to have to make some adjustments in the program," said Erick Anderson, MAG's transportation director.

But it's not clear where the adjustments would occur. Anderson said that MAG staff will meet with valley elected leaders later this year to look at income and expense projections and then discuss options.

But despite being short of money, there are no immediate plans to drop the South Mountain Loop 202. Efforts to update the original 1985 plan, to take into account the rapid growth in the area, have been going on since 2002, with a draft environmental impact statement hung up in the approval process because the freeway requires massive cuts into South Mountain, which the Gila River Indian Community and others consider sacred.

The ultimate decision to put on hold or cancel a project will come from the Valley's elected leaders who make up the governing board of MAG.

Laurel Arndt, a member of the Citizens Advisory Team and the Ahwatukee Foothills Village Planning Committee, said last week that now might be a good time to start getting Phoenix on record as opposing the freeway.

In the past, Councilman Greg Stanton has gone on the record opposing the freeway, once saying they would build it on Pecos Road over his dead body. And Mayor Phil Gordon has said that he supports the community. But the City Council as a whole has been silent on the project.

"The city, technically, isn't on the record for or against how the Loop 202 would impact the general plan," Arndt said at a Village Planning Committee meeting on Sept. 22. "We know where they stand, but we don't have a City Council resolution."

Meanwhile, the freeway's citizen advisory board will meet later this month to discuss air quality impact the highway could create.

Loop 202 costs double as revenue drops

[By Doug Murphy](#)

September 29, 2008 - 3:29PM

Construction costs for the South Mountain Loop 202 Freeway have more than doubled since voters approved funding in 2004, according to figures released by the Arizona Department of Transportation last week.

At the same time, projected revenues from voter-approved Proposition 400, designed to fund projects until 2024, are expected to be down by \$1 billion.

The combination could mean dramatic changes, not just for the South Mountain Loop 202, but for light rail expansion, new and improved freeways and improved public transit that were all included in Prop. 400 and the Regional Transportation Plan.

A detailed analysis of revenues from Prop. 400 - a 20-year, half-cent sales tax dedicated to transportation, from freeway expansion to light rail and mass transit improvements - isn't expected until later in the month. But early figures show that sales tax income will shrink by more than \$1 billion over the life of the tax, from \$15.7 billion to \$14.5 billion. In the past two months alone, sales tax revenues from Prop. 400 are 10 percent below what was expected, mirroring the economic meltdown that is hitting Arizona consumers.

"It is significant, no doubt about it. And there is no way to sugar coat it," said Eric Anderson, the Maricopa Association of Governments transportation director, who oversees planning for the Valley's transportation systems.

Increasing costs aren't affecting just the Loop 202. In a draft report prepared by MAG engineers the Loop 303, planned for the West Valley is underfunded by \$1 billion and State Route 801, an alternative to Interstate 10 also on the west side, is \$1.1 billion short.

That leaves MAG with few options.

"We are going to have to make some adjustments in the program," Anderson said.

And because of safeguards built into Prop. 400 - so freeway money from one category couldn't be used in another category - everything in the 20-year Regional Transportation Plan will probably feel the economic pinch.

In the case of the South Mountain Loop 202, it was originally budgeted at \$1.1 billion in 2003 and is now estimated to cost \$2.4 billion, a 40 percent increase in two years and a 120 percent increase in roughly five years.

Contributing to the increased cost was a 164 percent increase in the price of asphalt over the past five years, steel prices jumping 94 percent and diesel climbing an incredible 820 percent over the past 10 years.

Michael Brueder, the freeway's project manager with ADOT, said that when budgets like the Loop 202 get out of balance he has four options: to ask for more money, reduce the scope of a project, look for new funding sources, or "The ultimate case is to drop the project and not build it at all," he told the South Mountain Citizens Advisory Team on Sept. 25.

- Bringing in external experts to review projects.
- Extending and delaying projects.
- Converting freeways into parkways.
- Reducing the scope of freeways.
- Instituting toll roads, especially for high-occupancy lanes.

The budget shortfall is something MAG's transportation-policy committee will take up at future meetings. The committee will be responsible for recommending which projects are scaled back and which are put on hold.

Those recommendations then would be considered by the full MAG executive committee and the full regional council, which is comprised of 32 members of governments in Maricopa County plus representatives of three Native American communities and members of the state transportation board.

Anderson said MAG, which is comprised of Valley mayors and other elected leaders, might consider reducing the width of the proposed South Mountain Freeway from its ultimate 10-lane design.

"Maybe for the South Mountain (Freeway), where we have significant neighborhood impact, we might narrow it down to only be six lanes," he said.

More than 300 to 600 homes would have to be bulldozed to make way for the freeway, which has been in state freeway plans for 20 years but was an unfunded project during the 1990s. Voter approval of Proposition 400, a half-cent sales tax, in 2004 made the project more of a reality.

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South Mtn. Freeway costs soar

by **Kerry Fehr-Snyder** - Sept. 26, 2008 05:45 PM
 The Arizona Republic

The price of the proposed South Mountain Freeway has soared in the past two years, eclipsing its budget for the next decade at least.

What was once billed as a \$1.7 billion freeway to complete the Loop 202 through Ahwatukee Foothills and Laveen has mushroomed to \$2.4 billion. And that doesn't include the cost of the whole project, which initially would be built as a six-lane, 22-mile freeway with room to expand to 10 lanes.

The new estimates were discussed Thursday at the monthly meeting of the South Mountain Citizens Advisory Team.

"I find it amazing that we've been talking about a 10-lane facility but we have an estimate for a six-lane freeway," said Brian Smith, a CAT member who represents the Calabrea HOA in Ahwatukee Foothills.

But officials with the Arizona Department of Transportation said that the real cost of building the freeway comes at the beginning with acquiring rights of way, excavating dirt, buying construction materials and covering

labor costs.

Those costs rose about 50 percent since April 6, 2006, said Mike Bruder, project manager for the South Mountain Freeway.

Nationally, construction materials account for the largest increase on freeway projects over the past year: 85 percent for diesel, 53 percent for asphalt and 30 percent for steel.

In Arizona, the costs for freeway construction have risen primarily due to an increase in money set aside for litigation and other expenses as part of ADOT's right-of-way estimate. The new estimate is \$930.6 million, an increase of nearly \$294 million.

The Regional Transportation Plan has set aside \$900 million over the next five years for the South Mountain Freeway. It has allocated another \$200 million for the project in the five years after that.

Taxpayers already have spent \$106.7 million on the project, primarily to build the interchange between the Santan Freeway-Loop 202 and Interstate 10 as it leads onto Pecos Road, the most likely route for the South Mountain Freeway.

ADOT and the Federal Highway Administration will issue a record of decision on building the freeway, perhaps as early as next year. The Maricopa Association of

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Governments ultimately will decide whether to fund it.

Bruder said if the freeway is approved, ADOT engineers will need 24 months to design and engineer it. That would be followed by four years of construction in the first phase.

With a new price tag of \$2.4 billion, the state is looking at a \$1.1 billion funding shortfall.

Bruder said if a decision is made to build the freeway, ADOT may need to scale back the project.

"Or ultimately, we delete it and don't build it," he said, prompting a quiet "yay" from CAT members opposed to the project.

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Freeway projects could be stalled by \$4.5B shortfall

by *Kerry Fehr-Snyder* - Oct. 16, 2008 01:53 PM
The Arizona Republic

The proposed South Mountain Freeway could be scaled back, converted into a parkway or delayed further as the Valley faces a \$4.5 billion shortfall for transportation projects.

The bleak economic picture and strategies to deal with it emerged Wednesday night at the transportation policy committee meeting of the Maricopa Association of Governments.

Eric Anderson, MAG's transportation director, mentioned the proposed \$2.4 billion South Mountain Freeway several times as a project that might be cut back although not eliminated entirely on the Valley's Regional Transportation Plan.

Anderson said a combination of declining sales tax revenues, rising construction costs and lower bonding capacity have created a funding deficit of at least \$3.8 billion but probably more like \$4.5 billion.

The deficit includes the cost of the entire South Mountain Freeway, said Anderson, who put the pricetag for that at \$2.6 billion. Last month, the Arizona Department of Transportation revised the cost estimate for

the proposed 22-mile freeway to \$2.4 billion from \$1.7 billion. Soaring construction costs are largely to blame for the project's shortfall. But so are ongoing costs to consultants for producing a federally required "environmental impact statement," a process that began in 2001 and is still several years from being finished.

Taxpayers have spent \$10 million to \$12 million on consulting fees to determine the freeway's expected impact on air pollution, noise pollution and other environmental concerns. Anderson said he expects construction costs to grow by as much as \$100 million.

"Every year of delay is costing hundreds of millions of dollars," Anderson said.

The federal government and ADOT's "record of decision" about whether to build the freeway is still two to three years away, he estimated.

Anderson laid out several strategies to deal with the shortfall. They include:

- Revising appraisal methods.
- Streamlining the environmental analysis.

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Valley budget shortfall threatens transit projects

by *Kerry Fehr-Snyder* - Oct. 16, 2008 12:00 AM
The Arizona Republic

The Valley's freeway and mass-transit projects are short \$4.5 billion as tax revenues plummet, construction costs soar and government bonding capacity stalls, the transportation director for the region's planning agency told stunned mayors Wednesday.

The gloomy prediction from Eric Anderson of the Maricopa Association of Governments, means that funding for proposed projects such as the South Mountain Freeway and Loop 303 are in jeopardy.

"The only good news is that crude-oil prices are falling below \$75 a barrel," Anderson told MAG's transportation policy committee.

The committee is comprised of Valley mayors, city council members and others.

The Valley's fiscal outlook has darkened since August, when Anderson met with Arizona Department of Transportation officials to revise cost and revenue estimates for Valley freeway projects.

"ADOT is in an extremely tight financial situation," Anderson said.

He added later, "Who knows what's going to happen tomorrow. That's one of the challenges."

Sales tax revenues from auto dealerships alone fell to \$500 million in July from \$800 million for the same month a year earlier.

"This is a dramatic decline," he said. "This has implications on future spending, and it will take a long time to work out."

The downturn hit the Valley's economy harder because it has relied so heavily on home building and commercial real estate. Unlike the downturn in the late 1980s during the savings and loan crisis, this crisis stretches far beyond developers and institutional investors.

Arizona collected \$96 million less in highway user revenue funds in fiscal 2008 than what was projected last year.

At the same time, highway and street construction costs rose 77 percent over the past four years.

Governments are struggling to cover those costs with bonding authority as markets freeze. Only \$4 billion in bonds were issued nationally over the past three weeks compared to \$6 billion for an average week before the turmoil, according to MAG's data.

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The funding shortfall may prompt planners to scale back the size of the proposed 22-mile South Mountain Freeway to six lanes from 10, Anderson said. The project's cost has grown to \$2.4 billion from \$1.7 billion in the past two years, eclipsing its budget for the next decade at least.

MAG's transportation-committee members also may decide to convert freeway projects to less expensive parkways, add high-occupancy lane toll roads or delay other projects. But unlike funding shortfalls in the early 1990s, no project will be removed from the regional transportation plan without having to first undergo a major amendment to Proposition 400, the voter-approved half-cent sales tax that funds Valley transportation projects.

Ron Ames, a MAG transportation-committee member and Peoria city councilman, said he hopes that revised population projections will show a declining need for new freeways.

Anderson said that's unlikely because the Valley is already behind on building freeways, especially in the West Valley.

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Last meeting of freeway team before taking a break

[By Doug Murphy](#)

October 20, 2008 - 2:09PM

The South Mountain Loop 202 Citizens Advisory Team meets Thursday in what may be the last meeting for a long time, while planners try to solve mounting problems that could doom the freeway project.

One major issue holding up approval of a draft environmental impact statement is a continuing disagreement with the Gila River Indian Community over major cuts in ridges on South Mountain, which they consider sacred and oppose. There is no estimate of when the issue might be resolved.

The other major issue Valley transportation planners and elected officials will need to deal with is money. The Loop 202 now costs more than twice what was originally expected - now estimated at \$2.4 billion - while funding is shrinking and other high priority projects are also going up in cost. The situation could create a battle between Valley governments, each competing for freeway projects and limited funding.

The advisory team meets at 6 p.m. this Thursday, Oct. 23, at South Mountain Community College, 7050 S. 24th St. On the agenda is a discussion about how air quality concerns will be addressed when the advisory team reconvenes - sometime in the future - after the draft environmental impact statement has been approved.