

STATE OF ARIZONA

## Joint Committee on Capital Review

STATE  
SENATE

ROBERT L. BURNS  
CHAIRMAN 2005  
PAULA ABOUD  
LINDA AGUIRRE  
TIMOTHY S. BEE  
ROBERT CANNELL  
RON GOULD  
KAREN S. JOHNSON

1716 WEST ADAMS  
PHOENIX, ARIZONA 85007

PHONE (602) 926-5491

FAX (602) 926-5416

<http://www.azleg.gov/jlbc.htm>

HOUSE OF  
REPRESENTATIVES

TOM BOONE  
CHAIRMAN 2006  
AMANDA AGUIRRE  
ANDY BIGGS  
JACK A. BROWN  
PHIL LOPES  
RUSSELL K. PEARCE  
STEPHEN TULLY

### JOINT COMMITTEE ON CAPITAL REVIEW

Thursday, September 21, 2006

1:30 p.m.

House Hearing Room 4

#### MEETING NOTICE

- Call to Order
- [Approval of Minutes of August 24, 2006.](#)
- DIRECTOR'S REPORT (if necessary).
- 1. ARIZONA DEPARTMENT OF TRANSPORTATION
  - A. [Review of FY 2007 Construction Budget Operating Expenditure Plan.](#)
  - B. [Report on 5-Year Transportation Plan.](#)
- 2. UNIVERSITY OF ARIZONA - [Review of Residence Life Building Renewal Phases III and IV Bond Projects.](#)
- 3. ARIZONA STATE UNIVERSITY - [Review of Polytechnic Academic Complex Lease-Purchase Project.](#)
- 4. ARIZONA EXPOSITION AND STATE FAIR BOARD - [Review of FY 2007 Building Renewal Allocation Plan.](#)

The Chairman reserves the right to set the order of the agenda.  
9/13/06

**People with disabilities may request accommodations such as interpreters, alternative formats, or assistance with physical accessibility. Requests for accommodations must be made with 72 hours prior notice. If you require accommodations, please contact the JLBC Office at (602) 926-5491.**

STATE OF ARIZONA

## Joint Committee on Capital Review

STATE  
SENATE

ROBERT L. BURNS  
CHAIRMAN 2005  
PAULA ABOUD  
LINDA AGUIRRE  
TIMOTHY S. BEE  
ROBERT CANNELL  
RON GOULD  
KAREN S. JOHNSON

1716 WEST ADAMS  
PHOENIX, ARIZONA 85007

PHONE (602) 926-5491

FAX (602) 926-5416

<http://www.azleg.gov/jlbc.htm>

HOUSE OF  
REPRESENTATIVES

TOM BOONE  
CHAIRMAN 2006  
AMANDA AGUIRRE  
ANDY BIGGS  
JACK A. BROWN  
PHIL LOPES  
RUSSELL K. PEARCE  
STEPHEN TULLY

### MINUTES OF THE MEETING JOINT COMMITTEE ON CAPITAL REVIEW

Thursday, August 24, 2006

---

The Chairman called the meeting to order at 9:35 a.m., Thursday, August 28, 2006 in Senate Appropriations Room 109 and attendance was as follows:

Members:	Senator Burns, Vice-Chairman	Representative Boone, Chairman
	Senator Bee	Representative Biggs
	Senator Cannell	Representative Brown
	Senator Gould	Representative Pearce
	Senator Johnson	Representative Tully
Absent:	Senator About	Representative A. Aguirre
	Senator L. Aguirre	Representative Lopes

*Senator Burns moved the Committee approve the minutes of July 27, 2006, as presented. The motion carried.*

#### **ARIZONA STATE UNIVERSITY – Review of Academic Renovations and Deferred Maintenance Phase IIA Bond Projects.**

Ms. Leah Ruggieri, JLBC Staff, presented the ASU request to review, on behalf of the Arizona Board of Regents, the Academic Renovations and Deferred Maintenance Phase IIA to be financed with a revenue bond issuance of \$10 million. The 11 projects that comprise Phase IIA will total approximately \$9.2 million, leaving \$800,000 of the bond issuance unallocated. The projects include updated and growth space for academic programs and new faculty members, as well as renovations for vacated space from departments moving to the ASU Downtown Phoenix Campus.

*Handout 1* lists 6 of the 11 projects. These projects are specifically to accommodate new hires. New annual research funds brought to the university by the new faculty are estimated to be approximately \$2.5 million. The School of Earth and Space Explorations has \$350,000 in new annual research funds. The renovation cost associated with this space is approximately \$1.5 million, which includes an all plastic lab. While the cost is high, the new annual research funds of \$350,000 will contribute \$70,000 annual indirect cost, which is roughly 20% of the new grant. This amount represents what will be used to defray the cost of the debt service from the \$10 million bond. ASU plans to pay off the debt with half coming from tuition collections and the other half from the Indirect Cost Recovery Fund.

The Committee has the options of a favorable or unfavorable review as detailed in the memo. In addition, there are standard university provisions listed when debt financing requests come forward. The last provision is that when ASU does develop a plan for the \$800,000 unallocated amount, they return to the Committee with a plan and provide an update.

The Committee also has an option to make a recommendation as to the procurement method that is used for the projects. ASU is proposing to use the Construction Manager at Risk method. In the past, the Committee has shown interest in other procurement methods.

Representative Andy Biggs asked if ASU would have to comply with an alternative Committee recommendation.

Mr. Richard Stavneak, JLBC Director, replied that after Committee review, ASU has the ability to proceed with or without taking into consideration the Committee recommendation.

Representative Steve Tully asked what will be done in the all-plastic lab.

Ms. Ruggieri said that it is for highly specialized meteorite research.

Senator Ron Gould referred to the School of Earth and Space Exploration \$350,000 grant. He asked if the \$70,000 for indirect costs will be used to specifically pay off the renovation of \$1.5 million.

Mr. Stavneak stated that all the indirect charges on all the grants across the university are deposited into a pot of money, and this pot of money will be used to pay for half of the debt service on these projects. The \$70,000 is not directly tied to only paying off the specific \$1.5 million renovations.

Senator Gould asked if it would be better to have the accounting numbers to show where each dollar went, rather than putting it in a big pot.

Mr. Stavneak acknowledged that it would be good, but ASU would probably have their own perspective.

Senator Gould asked if there was a guarantee that the grants continue.

In response to Senator Gould, Mr. Stavneak said that to the extent that the grant does not continue, the university is relying on the larger pot of indirect cost monies to continue to fund the debt service. The other half is the tuition payments being used to pay for debt service. To the extent tuition is used for debt service, it is not available for operating costs, and possibly reduce General Fund costs.

Senator Robert Cannell commented that the state is underfunding the university system to the point that they are relying on research to do the job. If they are not going to be fully funded, their research should not be cutoff.

Mr. Scott Cole, Deputy Executive Vice President for Business and Finance, ASU, said the special laboratory has to be completely built out of polymers and plastic because metal in the lab skews the equipment that measures micro amounts of magnetism in meteorites. This researcher is involved in a NASA study that is very sensitive and expensive. Researchers have to generate certain dollars per square foot on an annual basis for each of their laboratories. If they do not meet the amount, there is a 2-year time period within which to secure their grants. If they do not meet this, they are moved out of the space and a researcher that is productive can take over the space.

Representative Biggs noted the Classroom Renovation of 4,800 square feet for \$1.2 million seems disproportionately high. He asked what type of renovations are taking place in the classroom.

Mr. Cole replied that the classrooms that were built in the 1950's will be modernized and upgraded with paint, floor and window coverings. They are also being upgraded with media equipment to run computerized equipment. The HVAC systems and electrical will also be upgraded.

In response to the Indirect Cost questions asked by Senator Gould, Mr. Cole added that the dollar amount shared with the \$350,000 research fund is \$70,000 annually, not a one-time amount. In general, the terms of the grant are usually 4-6 years. The funding is deposited in the Indirect Cost Fund as was correctly stated by JLBC Staff. The fund is allocated to cover debt on any renovations, not a specific researcher.

Senator Burns asked how the breakdown of half collected tuition and half Indirect Cost Recovery Fund is derived for annual debt service payments.

Mr. Jerry Snyder, Associate Vice President for Finance and Treasurer, ASU, replied that they look at the relative mix of cost between research projects versus classroom projects. They then allocate from the funds they believe to be reasonable. As an example, if they had all research project renovations, they would use solely indirect cost. If they had all classroom project renovations, they would use tuition. This particular project is a combination so this is how they derived the 50/50 allocation.

Senator Burns asked if 20% of grants are fixed amounts for indirect cost recovery.

Mr. Cole replied that there is a calculation negotiated with the federal government depending on the department. They allow a certain percentage of the indirect costs to come out of any grant. The 20% is the portion that the university gets for indirect cost based upon the funded federal formula.

Senator Burns said building renewal is derived from a formula and is appropriated through the Legislature for renovations. It appears that the indirect cost money is also available for the same purpose.

Mr. Cole said yes. The university allocates the building renewal appropriation toward the academic components on the campus.

Senator Burns said the indirect cost money is not tracked. He asked how the building renewal formula is balanced against a source of money that is not tracked.

Mr. Stavneak stated there may need to be a better reporting mechanism that shows how much the universities are spending on renovations from different sources.

Mr. Cole clarified that the building renewal money is allocated for the academic components on campus. Any renovation to research space is funded through the indirect cost fund, not the building renewal. If there are upgrades in a lab, such as HVAC or electrical systems, a proportion may be funded out of building renewal if it is available.

Senator Burns asked if there is a distinct line between a laboratory and academic facility.

Mr. Cole replied that the renovations are reported to the Legislature in the Capital Improvement Plan every year. The academic and research components are broken down in that report.

Representative Boone said that he encourages the university to approach the qualified select bidder list method. The Construction Manager at Risk is not always the best method in proceeding on a construction project.

Mr. Cole replied that the university is not opposed to qualified select bidder list method. The state procurement laws currently do not allow that methodology. The university was advised by legal counsel to adhere to the state procurement code.

Mr. Lorenzo Martinez, JLBC Staff, added that the statutes for the procurement code has language that says the universities are exempt from the procurement code provided they adopt policies that are substantially equivalent to the procurement code. A legal opinion would be needed to see if that would give the universities flexibility to adopt an alternate method such as the qualified select bidders.

Representative Boone would like to try to add language to statute to make alternate methods available to universities and other state agencies.

*Senator Burns moved the Committee give a favorable review as recommended by the JLBC Staff to the Academic Renovations and Deferred Maintenance Phase IIA bond project, with the following standard university financing provisions:*

- *ASU shall report to the Committee before expenditure of any allocations that exceed the greater of \$100,000 or 10% of the reported contingency amount total for add alternates that do not expand the scope of the project.*
- *ASU shall submit for Committee review any allocations that exceed the greater of \$100,000 or 10% of the reported contingency amount total for add alternates that expand the scope of the project. In case of an emergency, ASU may immediately report on the scope and estimated cost of the emergency rather than submit the item for review. The JLBC Staff will inform the university if they do not agree with the change of scope as an emergency.*
- *A favorable review by the Committee does not constitute endorsement of General Fund appropriations to offset any auxiliary revenues that may be required for debt service, or any operations and maintenance costs when the project is complete. Auxiliary funds derive from substantially self-supporting university activities, including student housing.*
- *ASU shall not use bonding to finance any repairs whose typical life span is less than the bond repayment period. Such repairs include, but are not limited to new flooring and painting. The exceptions to this stipulation are circumstances where such repairs are required to complete a major renovation.*
- *ASU shall submit to the Committee an expenditure plan for the \$800,000 unallocated to specific projects in Academic Renovations and Deferred Maintenance Phase IIA.*

The motion carried.

**ARIZONA DEPARTMENT OF TRANSPORTATION – Consider Approval of Surprise Land Purchase.**

Mr. Bob Hull, JLBC Staff, presented the Arizona Department of Transportation (ADOT) request for approval of the expenditure of \$1,779,000 to purchase land for a new Surprise MVD Service Center. ADOT has a \$2.7 million appropriation for this purpose.

There was no discussion on this item.

*Senator Burns moved that the Committee approve, as recommended by the JLBC Staff, the purchase of land for a new Surprise MVD Service Center with the provision that the purchase price not exceed the appraised value and ADOT report back on the appraised value.* The motion carried.

**ARIZONA DEPARTMENT OF ADMINISTRATION – Consider Approval of Rent Exemption for Structural Pest Control Commission.**

Mr. Tyler Palmer, JLBC Staff, presented the consideration for approval of a rent exemption for the Structural Pest Control Commission. The Arizona Department of Administration (ADOA) is authorized on recommendation from the Committee to grant rent exemptions. The Structural Pest Control Commission would use the \$8,800 to pay for motor pool vehicle charges and laptops for 2 new FTE Positions authorized during the last Legislative session. The space is currently occupied by the Arizona Medical Board and the Board of Osteopathic Examiners. Those 2 boards will continue to occupy the space and will assume the payment of the rent within their existing budgets.

There was no discussion on this item.

*Senator Burns moved the Committee approve, as recommended by JLBC Staff, a partial rent exemption for \$8,800 of FY 2007 rent charges for the Structural Pest Control Commission.* The motion carried.

Without objection the Committee meeting adjourned at 10:10 a.m.

Respectfully submitted:

---

Yvette Medina, Secretary

---

Lorenzo Martinez, Assistant Director

---

Representative Tom Boone, Chairman

NOTE: A full tape recording of this meeting is available at the JLBC Staff Office, 1716 W. Adams.

STATE OF ARIZONA

## Joint Committee on Capital Review

STATE  
SENATE

ROBERT L. BURNS  
CHAIRMAN 2005  
PAULA ABOUD  
LINDA AGUIRRE  
TIMOTHY S. BEE  
ROBERT CANNELL  
RON GOULD  
KAREN S. JOHNSON

1716 WEST ADAMS  
PHOENIX, ARIZONA 85007

PHONE (602) 926-5491

FAX (602) 926-5416

<http://www.azleg.gov/jlbc.htm>

HOUSE OF  
REPRESENTATIVES

TOM BOONE  
CHAIRMAN 2006  
AMANDA AGUIRRE  
ANDY BIGGS  
JACK A. BROWN  
PHIL LOPES  
RUSSELL K. PEARCE  
STEPHEN TULLY

DATE: September 13, 2006

TO: Representative Tom Boone, Chairman  
Members, Joint Committee on Capital Review

THRU: Richard Stavneak, Director

FROM: Bob Hull, Principal Research/Fiscal Analyst

SUBJECT: Arizona Department of Transportation – Review of FY 2007 Construction Budget Operating Expenditure Plan

### Request

The Arizona Department of Transportation (ADOT) requests approval of full year funding of \$103,644,800 for their Construction Budget Professional and Outside Services. To date, the Committee has approved \$34.6 million, but wanted more information on the Auditor General report.

The Auditor General performance audit found that, 1) ADOT should optimize internal resources to reduce consultant usage, 2) improve implementation and documentation of the inspection process, and 3) improve its audits of design and construction contracts. ADOT agrees with the performance audit findings and with implementing the audit recommendations.

### Recommendation

The JLBC Staff recommends that the Committee give a favorable review of ADOT's \$103,644,800 Professional and Outside Services expenditure plan for FY 2007. The JLBC Staff has recommended a favorable review as the consultants' budget remains in line with previous years. It remains difficult, however, to measure the efficiency of these expenditures. The "traffic congestion" measures have been useful in identifying the targets for future improvements.

While ADOT agrees to the findings, it will be difficult to measure their success as there are no targets for reducing consultants, or the Auditor's other recommendations. While reducing consultants may require filling more in-house staff vacancies, it is not clear how much pay parity would cost and whether it can be accomplished. If the Committee is interested in getting more ADOT input on the Auditor's finding it could recommend that the department report to the Committee by October 20, 2006 on the following items:

1. ADOT's current and proposed dollar amount for engineering pay plan salaries, and how it might affect vacancies.
2. ADOT's target for reduced consultant use.
3. ADOT's targets for meeting the Auditor General's second and third recommendations concerning improved documentation of inspections and auditing of its contracts.

(Continued)

Alternatively, as part of the sunset review process, the Committee could defer this issue to the Transportation Committees. The Committee of reference will not meet until fall 2007.

### **Analysis**

At the July 27, 2006 meeting, the Committee favorably reviewed the use of an additional \$17.3 million for Professional and Outside (P&O) Services expenditures. Combined with the \$17.3 million reviewed at the June meeting, the department has received a favorable review for a total of \$34.6 million for P&O Services through the end of October. The Committee intended to review the full year expenditure plan of \$103.6 million after it had had time to review the Auditor General report on Construction Management. The attached memo, dated July 17, 2006, from the July Committee meeting provides the analysis of ADOT's FY 2007 highway construction budget expenditure plan for P&O Services, which still applies. The following is a summary of the Auditor General's recommendations and ADOT's response.

#### **Auditor General's first finding: The Auditor General noted that ADOT should optimize internal resources to reduce consultant usage.**

ADOT's 5-year construction program has more than doubled in the past 10 years, from \$1.9 billion to \$5.1 billion, while payments to consultants increased 424% after adjusting for inflation, from \$17 million in FY 1996 to \$110 million in FY 2005. ADOT states that it uses consultants when the workload precludes using in-house staff or when special expertise is required. They believe that it is necessary to use consultants in the absence of adjustments to the salary structure.

ADOT reports that below market salary levels make recruitment and retention of in-house staff difficult, and that their engineering salaries were 13% to 26% lower than comparable private and public positions in the Phoenix area in November 2005. ADOT had 79 vacancies out of 286 engineering positions (27.6%) as of February 2006. ADOT has made counter-offers to retain some employees with higher-salary job offers, and has used an Engineer in Training program to attract new hires.

The Auditor General recommends that ADOT should fill vacant staff positions, continue developing strategies to recruit and retain staff, identify which ongoing work is more cost effective to do in-house, develop Division-wide criteria for when to use a consultant, and develop methods to track, monitor and evaluate consultant usage.

ADOT agrees with the finding and plans to implement the recommendation. ADOT states that they concur with the report's emphasis on optimizing the use of internal resources to reduce consultant usage, but opines that the current salary structure has made it difficult to hire and retain staff in engineering and technical positions. ADOT acknowledges that it is probably unreasonable to try to compete directly with the private sector on salary. ADOT states that they will continue to try to fill vacancies, and develop recruitment and retainment strategies.

However, it will be difficult to assess ADOT's progress in completing corrective actions, due to an absence of specific corrective actions and target dates for accomplishing them. ADOT has indicated their desire for continuing engineering pay plan salary increases to reduce turnover, but provides no specific information regarding the cost of pay parity and whether it can be accomplished.

For perspective on ADOT's engineering pay plan, ADOT began the plan without receiving a separate appropriation in FY 2001 to reduce turnover in their engineering and technical positions, which was 12.6% in CY 1999. ADOT gave everyone in the engineering pay plan a 5% salary increase in FY 2001, in addition to the regular state employee pay raise. In both FY 2002 and FY 2006, ADOT was appropriated monies for a 5% salary increase for engineering pay plan participants, in lieu of the regular state employee pay raise in FY 2002 and in addition to the regular state employee pay raise in FY 2006. In other years, engineering pay plan participants received the same salary adjustments as regular state employees. Although ADOT remains concerned about engineering pay plan turnover, it has been and remains significantly less than for other

(Continued)

uncovered state service positions, as shown in the following table. Turnover for engineering pay plan positions was 8.2% in FY 2005, compared with 20.3% for all uncovered state service positions.

<b>Selected State Employee Turnover</b>				
<b>ADOT Engineering and Technical Positions <sup>1/</sup></b>		<b>State Service <sup>2/</sup></b>		
		<b>Uncovered</b>	<b>Covered</b>	
CY 97	6.6%	CY 97	22.6%	14.7%
CY 98	11.2%	CY 98	12.8%	14.3%
CY 99	12.6%	CY 99	15.6%	15.9%
CY 00	11.7%	FY 00	15.9%	16.5%
CY 01	7.5%	FY 01	14.4%	15.2%
CY 02	6.7%	FY 02	9.9%	12.7%
FY 03	8.3%	FY 03	16.5%	15.4%
FY 04	8.7%	FY 04	18.5%	14.9%
FY 05	8.2%	FY 05	20.3%	17.6%

<sup>1/</sup> Reported by ADOT in FY 2007 Budget Request.  
<sup>2/</sup> ADOA Human Resources System 2004 and 2005 Annual Reports.

**Auditor General’s second finding: The Auditor General noted that ADOT should improve implementation and documentation of the inspection process.**

ADOT’s highway construction inspectors had incomplete documentation of their inspection results. For example, 43 of 47 inspectors’ diaries did not show whether the work met specifications, and 27 of 47 inspectors did not fill out any of the required checklists. Inspection standards are not consistently applied. Field inspectors found that work met specifications 66% of the time, while ADOT’s independent quality assurance inspectors found that work met specifications only 35% of the time. Follow-up on important deficiencies is lacking. ADOT has no follow-up procedures for major deficiencies identified by independent quality assurance inspectors.

ADOT agrees with the finding and plans to implement the recommendation. ADOT states that they will improve their management procedures, and inspector training regarding checklist scoring and how to properly document daily diaries. ADOT will correlate the checklist scoring of their field inspectors and independent quality assurance inspectors to ensure that there is consistency, and will formalize the process of documenting checklist revision procedures. ADOT issued an updated Construction Bulletin concerning construction checklist compliance, dated August 1, 2006.

It will be difficult to assess ADOT’s progress in meeting their other corrective actions, since their only target date was August 1, 2006 for issuing the Construction Bulletin.

**Auditor General’s third finding: The Auditor General noted that ADOT should improve its audits of design and construction contracts.**

ADOT’s Office of Audit and Analysis (Office) does not conduct the number of audits required by its own policies, due to long-term vacancies and inadequate workload planning and management. The Office had 7 of 16 positions vacant in the unit responsible for consultant and construction audits in December 2005. The Office has not complied with its policy to develop an annual audit plan or select construction progress audits based on a department-wide audit risk assessment. The Auditor General recommends that ADOT should continue its efforts to fill vacant positions, implement performance measures, audit the highest-risk projects, replace its database system with a system that can track and schedule workload and measure production, produce an annual audit work plan, and revise its audit manual.

ADOT agrees with the finding and plans to implement the recommendation. ADOT states that they hired a new chief auditor in January 2006, the Office is staffed at 92%, and they are trying to fill the 2 remaining vacant positions. ADOT has prioritized audits based on risk and incorporated them into the draft 2007 audit

(Continued)

plan, which they will periodically review and modify. ADOT states that they are developing performance measures, implementing a new audit management system, and will explore using certified public accountants to expedite completing required audits.

Again, it will be difficult to assess ADOT's progress in meeting their unfinished corrective actions, since they give no target dates for those actions.

RS/BH:ym  
Attachment



STATE OF ARIZONA

## Joint Committee on Capital Review

STATE  
SENATE

ROBERT L. BURNS  
CHAIRMAN 2005  
PAULA ABOUD  
LINDA AGUIRRE  
TIMOTHY S. BEE  
ROBERT CANNELL  
RON GOULD  
KAREN S. JOHNSON

1716 WEST ADAMS  
PHOENIX, ARIZONA 85007

PHONE (602) 926-5491

FAX (602) 926-5416

<http://www.azleg.gov/jlbc.htm>HOUSE OF  
REPRESENTATIVES

TOM BOONE  
CHAIRMAN 2006  
AMANDA AGUIRRE  
ANDY BIGGS  
JACK A. BROWN  
PHIL LOPES  
RUSSELL K. PEARCE  
STEPHEN TULLY

DATE: July 17, 2006

TO: Representative Tom Boone, Chairman  
Members, Joint Committee on Capital Review

THRU: Richard Stavneak, Director *RS*

FROM: Bob Hull, Principal Research/Fiscal Analyst *BH*

SUBJECT: Arizona Department of Transportation - Review of FY 2007 Construction Budget  
Operating Expenditure Plan

### Request

In compliance with a footnote in the FY 2007 Capital Outlay Bill, the Arizona Department of Transportation (ADOT) requests that the Committee review its FY 2007 highway construction budget expenditure plan for Professional and Outside Services (contracted consultants).

### Recommendation

The JLBC Staff recommends:

1. A favorable review of ADOT's \$103,644,800 Professional and Outside Services expenditure plan for FY 2007 with the provision that ADOT report to the Committee on the status of approved and requested spending plans for Statewide Transportation Acceleration Needs Account monies by December 15, 2006.
2. Adoption of the traffic congestion performance measures, with the provision that ADOT report on these performance measures as part of next year's Committee review.

The \$103,644,800 for FY 2007 includes \$17.3 million for Professional and Outside Services for the first 2 months in FY 2007, which the Committee favorably reviewed at its June 15, 2006 meeting.

In summary, the JLBC Staff has recommended a favorable review as the consultants' budget remains in line with previous years. It remains difficult, however, to measure the efficiency of these expenditures. The "traffic congestion" measures have been useful in identifying the targets for future improvements.

(Continued)

**Analysis**

The Committee gave a favorable review at its June 15, 2006 meeting to the expenditure of up to \$17.3 million for the first 2 months of ADOT's total \$103.6 million Professional & Outside Services expenditure plan for FY 2007.

ADOT's approved operating budget, in the General Appropriation Act (Laws 2006, Chapter 344), includes \$58 million and 616 FTE Positions from the State Highway Fund in FY 2007 for field administration, engineering, and oversight on highway construction projects. Additional monies for consulting services in the capital budget allow ADOT the flexibility to handle any interim changes in the level of funding for highway construction.

The Capital Outlay Bill (Laws 2006, Chapter 345) appropriated \$226.3 million from the State Highway Fund to ADOT for highway construction in FY 2007, apart from the new Statewide Transportation Acceleration Needs (STAN) Account. Of the \$226.3 million, ADOT plans to expend \$103.6 million for capital construction consultant services. ADOT's projected \$103.6 million is \$6.6 million more than their planned expenditures of \$97 million in FY 2006. The \$6.6 million includes increases of \$3.3 million for preliminary engineering, \$1.1 million for construction engineering, \$2 million for other Professional and Outside Services, and \$200,000 for other items.

The following table shows how ADOT's actual expenditures for construction consultant services have varied from the department's planned dollar amounts for the past several fiscal years. It is difficult to evaluate Professional and Outside Services and whether resources are being used efficiently.

<b>ADOT's Construction Budget Professional and Outside Services Expenditure Plan</b>			
<b>FY</b>	<b>Expenditures</b>		
	<b>Plan</b>	<b>Actual</b>	<b>Over/Under Plan</b>
2007	\$103,644,800	-	-
2006	97,000,000	\$ 87,047,700	\$(9,952,300)
2005	105,000,000	78,240,700	(26,759,300)
2004	105,000,000	82,000,000	(23,000,000)
2003	99,000,000	96,000,000	(3,000,000)
2002	99,000,000	111,000,000	12,000,000
2001	105,000,000	93,000,000	(12,000,000)

**STAN Account**

In addition, the General Appropriation Act includes a total of \$307 million for the STAN Account of the State Highway Fund, including \$245 million from the General Fund and \$62 million from the State Highway Fund. The Capital Outlay Bill establishes the STAN Account for the State Transportation Board to accelerate the construction or reconstruction of freeways, state highways, bridges and interchanges that are in a county's regional transportation plan or ADOT's long-range statewide transportation plan. ADOT's plan to expend \$103.6 million in FY 2007 for capital construction consultant services does not include any additional spending that might be needed for capital construction consultant services for projects paid for from the \$307 million in the STAN Account.

STAN Account monies are divided 60% for Maricopa County, 16% for Pima County and 24% for all other counties. The Maricopa Association of Governments (MAG) and Pima Association of Governments (PAG) are to establish processes for the review and approval of transportation projects eligible to receive STAN Account monies. In all other counties, ADOT, in cooperation with the council of governments (COG) that has the authority to approve transportation projects for the county, is to develop requests for expenditure of STAN Account monies. On receipt of a request for STAN Account monies, the State Transportation Board is to place the request on the agenda for the next regular business meeting of the board. The State Transportation Board is to review a request for monies from the STAN Account from MAG, PAG, or a COG, and approve or further modify the request before approval. STAN Account monies are to be used to supplement, not supplant, funding that would otherwise be made available for projects. The State Transportation Board shall not approve the release of any STAN Account monies for a transportation project unless the board verifies that all costs related to construction of the project are covered. ADOT has had preliminary discussions with MAG, PAG and some COG's, but has not yet received any request for STAN Account spending. ADOT does not have a timeline for having a STAN Account spending plan.

By July 1 of each year, the State Transportation Board is to submit a report of its activities pursuant to the STAN Account to the Governor, the President of the Senate and the Speaker of the House of Representatives and shall provide a copy of this report to the Secretary of State, the Director of the JLBC and the Director of the Arizona State Library, Archives and Public Records. MAG, PAG and COG's that receive monies from the STAN Account are to report by December 15 of each year to the Senate and House of Representatives Transportation Committees on approved projects and amounts expended for those projects.

#### Performance Measures

Last year the Committee adopted the following performance measures, which describe how ADOT's 5-year plan addresses some of the state's most crowded roadways. All the listed "over capacity" highway segments have some action in the 5-Year Plan, which was approved by the State Transportation Board on June 23, 2006. *(See ADOT's submission for maps showing highway segments listed in the congestion performance measures.)* ADOT's definition of "over capacity" highway segments includes those segments that are "over capacity" for 3 hours during either the morning or afternoon commute for the Phoenix and Tucson areas. *(See ADOT's submission for Phoenix area maps showing the duration of congestion for the morning or afternoon commute in 1-hour intervals for various highway segments.)*

<b>PHOENIX AREA</b>				FY 2004	FY 2005	FY 2007
				Actual	Actual	Estimate
<ul style="list-style-type: none"> <li>Percent of state highway system with traffic volume over 100% of capacity during 3 hours of the morning or afternoon commute in Phoenix Metro area</li> </ul>				14	14	14
<b>Phoenix Metro Area Highway Segments Over 100% of Capacity During Peak Driving Periods</b>						
<u>Action in</u>	<u>Route</u>	<u>Segment</u>	<u>ADOT Action</u>			
<u>5-Year Plan</u>						
Yes	I-10	Agua Fria - I-17	General purpose lanes; completion FY 12			
Yes	I-10	Baseline Rd - 40 <sup>th</sup> St	Collector distributor roads; completion FY 14			
Yes	I-10	Sarival Rd - Agua Fria	HOV/general purpose lanes; completion FY 11			
Yes	Loop 101	Red Mtn (L202) - Baseline	HOV lanes; completion FY 10			
Yes	Loop 101	Baseline - Santan (L202)	HOV lanes; completion FY 12			
Yes	I-17	Carefree Hwy - Loop 101	HOV/general purpose lanes; completion FY 09			
Yes	US 60	Loop 303 - Loop 101	General purpose lanes; completion FY 11			
	(Grand Ave)					
Yes	US 60	I-10 - Loop 101	General purpose lanes; completion FY 11			
	(Superstition)					
Yes	US 60	Val Vista Dr - Ellsworth Rd	HOV/general purpose lanes; completion FY 08			
	(Superstition)					
Yes	SR 51	Loop 101 - Shea Blvd	HOV/ramp; completion FY 09			
Yes	Loop 101	Princess Dr - Red Mtn (L202)	HOV lanes; completion FY 09			
Yes	Loop 202	Rural Rd - Pima (L101)	General purpose lanes; completion FY 11			
Yes	Loop 202	Pima (L101) - Gilbert Rd	General purpose lanes; completion FY 11			
<b>Completed Projects</b>						
	US 60	I-10 - Loop 101	8 traffic interchanges; completed FY 06			
	(Grand Ave)					

<b>TUCSON AREA</b>				FY 2004	FY 2005	FY 2007
				Actual	Actual	Estimate
<ul style="list-style-type: none"> <li>Percent of state highway system with traffic volume over 100% of capacity during 3 hours of the morning or afternoon commute in Tucson Metro area</li> </ul>				10	10	10
<b>Tucson Metro Area Highway Segments Over 100% of Capacity During Peak Driving Periods</b>						
<u>Action in</u>	<u>Route</u>	<u>Segment</u>	<u>ADOT Action</u>			
<u>5-Year Plan</u>						
Yes	I-10	Prince Rd - 29 <sup>th</sup> Ave	Widening project; completion FY 09			
Yes	I-10	Ruthrauff Rd - Prince Rd	Widening from 6 to 8 lanes; completion FY 11			
Yes	I-10	Cortaro Traffic Interchange	Reconstruct interchange; design FY 08; completion FY 13			
Yes	Oracle Rd	Calle Concordia - Tangerine	Widening from 4 to 6 lanes; completion FY 08			
<b>Completed Projects</b>						
	Oracle Rd	Ina Rd - River Rd	Add shoulders; completed FY 06			

<b>BALANCE OF STATE</b>				FY 2004	FY 2005	FY 2007
				Actual	Actual	Estimate
<ul style="list-style-type: none"> <li>Percent of state highway system with traffic volume over 100% of capacity in balance of state</li> </ul>				1	1	1
<b>State Highway Segments Over 100% of Capacity in Balance of State</b>						
<u>Action in</u>	<u>Route</u>	<u>Segment</u>	<u>ADOT Action</u>			
<u>5-Year Plan</u>						
Yes	SR 195	Yuma Area Service Highway (MP 0 - 26)	Design area service highway; completion FY 10			
Yes	US 93	Hoover Dam Bypass (MP 1.7 - 16.1)	Widen bridge approach from 2 to 4 lanes; completion FY 08			
Yes	SR 179	I-17 - Sedona (MP 304.5 - 313.4)	Needs study; completion FY 09			
MP - Mile post.						
SA - Alternate route.						
SR - State route.						
SB - Business route.						



# Arizona Department of Transportation

## Office of the Director

206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Janet Napolitano  
Governor

Victor M. Mendez  
Director

June 26, 2006

David P. Jankofsky  
Deputy Director



The Honorable Tom Boone  
Chairman  
Joint Committee on Capital Review  
1700 W. Washington  
Phoenix, Arizona 85007

Dear Representative Boone:

Attached you will find reports on Professional and Outside Services, and traffic congestion performance measures.

Laws of 2006, Chapter 345, requires JCCR review of ADOT's FY07 expenditure plan for Professional and Outside Services. Attached you will find schedules outlining our expenditure plan. They do not differ from the schedules submitted June 5, 2006.

In Mr. Stavneak's letter of June 20, 2006, we were asked to include an estimate of services from the Statewide Transportation Acceleration Needs (STAN) Account. Due to the timing of the June 23, 2006, adoption by the State Transportation Board of the FY2007-2011 5-Year Construction Program and the passage of HB 2865 we are unable to estimate the impact of STAN on planned FY07 Professional and Outside Services. The decision on which projects will be accelerated is dependent upon the process defined in the law. We will only be able to develop an estimate of consulting services at such time as project acceleration is determined.

Also you will find the congestion performance measures for the Phoenix area, Tucson area and the balance of the state as adopted by the Committee last year.

If you have any questions or desire additional information, please do not hesitate to call Terry Trost, 602-712-8981.

Sincerely

Victor M. Mendez

- cc: Senator Bob Burns, Vice-Chairman, Joint Committee on Capitol Review
- Richard Stavneak, Director, Joint Legislative Budget Committee
- Gary Yaquinto, Director, Governor's Office of Strategic Planning and Budgeting
- Bob Hull, Joint Legislative Budget Committee
- Marcel Benberou, Governor's Office of Strategic Planning and Budgeting



2001 Award Recipient

AGENCY NAME & AFIS CODE:

DEPARTMENT OF TRANSPORTATION DTA

COST CENTER/PROGRAM NAME:

CONSTRUCTION - STATE HIGHWAY FUND NON-APPROPRIATED

SCHEDULE 3A - FY 2007  
 COST CENTER/PROGRAM SUMMARY OF EXPENDITURES

AFIS OBJ CODE	CATEGORY	(A) ACTUAL FY 2005	(B) APPROVED FY 2006 (EXP PLAN)	(C) FY 2007 BASE ADJUSTMENTS	(D) FY 2007 BASE BUDGET (B) + (C)	(E) MANDATED & DEMOGRAPHIC ISSUES	(F) BASE MODIFICATIONS (Net to \$0)	(G) FY 2007 (D) + (E) + (F)
	EXPENDITURE DETAIL:							
6200	PROFESSIONAL & OUTSIDE SERVICES	78,240.7	96,530.0	6,644.8	103,174.8			103,174.8
	TOTAL PROGRAM EXPENDITURES	78,240.7	96,530.0	6,644.8	103,174.8			103,174.8
	FUNDING SOURCES:							
1000	GENERAL FUND							
	NON-APPROPRIATED FUNDS	78,240.7	96,530.0	6,644.8	103,174.8			103,174.8
	SUBTOTAL NON-APPROPRIATED FUNDS	78,240.7	96,530.0	6,644.8	103,174.8			103,174.8
	TOTAL FUNDS	78,240.7	96,530.0	6,644.8	103,174.8			103,174.8

AGENCY NAME & AFIS CODE:

DEPARTMENT OF TRANSPORTATION DTA

COST CENTER/PROGRAM NAME:

CONSTRUCTION - NON-APPROPRIATED

FUND NAME & AFIS NUMBER:

STATE HIGHWAY FUND 2030

SCHEDULE 7  
PROFESSIONAL AND OUTSIDE SERVICES

AFIS COMP SRC CLS	EXPENDITURE CATEGORY	(A) ACTUAL FY 2005	(B) APPROVED FY 2006 (EXP PLAN)	(C) FY 2007 BASE ADJUSTMENTS	(D) FY 2007 BASE BUDGET (B) + (C)
6219	Other External Financial Services	321.6	275.0	56.5	331.5
6221	Attorney General Legal Services	348.6	475.0	31.1	506.1
6222	External Legal Services	13.9	50.0	19.4	69.4
6231	Preliminary Engineering	20,598.6	46,250.0	3,291.1	49,541.1
6232	Construction Engineering	18,830.8	19,000.0	1,091.8	20,091.8
6239	Other Design	497.8	1,275.0	92.1	1,367.1
6240	Temp Agency Services	18.5	125.0		125.0
6271	Education and Training	3.1	55.0	17.9	72.9
6299	Other Professional and Outside Services	37,607.8	29,025.0	2,044.9	31,069.9
	TOTAL Professional and Outside (to SCH. 3A)	78,240.7	96,530.0	6,644.8	103,174.8

STATE OF ARIZONA

## Joint Committee on Capital Review

STATE  
SENATE

ROBERT L. BURNS  
CHAIRMAN 2005  
PAULA ABOUD  
LINDA AGUIRRE  
TIMOTHY S. BEE  
ROBERT CANNELL  
RON GOULD  
KAREN S. JOHNSON

1716 WEST ADAMS  
PHOENIX, ARIZONA 85007

PHONE (602) 926-5491

FAX (602) 926-5416

<http://www.azleg.gov/jlbc.htm>

HOUSE OF  
REPRESENTATIVES

TOM BOONE  
CHAIRMAN 2006  
AMANDA AGUIRRE  
ANDY BIGGS  
JACK A. BROWN  
PHIL LOPES  
RUSSELL K. PEARCE  
STEPHEN TULLY

DATE: September 13, 2006

TO: Representative Tom Boone, Chairman  
Members, Joint Committee on Capital Review

THRU: Richard Stavneak, Director

FROM: Bob Hull, Principal Research/Fiscal Analyst

SUBJECT: Arizona Department of Transportation – Report on 5-Year Transportation Plan

### Request

In compliance with a Committee request, the Arizona Department of Transportation (ADOT) has submitted an Executive Summary of their 5-Year Transportation Facilities Construction Program for FY 2007-FY 2011.

### Summary

The entire 5-Year Plan costs \$5.8 billion. Of this amount, \$3.1 billion will be spent on 33 major projects above \$25 million (see *Table 8*). During the 5 years, the annual spending level ranges between \$1.3 billion and \$1.6 billion. During the 5 years, the amount of outstanding Highway User Revenue Fund (HURF) bonds ranges between \$1.5 billion and \$1.8 billion. Laws 2006, Chapter 284, removed the \$1.3 billion HURF bond statutory limit.

The 5-year highway program does not include the \$307 million from the FY 2007 budget to accelerate certain highway projects. The Committee has already requested that ADOT report back on this spending plan by December 15, 2006.

ADOT has reported that the plan addresses all of the 20 “over capacity” highway segments.

### Recommendation

This item is for information only and no Committee action is required. As described below, however, the JLBC Staff has recommendations for enhancing future Committee reviews.

Since the full Legislature neither appropriates the entire funding of the 5-year plan nor approves the individual projects, the Committee has traditionally requested information on the plan to ensure some legislative oversight. Over the years, the Committee has requested that ADOT include an executive summary of the plan and a progress report on congestion performance measures.

(Continued)

After reviewing this year's plan, the JLBC Staff believes that further improvements in the report would be useful. The summary of the plan's long term revenue and expenditures is presented in current year dollars and does not reflect actual cash flow. Since inflation can be considerable over a 5-year period of time, this approach can understate the true value of the plan. As a result, the JLBC Staff recommends obtaining added information on the plan's actual cash flow.

With the removal of the HURF bond statutory cap, it would also be useful for ADOT's annual report to include information on HURF bond coverage level and debt ratio.

In terms of specific suggestions, the JLBC Staff recommends that the Committee request the following:

ADOT provide an Executive Summary of its 5-Year Transportation Facilities Construction Program for FY 2008-FY 2012, due by July 31, 2007. The Executive Summary should include the information in *Tables 1-9*, plus:

- A narrative explanation of the changes in revenues and expenditures between the FY 2007-FY 2011 and FY 2008-FY 2012 plans.
- A narrative description of major projects added and removed since the FY 2007-2011 plan, along with the current status and completion dates for removed projects.
- Separate the listing of 3 revenue dollar amounts for bonds, notes, and HELP loans. In addition, debt service payments should be listed separately and not deducted from revenue.
- A table that crosswalks next year's obligation basis 5-year highway program revenues to ADOT's cash flow projections, along with an explanation of the reasons for differences.
- A comparison of ADOT's bonding level to the statutory HURF Bond coverage requirement and the bond agencies' rating standard.

## **Analysis**

### **Expenditures**

The 5-Year Transportation Facilities Construction Program for FY 2007-FY 2011 includes a 5-year total of \$5.8 billion for the highway program and \$0.7 billion for the aviation program. The 5-year program shows estimated expenditures on an obligation basis in the fiscal year that the project begins. Expenditures do not represent cash flow, since projects typically take multiple years to complete. Expenditures exclude debt service, which is netted out of revenue.

*Table 1* compares the estimated expenditures for this year's 5-year highway program to last year's program. The overall 5-year highway program increases from \$5.12 billion to \$5.84 billion, \$722 million, or 14.1%. This includes the following increases:

- The statewide highway program grows from \$2.32 billion to \$2.60 billion, an increase of \$279 million, or 18%.
- The MAG freeway system increases from \$2.8 billion to \$3.24 billion, \$443 million, or 15.8%.

(Continued)

<b>Table 1</b>		
<b>ADOT's 5-Year Highway Program Estimated Expenditures</b>		
	<b><u>FY's 2006 - 2010</u></b>	<b><u>FY's 2007 - 2011</u></b>
<u>Statewide Program</u>		
Preservation	\$ 756,000,000	\$ 892,000,000
Improvements	1,202,000,000	1,325,000,000
Management	<u>359,000,000</u>	<u>379,000,000</u>
Total Statewide Program	\$2,317,000,000	\$2,596,000,000
<u>MAG Freeway System</u>		
	<u>\$2,800,000,000</u>	<u>\$3,243,000,000</u>
<b>Total</b>	<b><u>\$5,117,000,000</u></b>	<b><u>\$5,839,000,000</u></b>

Table 8 lists the estimated expenditures by fiscal year for 33 major highway projects (those over \$25 million), which total \$3.1 billion of estimated expenditures in this year's 5-year highway program. Table 9 compares the 33 major highway projects costing \$3.1 billion in this year's 5-year highway program to the 28 major highway projects costing \$2.6 billion in last year's program. Six projects are listed as major highway projects in last year's program but not in this year's program, as shown in Table 2. These projects may not yet be completed, since projects typically take multiple years to complete. Also, some of last year's major projects may still be in this year's 5-year program, but with expenditures below the \$25 million major project level.

<b>Table 2</b>	
<b>Major Highway Projects (Over \$25,000,000) Removed This Year</b>	
	<b><u>Status</u></b> <sup>1/</sup>
<u>East Valley</u>	
Red Mountain Freeway – L202, University to Southern	
Red Mountain Freeway – Power Rd to University Drive	
Red Mountain Freeway – Red Mountain Corridor ROW	
Santan Freeway – Santan Corridor ROW	
US 60 – Gilbert to Power Rd, HOV/SOV	
<u>Tucson</u>	
Tucson I-10 – Prince Rd to 25 <sup>th</sup> Ave, widen	
<sup>1/</sup> JLBC Staff has asked ADOT for the current status of these projects.	
ROW – Right of Way    HOV – High Occupancy Vehicle Lane    SOV – Single Occupancy Vehicle	

There are 11 new major projects totaling \$598.3 million in this year's 5-year program, as shown in Table 3. The 11 new major projects include 2 new major projects each in the North Valley (\$70 million), West Valley (\$143.8 million), East Valley (\$168 million) and Tucson (\$76.2 million), and 3 in the balance of the state (\$140.3 million).

<b>Table 3</b>	
<b>New Major Highway Projects (Over \$25,000,000)</b>	
	<b><u>FY's 2007 - 2011</u></b>
<u>North Valley</u>	
I-17 – Jomax/Dixileta Interchanges	\$40,000,000
L303 (Estrella) – Happy Valley Rd to I-17, interchange	30,000,000
<u>West Valley</u>	
I-10 – Sarival Rd to Dysart Rd, widen & HOV	90,020,000
I-10 – Dysart Rd to L101 (Agua Fria), widen & HOV	53,805,000
<u>East Valley</u>	
I-10 – SR 51 to 40 <sup>th</sup> St, collector distributor road	140,000,000
L101 (Pima) – Tatum Blvd to Princess Dr, HOV	28,000,000
<u>Tucson</u>	
Tucson I-10 – Ina Rd, interchange	38,164,000
Tucson I-19 – Valencia Rd to Ajo Way, widen	38,000,000
<u>Balance of State</u>	
Safford US 191 – MP 151 to Threeway, widen	33,146,000
Kingman US 93 – Hoover Dam to MP 17, widen	80,000,000
Prescott SR 260 – Little Green Valley, widen	27,125,000
SR – State Route    HOV – High Occupancy Vehicle Lane	

**Revenues**

Table 4 compares ADOT’s estimated revenues for this year’s 5-year highway program to last year’s program. ADOT shows the 5-year highway program revenues in current fiscal year dollars, and therefore does not show the actual funds collected over that time period. In addition, debt service payments are deducted from revenue and are not displayed as expenditures.

For these reasons, the 5-year highway program revenues do not match ADOT’s estimated cash flow revenue tables (See Attachment A), which are neither discounted to current fiscal year dollars nor net of debt service. This disconnect causes confusion when trying to compare ADOT’s 5-year program obligation basis revenue to their cash flow revenue tables.

The main reasons for changes in revenues between the FY 2006-2010 and FY 2007-2011 plans are as follows:

- State Highway Fund decreases from \$1.05 billion to \$769 million. It is unclear how this relates to ADOT’s cash flow tables. ADOT reports that the \$(283) million decrease, or (27%), is due to operating budget (including pay plan) increases in FY 2007 which are annualized over the next 5 years, and debt service increases for higher levels of HURF bonding due to lifting the HURF bonding cap. These spending increases decrease the monies remaining to fund highway construction by a like amount. The 2 items would appear to account for a reduction in monies available for highway construction of about \$(376) million over 5 years on a cash flow basis. The \$(376) million reduction, would include reductions of \$(114) million due to increases in ADOT’s State Highway Fund operating budget, and \$(262) million due to HURF bond debt service increasing from \$632 million to \$894 million on a cash flow basis. ADOT reports that these two factors were somewhat offset by higher estimated revenues, and lower DPS funding.

In addition to the above factors, 5-year program revenues also differ from the cash flow dollar amounts because they are net of HURF bond debt service and are discounted to current year dollar values.

(Continued)

JLBC Staff has asked ADOT for more information on how they convert their cash flow revenue numbers to the revenues shown in the 5-year program.

ADOT projects that total Highway User Revenue Fund (HURF) revenues will increase from \$1.4 billion in FY 2007 to \$1.66 billion in FY 2011, or a 19% increase. It is unclear how a 19% increase in HURF revenue over the 5 years translates to the State Highway Fund revenue amount in the 5-year plan after all of the above adjustments.

- MRARF decreases from \$569 million to \$460 million. ADOT reports that the \$(109) million decrease, or (19%), is due to debt service increases for higher levels of MRARF bonding in order to maximize funding from the Maricopa ½ cent sales tax. In addition, 5-year program revenues are also net of MRARF bond debt service and are discounted to current year dollar values. It is unclear how this relates to ADOT’s cash flow tables, which show MRARF bond debt service decreasing from \$336.2 million to \$332.5 million, a decrease of \$(3.7) million.
- Federal Funds increases from \$1.94 billion to \$2.16 billion. ADOT reports that the \$220 million increase, or 11.3%, is based on updated estimates. The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the federal transportation program, is authorized through FY 2009. ADOT estimates that federal funds would continue in FY 2010 at the FY 2009 level, and increase by 4% in FY 2011, based on past experience with federal continuing resolutions and program reauthorization levels. In addition, 5-year program revenues are also net of Grant Anticipation Note debt service and are discounted to current year dollar values. It is unclear how this relates to ADOT’s cash flow tables, which show federal funds actually decreasing from \$2.54 billion to \$2.42 billion, or \$(120) million.
- Proceeds from bonds, notes, & HELP loans increase from \$1.55 billion to \$2.45 billion. ADOT reports that the \$894 million increase, or 58%, is due to increased HURF and MRARF bonding. In addition, 5-year program revenues are also discounted to current year dollar values. It is unclear how this relates to ADOT’s cash flow tables, which show HURF and MRARF bond proceeds increasing from \$1.36 billion to \$2.32 billion, an increase of \$962 million, or 70.6%.

**Table 4**

**ADOT's 5-Year Highway Program Estimated Revenues <sup>1/</sup>**

	<u>FY's 2006 - 2010</u>	<u>FY's 2007 - 2011</u>
State Highway Fund <sup>2/</sup>	\$1,052,000,000	\$769,000,000
Maricopa Regional Area Road Fund <sup>3/</sup>	569,000,000	460,000,000
Federal Funds <sup>4/</sup>	1,943,000,000	2,163,000,000
Bonds, Notes, & HELP Loans <sup>5/</sup>	<u>1,553,000,000</u>	<u>2,447,000,000</u>
<b>Total</b>	<b>\$5,117,000,000</b>	<b>\$5,839,000,000</b>

<sup>1/</sup> Estimated revenues are in current fiscal year dollars and net of debt service.  
<sup>2/</sup> Net of HURF bonds debt service.  
<sup>3/</sup> Net of MRARF bonds debt service.  
<sup>4/</sup> Net of Grant Anticipation Notes debt service.  
<sup>5/</sup> Proceeds from bonds, Grant Anticipation Notes, and Highway Expansion and Extension Loan Program Loans.

**Statewide Transportation Acceleration Needs (STAN) Account**

In addition to the \$5.8 billion 5-year highway program, the General Appropriation Act includes a total of \$307 million for the STAN Account of the State Highway Fund, including \$245 million from the General Fund and \$62 million from the State Highway Fund. This amount is not reflected in the above estimates.

(Continued)

ADOT cannot estimate the impact of the \$307 million on the department's highway construction program until they determine which projects will be accelerated and when. The Committee adopted a motion at its July 27, 2006 meeting that ADOT report back on spending plans for STAN Account monies by December 15, 2006.

## **Bonding**

Highlights of ADOT's bonding plans include the following.

- 1) HURF bonds outstanding begin at \$1.48 billion in FY 2007 and increase to approximately \$1.76 billion in FY 2011. Laws 2006, Chapter 284, removed the \$1.3 billion HURF bond statutory limit. By statute, ADOT's annual revenue which is available to pay debt service on HURF bonds must be more than 3 times the HURF bonds' annual debt service over the life of the bonds. It appears from ADOT's cash flow tables that \$697 million of HURF revenue is available to pay \$144.9 million of HURF bond debt service in FY 2007, for a debt service ratio of 4.8 in FY 2007. ADOT has been asked for a confirmation of this calculation.

JLBC Staff has asked ADOT what standard bond rating agencies use to evaluate ADOT's level of HURF bond debt, and how ADOT compares, both currently and in this year's 5-year highway program, to both the statutory coverage requirement and the bond agencies' rating standard.

- 2) Maricopa Regional Area Road Fund (MRARF) Bonds outstanding increase from \$386 million in FY 2007 to \$1.31 billion in FY 2011, due to large MRARF bond issues and small repayments in the early years of the second 20-year Maricopa freeway program.
- 3) Grant Anticipation Notes (GANS) outstanding begin at \$283 million in FY 2007 and increase to \$315 million in FY 2008 before decreasing to \$246 million in FY 2011. GANS are monies borrowed by ADOT, which are repaid from future federal funds.
- 4) State Transportation Board Funding Obligations (BFO's) outstanding remain constant at \$200 million from FY 2007 through FY 2011. BFO's are loans totaling \$200 million from the General Fund operating balance to the department, as authorized by statute. The \$200 million includes \$60 million to the State Highway Fund and \$140 million to the Highway Expansion and Extension Loan Program (HELP) Fund. ADOT is due to retire the current \$200 million of BFO's with a \$266.3 million debt service payment to the General Fund in FY 2008, including about \$79.9 million from the State Highway Fund and \$186.4 million from the HELP Fund. The \$266.3 million debt service payment includes \$200 million of principal and \$66.3 million of interest to the General fund. ADOT plans to re-borrow the \$200 million of BFO's in FY 2008 from the General Fund to continue funding the 5-Year Program.
- 5) HELP Fund loans outstanding decrease from \$121 million in FY 2007 to \$0 in FY 2011, since ADOT does not try to project which future projects might be accelerated through the use of HELP loans. The HELP Fund is a state infrastructure bank which was capitalized with federal funds, State Highway Fund monies, and \$140 million of BFO's. The HELP Fund provides loans to political subdivisions, Indian tribes and state agencies for eligible transportation projects. HELP Fund loans are repaid from future programmed funds for those projects.

ADOT's overall estimated debt/revenue ratio, which combines HURF bonds, MRARF bonds, GANS and BFO's, increases from 1.6 (or \$2.35 billion of debt divided by \$1.50 billion of revenue) in FY 2007 to 2.0 (or \$3.51 billion of debt divided by \$1.75 billion of revenue) in FY 2011. The overall debt/revenue ratio indicates changes in ADOT's overall level of debt to the revenues available to pay the debt. The overall debt/revenue ratio is different than the statutory debt service coverage requirement for HURF bonds.

(Continued)

MRARF bonds are limited by the revenue generated by the ½ cent sales tax. GANS are limited by future federal funds. BFO's are statutorily capped at \$200 million.

**Congestion Performance Measures**

ADOT reported on their traffic congestion performance measures, which describe how ADOT's 5-year plan addresses some of the state's most crowded roadways, at the July 27, 2006 Committee meeting. The Committee adopted the highway congestion performance measures, shown in the following table, with the stipulation that ADOT report on these performance measures as part of next year's Committee review of ADOT's construction budget for Professional and Outside Services.

ADOT lists 20 "over capacity" highway segments, including 13 in the Phoenix area, 4 in the Tucson area, and 3 in the balance of the state. (See Attachments B, C and D for maps of the Phoenix area, Tucson area, and balance of the state showing highway segments listed in the congestion performance measures.) All of the 20 "over capacity" highway segments have some action in the 5-Year Plan, which was approved by the State Transportation Board on June 23, 2006. ADOT's definition of "over capacity" highway segments includes those segments that are "over capacity" for 3 hours during either the morning or afternoon commute for the Phoenix and Tucson areas. The Phoenix area maps in Attachment B show the duration of congestion for the morning or afternoon commute in 1-hour intervals for various highway segments. The maps show varying lengths of congested highway segments on most Phoenix area freeways, with heavier congestion during the afternoon commute than the morning. ADOT reports that more detailed "over capacity" information is not available for the Tucson area.

<b>PHOENIX AREA</b>		FY 2004 Actual	FY 2005 Actual	FY 2007 Estimate
• Percent of state highway system with traffic volume over 100% of capacity during 3 hours of the morning or afternoon commute in Phoenix Metro area		14	14	14
<b>Phoenix Metro Area Highway Segments Over 100% of Capacity During Peak Driving Periods</b>				
<b>Action in 5-Year Plan</b>	<b>Route</b>	<b>Segment</b>	<b>ADOT Action</b>	
Yes	I-10	Agua Fria - I-17	General purpose lanes; completion FY 12	
Yes	I-10	Baseline Rd - 40 <sup>th</sup> St	Collector distributor roads; completion FY 14	
Yes	I-10	Sarival Rd - Agua Fria	HOV/general purpose lanes; completion FY 11	
Yes	Loop 101	Red Mtn (L202) - Baseline	HOV lanes; completion FY 10	
Yes	Loop 101	Baseline - Santan (L202)	HOV lanes; completion FY 12	
Yes	I-17	Carefree Hwy - Loop 101	HOV/general purpose lanes; completion FY 09	
Yes	US 60 (Grand Ave)	Loop 303 - Loop 101	General purpose lanes; completion FY 11	
Yes	US 60 (Superstition)	I-10 - Loop 101	General purpose lanes; completion FY 11	
Yes	US 60 (Superstition)	Val Vista Dr - Ellsworth Rd	HOV/general purpose lanes; completion FY 08	
Yes	SR 51	Loop 101 - Shea Blvd	HOV/ramp; completion FY 09	
Yes	Loop 101	Princess Dr - Red Mtn (L202)	HOV lanes; completion FY 09	
Yes	Loop 202	Rural Rd - Pima (L101)	General purpose lanes; completion FY 11	
Yes	Loop 202	Pima (L101) - Gilbert Rd	General purpose lanes; completion FY 11	
<b>Completed Projects</b>				
	US 60 (Grand Ave)	I-10 - Loop 101	8 traffic interchanges; completed FY 06	

(Continued)

<b>Table 6</b>				
<b>TUCSON AREA</b>		FY 2004	FY 2005	FY 2007
		Actual	Actual	Estimate
<ul style="list-style-type: none"> <li>Percent of state highway system with traffic volume over 100% of capacity during 3 hours of the morning or afternoon commute in Tucson Metro area</li> </ul>		10	10	10
<b>Tucson Metro Area Highway Segments Over 100% of Capacity During Peak Driving Periods</b>				
<u>Action in 5-Year Plan</u>	<u>Route</u>	<u>Segment</u>	<u>ADOT Action</u>	
Yes	I-10	Prince Rd - 29 <sup>th</sup> Ave	Widening project; completion FY 09	
Yes	I-10	Ruthruaff Rd - Prince Rd	Widening from 6 to 8 lanes; completion FY 11	
Yes	I-10	Cortaro Traffic Interchange	Reconstruct interchange; design FY 08; completion FY 13	
Yes	Oracle Rd	Calle Concordia - Tangerine	Widening from 4 to 6 lanes; completion FY 08	
<b>Completed Projects</b>				
	Oracle Rd	Ina Rd - River Rd	Add shoulders; completed FY 06	

<b>Table 7</b>				
<b>BALANCE OF STATE</b>		FY 2004	FY 2005	FY 2007
		Actual	Actual	Estimate
<ul style="list-style-type: none"> <li>Percent of state highway system with traffic volume over 100% of capacity in balance of state</li> </ul>		1	1	1
<b>State Highway Segments Over 100% of Capacity in Balance of State</b>				
<u>Action in 5-Year Plan</u>	<u>Route</u>	<u>Segment</u>	<u>ADOT Action</u>	
Yes	SR 195	Yuma Area Service Highway (MP 0 - 26)	Design area service highway; completion FY 10	
Yes	US 93	Hoover Dam Bypass (MP 1.7 - 16.1)	Widen bridge approach from 2 to 4 lanes; completion FY 08	
Yes	SR 179	I-17 - Sedona (MP 304.5 - 313.4)	Needs study; completion FY 09	
MP - Mile post.		SA – Alternate route.	SR - State route.	SB - Business route.

**Aviation**

ADOT’s Executive Summary also includes their 5-Year Aviation Program for FY 2007-FY 2011 which totals \$716.9 million, including revenues of \$589 million from federal grants, \$96.1 million from the state, and \$31.8 million from local governments. Last year’s 5-Year Aviation Program totaled \$664.7 million, including revenues of \$551 million from federal grants, \$79.3 million from the state, and \$34.4 million from local governments. The aviation program provides for planning, construction, development, and improvement of state, county, city, and town airports.

RS/BH:ym  
Attachments

**MAJOR PROJECTS (Over \$25,000,000)**

<b>Table 9</b>		
<b>Projects</b>	<b>FY's 2006 - 2010</b>	<b>FY's 2007 - 2011</b>
Red Mountain Freeway – L202, University to Southern	\$ 58,418,000	
Red Mountain Freeway – Power Rd to University Drive	153,040,000	
Red Mountain Freeway – Red Mountain Corridor ROW	38,338,000	
L202 (Red Mountain) – I-10/SR 51 Interchange to L101 eastbound, widen	63,300,000	\$ 64,800,000
L202 (Red Mountain) – SR 101L to Gilbert Rd, HOV	38,100,000	31,500,000
Santan Freeway – Santan Corridor ROW	33,412,000	
I-17 – L101 to Carefree Highway, widen & HOV	170,370,000	194,400,000
I-17 – Jomax/Dixileta Interchanges		40,000,000
SR 51 – Shea Blvd to L101, HOV	50,900,000	61,400,000
US 60 – Gilbert to Power Rd, HOV/SOV	89,400,000	
US 60 – L303 (Estrella) to 99th Ave, widen	25,320,000	25,900,000
US 60 – L101 (Agua Fria) to McDowell Rd, widen	28,540,000	29,865,000
I-10 – L101 (Agua Fria) to I-17, widen	71,740,000	71,740,000
I-10 – 40 <sup>th</sup> St to Baseline, collector distributor road	394,500,000	394,250,000
I-10 – SR 51 to 40 <sup>th</sup> St, collector distributor road		140,000,000
I-10 – SR 202L (Santan) to Riggs Rd, widen	44,310,000	44,310,000
I-10 – Sarival Rd to Dysart Rd, widen & HOV		90,020,000
I-10 – Dysart Rd to L101 (Agua Fria), widen & HOV		53,805,000
L101 (Pima) – Princess Dr to L202, HOV	81,000,000	65,000,000
L101 (Pima) – Tatum Blvd to Princess Dr, HOV		28,000,000
L101 (Price) – Baseline to L202, HOV	60,100,000	32,500,000
L202 – South Mountain Freeway	370,000,000	639,300,000
L303 (Estrella) – Happy Valley Rd to I-17, interim roadway	250,000,000	210,000,000
L303 (Estrella) – I-10 to US 60 (Grand Ave), new freeway	50,000,000	195,000,000
L303 (Estrella) – Happy Valley Rd to I-17, interchange		30,000,000
Safford US 191 – MP 151 to Threeway, widen		33,146,000
Tucson I-10 – Twin Peaks, traffic interchange	28,000,000	28,000,000
Tucson I-10 – Prince Rd to 25 <sup>th</sup> Ave, widen	124,413,000	
Tucson I-10 – Ruthrauff Rd to Prince Rd, widen	36,250,000	53,000,000
Tucson I-10 – Ina Rd, interchange		38,164,000
Tucson I-19 – Valencia Rd to Ajo Way, widen		38,000,000
Globe US 60 – Florence Junction to Queen Creek, widen	39,000,000	60,000,000
Kingman US 93 – Hoover Dam to MP 17, widen		80,000,000
SR 85 – Gila Bend, widen projects	122,953,000	160,747,000
SR 93 – Wickenburg By-Pass	26,550,000	29,000,000
Flagstaff SR 179 – N Forest Boundary to Sedona, roundabouts & straighten	45,776,000	30,200,000
Yuma SR 195 – Yuma Service Highway/Goldwater Range, reliever road	69,545,000	77,911,000
Prescott SR 260 – Doubtful Canyon Section, widen	33,830,000	42,155,000
Prescott SR 260 – Little Green Valley, widen		27,125,000

ROW – Right of Way    SR – State Route    HOV – High Occupancy Vehicle Lane    SOV – Single Occupancy Vehicle

**MAJOR PROJECTS (Over \$25,000,000)**

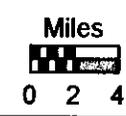
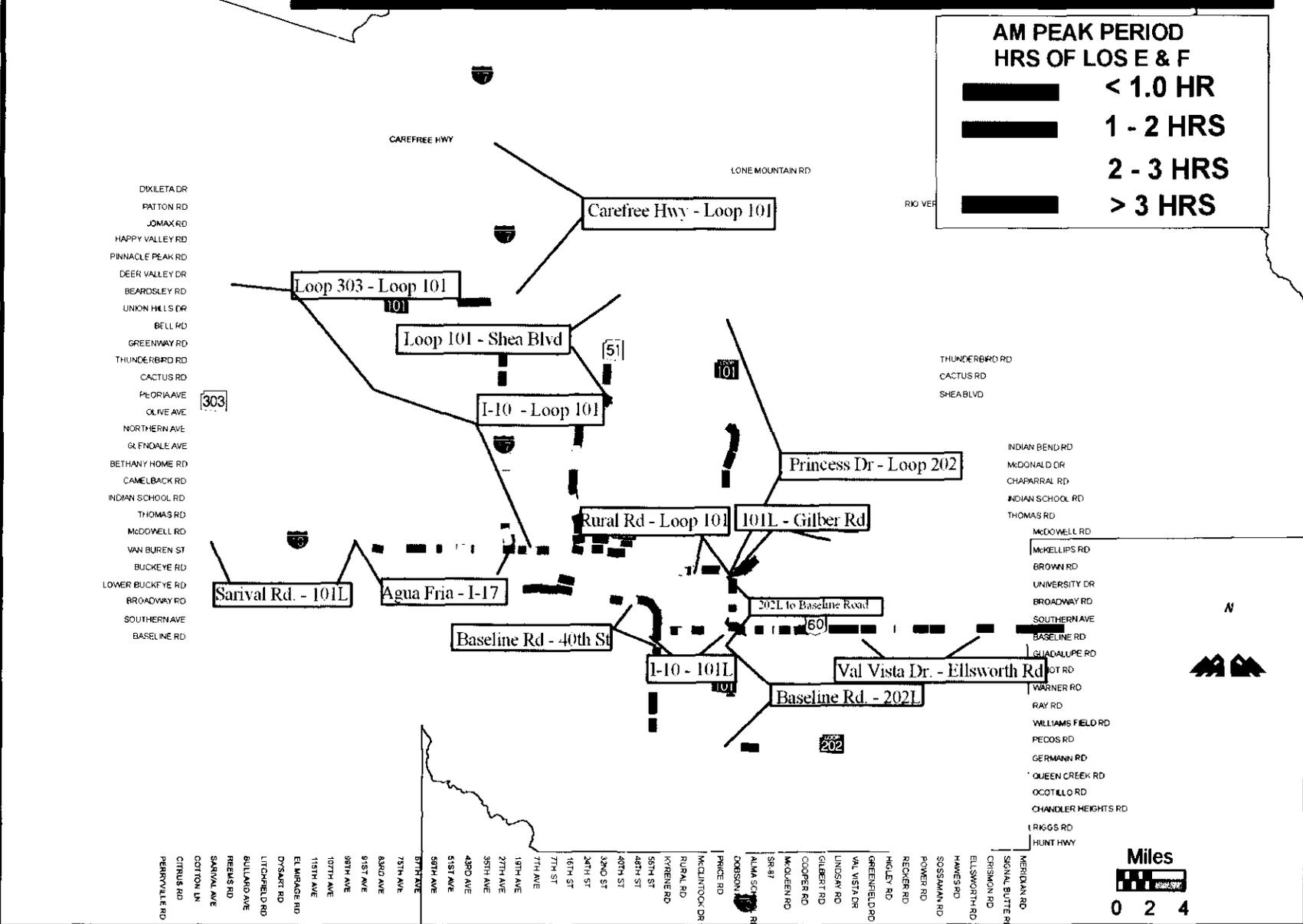
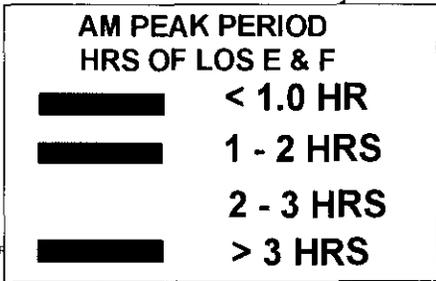
<b>Table 8</b>	<b>Projects</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>Total</b>
	L202 (Red Mountain) – I-10/SR 51 Interchange to L101 eastbound, widen		\$4,800,000	\$60,000,000			\$64,800,000
	L202 (Red Mountain) – SR 101L to Gilbert Rd, HOV		2,500,000	29,000,000			31,500,000
	I-17 – L101 to Carefree Highway, widen & HOV	\$189,800,000	720,000	3,000,000		\$880,000	194,400,000
	I-17 – Jomax/Dixileta Interchanges	40,000,000					40,000,000
	SR 51 – Shea Blvd to L101, HOV	61,400,000					61,400,000
	US 60 – L303 (Estrella) to 99th Ave, widen	1,900,000		24,000,000			25,900,000
	US 60 – L101 (Agua Fria) to McDowell Rd, widen			2,700,000	\$27,165,000		29,865,000
	I-10 – L101 (Agua Fria) to I-17, widen			3,740,000	68,000,000		71,740,000
	I-10 – 40 <sup>th</sup> St to Baseline, collector distributor road	10,775,000	24,125,000	59,350,000	130,000,000	170,000,000	394,250,000
	I-10 – SR 51 to 40 <sup>th</sup> St, collector distributor road				20,000,000	120,000,000	140,000,000
	I-10 – SR 202L (Santan) to Riggs Rd, widen		2,310,000	42,000,000			44,310,000
	I-10 – Sarival Rd to Dysart Rd, widen & HOV	2,800,000	51,900,000	35,000,000	320,000		90,020,000
	I-10 – Dysart Rd to L101 (Agua Fria), widen & HOV	2,805,000	51,000,000				53,805,000
	L101 (Pima) – Princess Dr to L202, HOV	65,000,000					65,000,000
	L101 (Pima) – Tatum Blvd to Princess Dr, HOV			2,000,000		26,000,000	28,000,000
	L101 (Price) – Baseline to L202, HOV			2,500,000	30,000,000		32,500,000
	L202 – South Mountain Freeway	6,300,000	40,000,000	113,000,000	210,000,000	270,000,000	639,300,000
	L303 (Estrella) – Happy Valley Rd to I-17, interim roadway	40,000,000	70,000,000	100,000,000			210,000,000
	L303 (Estrella) – I-10 to US 60 (Grand Ave), new freeway	15,000,000	10,000,000	10,000,000	10,000,000	150,000,000	195,000,000
	L303 (Estrella) – Happy Valley Rd to I-17, interchange	30,000,000					30,000,000
	Safford US 191 – MP 151 to Threeway, widen	33,146,000					33,146,000
	Tucson I-10 – Twin Peaks, traffic interchange	28,000,000					28,000,000
	Tucson I-10 – Ruthrauff Rd to Prince Rd, widen			21,000,000	14,000,000	18,000,000	53,000,000
	Tucson I-10 – Ina Rd, interchange		3,000,000		17,764,000	17,400,000	38,164,000
	Tucson I-19 – Valencia Rd to Ajo Way, widen			9,000,000		29,000,000	38,000,000
	Globe US 60 – Florence Junction to Queen Creek, widen		60,000,000				60,000,000
	Kingman US 93 – Hoover Dam to MP 17, widen		40,000,000	40,000,000			80,000,000
	SR 85 – Gila Bend, widen projects	52,047,000	31,100,000	37,600,000	40,000,000		160,747,000
	SR 93 – Wickenburg By-Pass	29,000,000					29,000,000
	Flagstaff SR 179 – N Forest Boundary to Sedona, roundabouts & straighten	30,200,000					30,200,000
	Yuma SR 195 – Yuma Service Highway/Goldwater Range, reliever road	52,911,000	25,000,000				77,911,000
	Prescott SR 260 – Doubtful Canyon Section, widen				42,155,000		42,155,000
	Prescott SR 260 – Little Green Valley, widen		27,125,000				27,125,000
	ROW – Right of Way						
	SR – State Route						
	HOV – High Occupancy Vehicle Lane						
	SOV – Single Occupancy Vehicle						

<b>Table 1</b>						
<b>ADOT's Projected Revenue Sources for FY 2007-2011 (\$ in Million)</b>						
	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	
<b>HURF</b>	\$ 1,398.8	\$ 1,443.3	\$ 1,513.3	\$ 1,584.8	\$ 1,660.6	(1)
<b>Maricopa 1/2 cent sales tax (MRARF)</b>	205.4	217.6	231.6	246.8	262.9	(2)
<b>Federal Funds</b>	453.0	473.0	491.0	491.0	510.0	(3)
<b>HURF Bond Proceeds</b>	313.0	342.0	125.0	60.0	15.0	
<b>RARF Bond Proceeds</b>	400.0	120.0	140.0	270.0	540.0	
<b>Grant Anticipation Loan Proceeds (GANS)</b>	0.0	68.0	22.0	32.0	0.0	
<b>Highway Expansion and Extension Loan Program (HELP)</b>	21.0	5.5	0.9	0.0	0.0	
<b>Other Income</b>	51.5	43.7	41.3	36.8	34.5	(4)
<b>(1) Represents estimated total HURF, including City, County and DPS shares</b>						
<b>(2) Represents estimate of ADOT's share of Maricopa County Regional Area Road Funds</b>						
<b>(3) Represents estimate of ADOT's share of Federal Highway Funds</b>						
<b>(4) Includes Interest Income, MVD Fees, Local/Private Contributions, Miscellaneous and Other Income</b>						

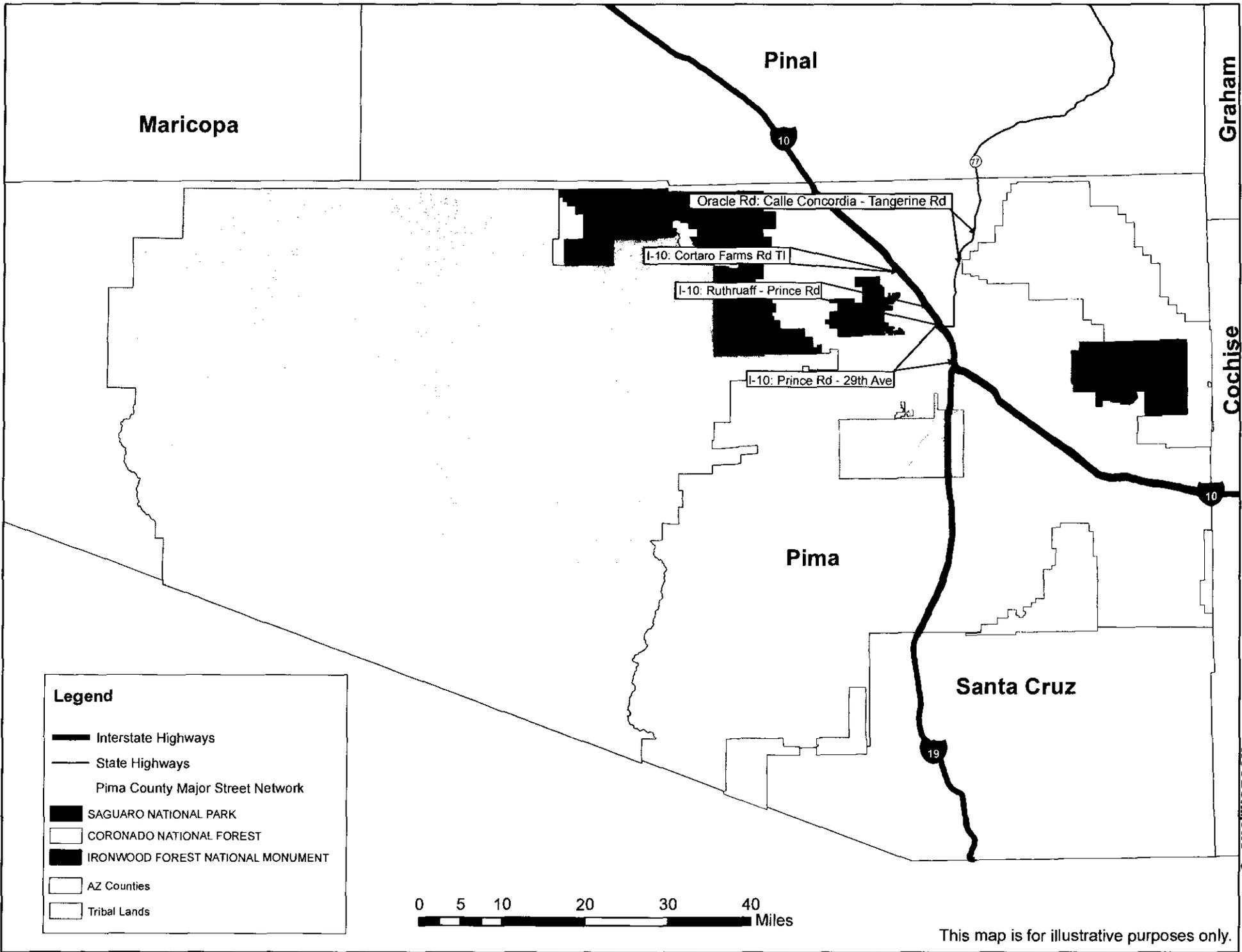
<b>Table 3</b>					
<b>ADOT's Bonding Plans for FY 2007-FY 2011 (\$ in Million)</b>					
	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>
HURF Bonds Outstanding - Beginning of FY	\$ 1,223	\$ 1,478	\$ 1,760	\$ 1,821	\$ 1,813
HURF Bonds Issued	\$ 313	\$ 342	\$ 125	\$ 60	\$ 15
HURF Bonds Repaid	\$ 58	\$ 60	\$ 64	\$ 68	\$ 72
HURF Bonds Outstanding - End of FY	\$ 1,478	\$ 1,760	\$ 1,821	\$ 1,813	\$ 1,756
MRARF Bonds Outstanding - Beginning of FY	\$ -	\$ 386	\$ 487	\$ 602	\$ 834
MRARF Bonds Issued	\$ 400	\$ 120	\$ 140	\$ 270	\$ 540
MRARF Bonds Repaid	\$ 14	\$ 19	\$ 25	\$ 38	\$ 68
MRARF Bonds Outstanding - End of FY	\$ 386	\$ 487	\$ 602	\$ 834	\$ 1,306
GANS Outstanding - Beginning of FY	\$ 324	\$ 283	\$ 315	\$ 307	\$ 308
GANS Issued	\$ -	68	22	32	0
GANS Repaid	\$ 41	\$ 36	\$ 30	\$ 31	\$ 62
GANS Outstanding - End of FY	\$ 283	\$ 315	\$ 307	\$ 308	\$ 246
HELP Loans Outstanding - Beginning of FY	\$ 136	\$ 121	\$ 48	\$ 8	\$ -
HELP Loans Issued	\$ 21	\$ 6	\$ 1	\$ -	\$ -
HELP Loans Repaid	\$ 36	\$ 78	\$ 41	\$ 8	\$ -
HELP Loans Outstanding - End of FY	\$ 121	\$ 48	\$ 8	\$ -	\$ -
BFO's Outstanding - Beginning of FY	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200
BFO's Loans Issued	\$ -	\$ 200	\$ -	\$ -	\$ -
BFO's Loans Repaid	\$ -	\$ 200	\$ -	\$ -	\$ -
BFO's Loans Outstanding - End of FY	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200

		<b>Table 5</b>					
		<b>ADOT's Estimated Debt/Revenue Ratio (\$ In Million)</b>					
		<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	
<b>Outstanding Debt - Fiscal Year End</b>							
HURF		\$ 1,478	\$ 1,760	\$ 1,821	\$ 1,813	\$ 1,756	
RARF		\$ 386	\$ 487	\$ 602	\$ 834	\$ 1,306	
GANS		\$ 283	\$ 315	\$ 307	\$ 308	\$ 246	
BFO's		\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	
<b>Total</b>		<b>\$ 2,347</b>	<b>\$ 2,762</b>	<b>\$ 2,930</b>	<b>\$ 3,155</b>	<b>\$ 3,508</b>	
<b>Revenues:</b>							
HURF		\$ 697	\$ 720	\$ 755	\$ 791	\$ 829	(1)
RARF		\$ 205	218	232	247	263	
Federal		\$ 593	\$ 613	\$ 637	\$ 637	\$ 662	(2)
<b>Total</b>		<b>\$ 1,495</b>	<b>\$ 1,551</b>	<b>\$ 1,624</b>	<b>\$ 1,675</b>	<b>\$ 1,754</b>	
<b>Debt / Revenue Ratio</b>		<b>1.6</b>	<b>1.8</b>	<b>1.8</b>	<b>1.9</b>	<b>2.0</b>	
<b>(1) Represents estimated ADOT share of HURF Funds</b>							
<b>(2) Represents total estimated Federal Funds flowing to ADOT and available for Debt Service Coverage</b>							

**2006 NETWORK AM PEAK PERIOD DURATION OF LEVEL OF SERVICE**

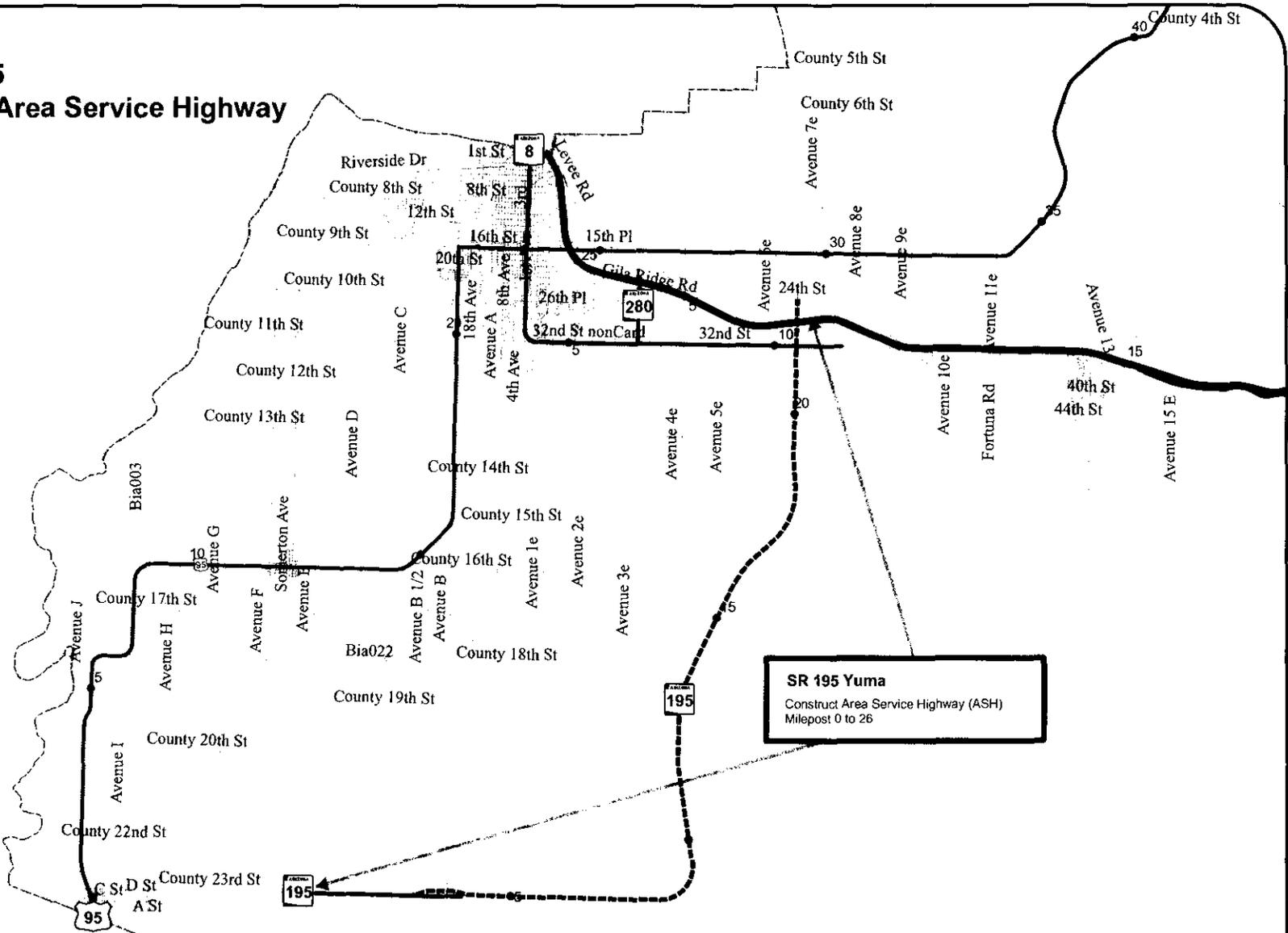






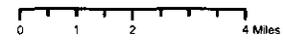
This map is for illustrative purposes only.

# SR-195 Yuma Area Service Highway



### Legend

- Interstate
- US Route
- State Route
- Future Hwy
- county and local roads
- SR-195 ASH
- Mile Marker (every 5th)
- County



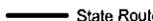
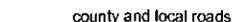
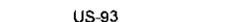
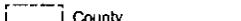
Prepared by the Arizona Dept of Transportation  
 Planning Division, Data Bureau GIS-T Section  
 (602) 712-7333

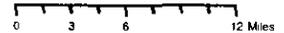
# US-93

**US 93**  
**Hoover Dam to MP 17**  
Construct roadway widening

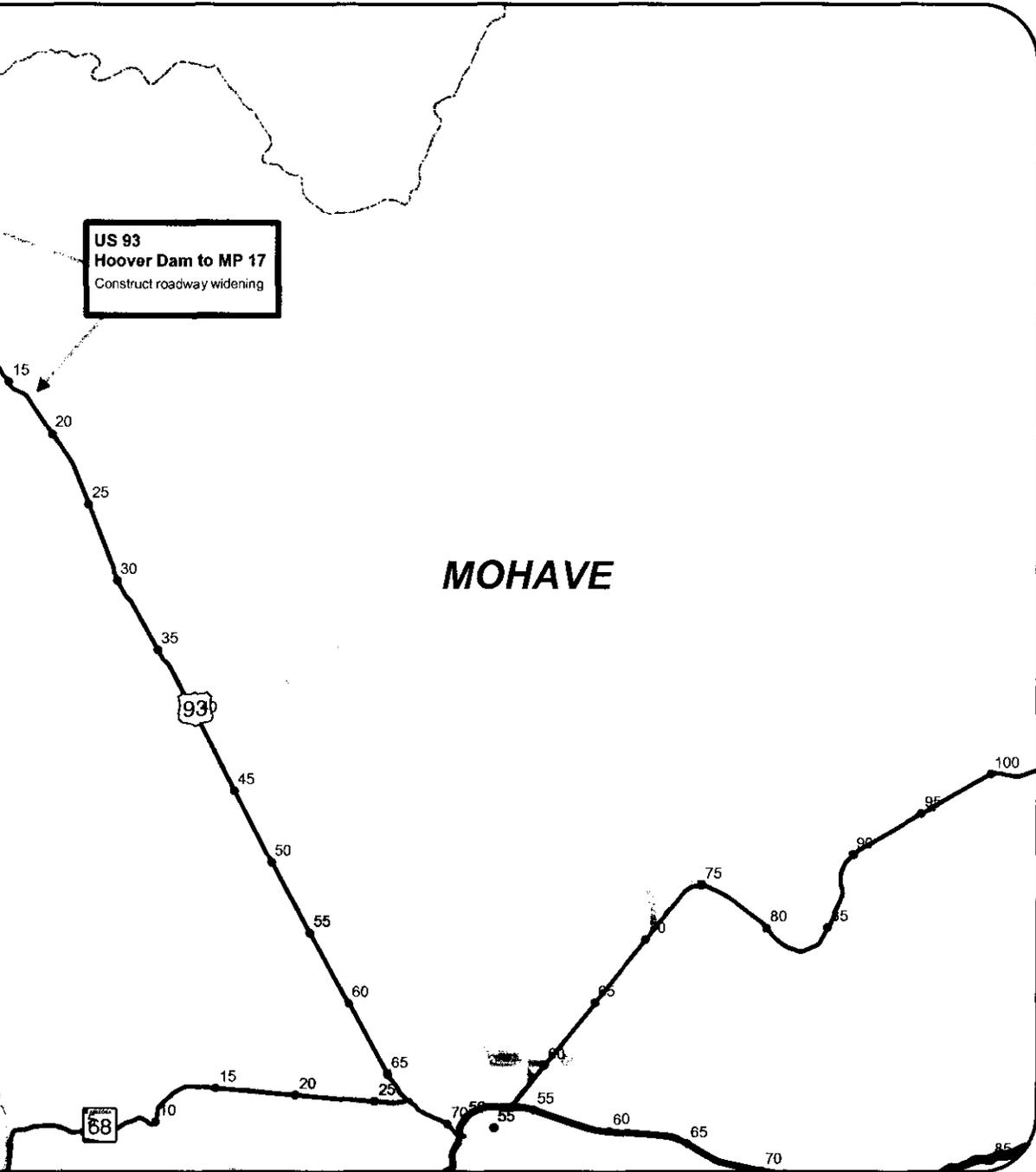
## MOHAVE

### Legend

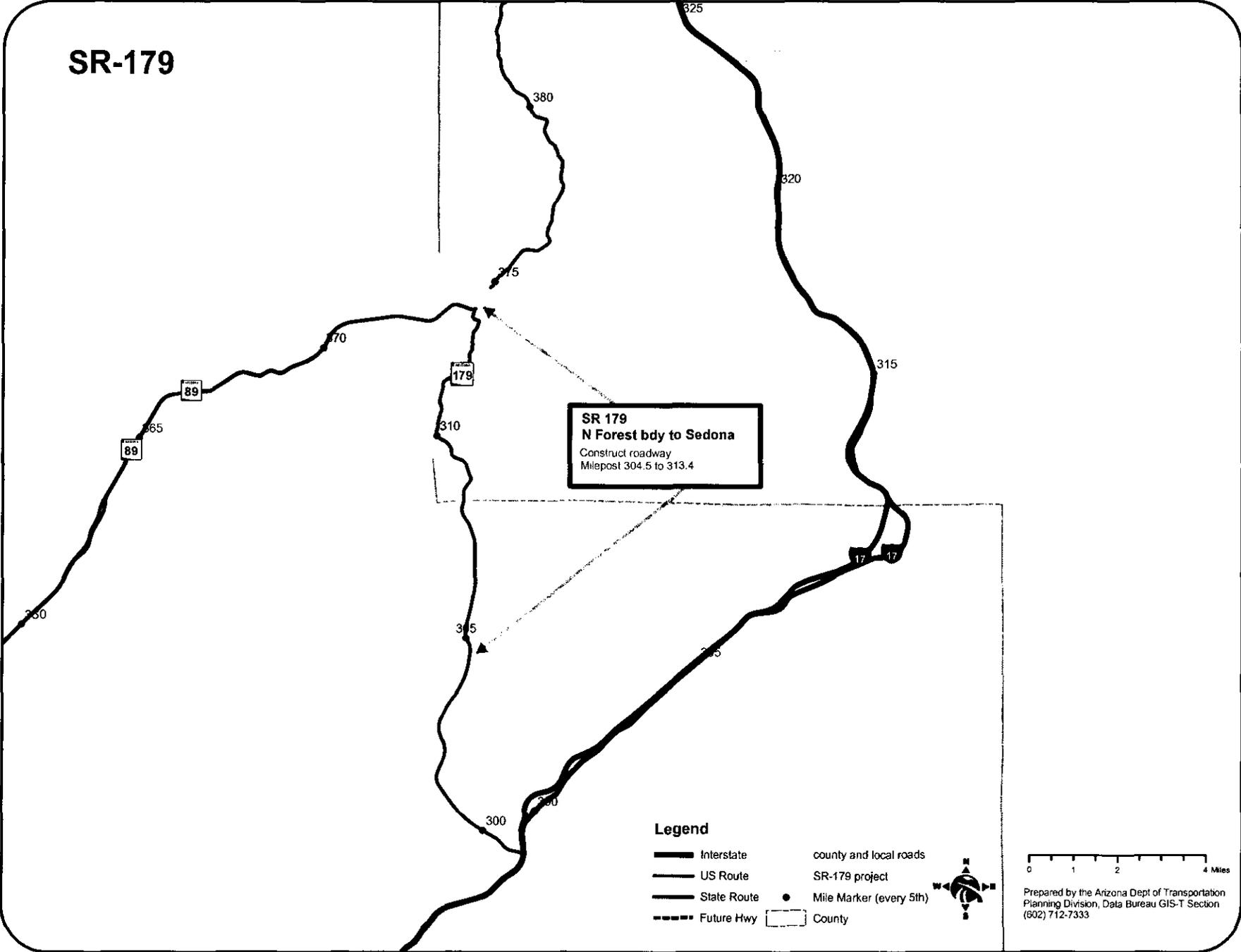
-  Interstate
-  US Route
-  State Route
-  Future Hwy
-  county and local roads
-  US-93
-  Mile Marker (every 5th)
-  County



Prepared by the Arizona Dept of Transportation  
Planning Division, Data Bureau GIS-T Section  
(602) 712-7333



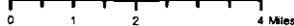
# SR-179



**SR 179**  
N Forest bdy to Sedona  
Construct roadway  
Milepost 304.5 to 313.4

### Legend

- Interstate
- US Route
- State Route
- Future Hwy
- county and local roads
- SR-179 project
- Mile Marker (every 5th)
- County



Prepared by the Arizona Dept of Transportation  
Planning Division, Data Bureau GIS-T Section  
(602) 712-7333



# Arizona Department of Transportation

## Transportation Services Group

206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Janet Napolitano  
Governor

Victor M. Mendez  
Director

July 20, 2006

John A. Bogert  
Chief of Staff

Richard Stavneak  
Director  
Joint Legislative Budget Committee  
1716 W. Adams  
Phoenix, AZ 85007



Dear Mr. Stavneak:

The attached material responds to an action item for ADOT approved by the Joint Committee on Capital Review at its September 28, 2005 meeting.

The Committee instructed ADOT to provide an Executive Summary of its 5-Year Transportation Facilities Construction Program for FY 2007 – FY 2011 by July 31, 2006.

If you have questions regarding this response please direct them to me at 712-8981.

Sincerely,

Terry Trost  
Director, Strategic Planning & Budgeting

cc: Representative Tom Boone, Chairman  
Senator Bob Burns, Vice-Chair  
Gary Yaquinto, Director, OSPB  
Marcel Benberou, Principal Budget Analyst, OSPB  
Bob Hull, Senior Budget Analyst, JLBC



2001 Award Recipient

# **Arizona Department of Transportation**

## **Five-Year Transportation Facilities Construction Program FY 2007-2011**

### **Executive Summary**

**Prepared by:  
Arizona Department of Transportation**

## **Introduction**

The statutory authority for the Arizona Department of Transportation (ADOT) is found in Title 28 of the Arizona Revised Statutes. ADOT has exclusive control and jurisdiction over all state owned transportation systems including state highways, routes, and airports.

## **Construction Program**

One of ADOT's statutory responsibilities is the development of a Five-Year Transportation Facilities Construction Program, a public document that provides the location, description of work, and expected costs of transportation construction projects under the state's purview.

Approval authority for the Five-Year Facilities Construction Program is vested in the Arizona State Transportation Board, a seven-member statutory entity whose members are appointed by the Governor, subject to Senate confirmation for a six-year term. Each member represents one of six districts in the state, with one at-large member. The Transportation Board establishes the policies and the relative weights given to criteria to guide the development, or modification of the Five-Year Transportation Facilities Construction Program, awards all construction contracts for transportation facilities and monitors the status of these projects.

In developing the Five-Year Program, the Priority Planning Advisory Committee (PPAC), a statutory committee appointed by the ADOT Director recommends transportation facilities construction projects and annually prepares and updates a long-range statewide transportation facilities construction program with which the Five-Year Program is aligned. The PPAC also recommends changes to the Five-Year Construction Program for the Board's consideration.

## **Development of the Construction Program**

In order for a project to be included in the Five-Year Transportation Facilities Construction Program, it first must be selected for scoping. Requests for scoping are generally initiated from the Department district engineers, but may come from other sources (e.g., political subdivisions). Scoping involves identifying transportation issues, concerns, and possible solutions. The assessment also provides estimated costs for construction and design, right of way needs, and environmental requirements.

A Technical Advisory Committee (TAC) is selected to review programming and scoping requests. Regional meetings are held throughout the state to gather input from ADOT district engineers, Councils of Governments (COGs), Metropolitan Planning Organizations (MPOs) and concerned citizens.

## **Program Modifications**

The program is continuously reviewed. Several committees review any requests involving changes to budget, schedule and scope. The Project Review Board (PRB) reviews all requests for project modifications. The Deputy State Engineer for Development chairs the PRB.

## **Financial Resources**

The cornerstone of highway financing in Arizona is the Highway User Revenue Fund (HURF). The State of Arizona taxes motor fuels and collects a variety of fees and charges relating to the registration of motor vehicles. These revenues are deposited in the HURF. A portion of the HURF is then distributed to cities, towns, counties, and the Department of Public Safety. The remainder is deposited in the State Highway Fund.

An additional source of funding dedicated entirely to construction of the Maricopa County Regional Freeway System is the Transportation Excise Tax or what is commonly referred to as the "Maricopa County 1/2 cent sales tax" which expired December 31, 2005. Arizona House Bill 2292, which was passed in the Spring 2003 session of the Arizona Legislature, established the Transportation Policy Committee which was tasked with developing a Regional Transportation Plan for Maricopa County, and established the process for an election to extend the current half-cent County Transportation Excise Tax. On November 2, 2004, voters in Maricopa County approved Proposition 400 to extend the existing half-cent Sales Tax for transportation for an additional twenty years to 2026. The extension began January 1, 2006. The Regional Transportation Plan has three components: Freeways/Highways, Transit and Arterial Roads. The Regional Transportation Plan Freeway Program is funded by three primary revenue sources: extension of the Maricopa County transportation excise tax, the Arizona Department of Transportation's funds dedicated to Maricopa County and federal funds. Per ARS 42-6105E, 56.2 percent of all sales tax collections will be distributed to freeways and state highways; 10.5 percent will be distributed to arterial street improvements; and 33.3 percent will be distributed to the public transportation fund.

ADOT also receives funds from the Federal Highway Trust Fund under the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) to develop and maintain federal-aid eligible highways on the state highway system.

All of these funding sources are further leveraged by the issuance of revenue bonds. Bonding has enabled ADOT to accelerate certain construction projects.

In accordance with A.R.S. 28-6953, the State Transportation Board adopted the FY 2007-2011 Five Year Transportation Facilities Construction Program on June 23, 2006.

**Highway Program**  
 FY 2007-2011  
 (In millions of dollars)

System Preservation	\$ 892
System Improvements	\$ 1,325
<u>System Management</u>	<u>\$ 379</u>
Total Statewide Program	\$ 2,596
<u>MAG</u>	
Proposition 200 (1985)	\$ 52
Proposition 400 (2004)	\$ 2,910
System wide	<u>\$ 281</u>
Total MAG Area Life Cycle	<u>\$ 3,243</u>
Total Highway Program	\$ 5,839

The following table reflects the sources of funds (estimated), in constant dollars:

State Highway Funds *	\$ 769
Regional Area Road Fund*	\$ 460
Federal Funds*	\$ 2,163
Proceeds from Bonds and Notes	<u>\$ 2,447</u>
Total Proceeds (net of debt service repayments*)	\$ 5,839

**Summary of Major Projects**

Selected major (over \$25 million) projects contained in this Program include (\$000):

MAJOR PROJECTS	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Red Mtn. L202, I-10/SR 51 TI - L 101 EB, widening		4,800	60,000		
Red Mtn. L202, SR 101L to Gilbert Rd – HOV lanes		2,500	29,000		
I-17, Black Canyon–L101 to Carefree Hwy, widening and HOV lanes	189,800	720	3,000		880
I-17, Black Canyon-Jomax/Dixileta Traffic Intersections (TI's)	40,000				
SR 51, (Piestewa) – Shea Blvd to L101 – HOV lanes	61,400				
US 60, L303 (Estrella) to 99 <sup>th</sup> Avenue, widening	1,900		24,000		
US 60, L 101 (Agua Fria) to McDowell Rd, widening			2,700	27,165	
I- 10, L 101 (Agua Fria) to I-17, widening			3,740	68,000	
I- 10, 40 <sup>th</sup> St–Baseline-Collector Distributor Road	10,775	24,125	59,350	130,000	170,000
I–10, SR 202L (Santan) to Riggs Road, widening		2,310	42,000		
I-10, Sarival Rd. to Dysart Rd., widening & HOV lanes	2,800	51,900	35,000	320	
I-10, Dysart Rd. to L101 (Agua Fria), widening & HOV	2,805	51,000			
I-10, SR 51 to 40 <sup>th</sup> St., Collector Distributor Road				20,000	120,000
Pima, L 101, Princess Dr to L 202 HOV lanes	65,000				
Pima, L 101, Tatum Blvd to Princess Drive HOV lanes			2,000		26,000
Price, L 101, Baseline to L202, HOV lanes			2,500	30,000	
L202, South Mountain Freeway	6,300	40,000	113,000	210,000	270,000
L303 (Estrella) Happy Valley Rd - I-17 (Interim)	40,000	70,000	100,000		
L303 (Estrella) I-10 to US 60 (Grand Ave), new freeway	15,000	10,000	10,000	10,000	150,000
L303, (Estrella) Happy Valley Rd – I-17 TI	30,000				
Safford US 191, MP 151-Threeway, widen	33,146				
Tucson I-10, Twin Peaks – Traffic Interchange	28,000				
Tucson I-10, Ruthrauff Rd. – Prince Rd. widening			21,000	14,000	18,000
Tucson I-10, Ina Rd. Traffic Interchange		3,000		17,764	17,400
Tucson I-19, Valencia Rd –Ajo Way, widening			9,000		29,000
Globe US 60, Florence Jct–Queen Creek, widen		60,000			
Kingman, Hoover Dam to MP 17, widening		40,000	40,000		
SR 85 Widening projects	52,047	31,100	37,600	40,000	
SR 93 Wickenburg By-Pass	29,000				
Flagstaff SR 179 North Forest Boundary - Sedona	30,200				
Yuma SR 195 Yuma Svc Hwy / Goldwater Range	52,911	25,000			
Prescott SR 260 Doubtful Canyon Section widen				42,155	
Prescott SR 260 Little Green Valley widen		27,125			

The following reflects major changes (\$ millions) from the FY 2006-2007 Five-Year Plan:

- I-17 Black Canyon Highway, Jomax / Dixileta Traffic Interchanges (TI's) were treated as separate projects in the previous 5 Year Plan and did not meet the \$25 million reporting threshold.
- I-10, Sarival Rd. to Dysart Rd., widening & HOV lanes is identified as a new project.
- I-10, Dysart Rd. to L101 (Agua Fria), widening & HOV is identified as a new project.
- I-10, SR 51 to 40<sup>th</sup> St., Collector Distributor Road is identified as new project.
- L 101, (Pima) Tatum Blvd to Princess Drive HOV lanes is identified as a new project.
- L303, (Estrella) Happy Valley Rd – I-17 TI is identified as a new project.
- Safford US 191, MP 151-Threeway is an old project but cost increases pushed it over the \$25 million reporting threshold.
- Tucson I-19, Valencia Rd – Ajo Way is identified as a new project for FY 2011.
- Kingman, Hoover Dam to MP 17 roadway widening is an old project but cost increases pushed it over the \$25 million reporting threshold.
- Flagstaff SR 179 North Forest Boundary is an old project but cost increases pushed it over the \$25 million reporting threshold.
- Prescott, SR 260 Little Green Valley did not meet the \$25 million reporting threshold in the previous 5 Year Plan.
- Tucson I-10, Ina Road TI did not meet the \$25 million reporting threshold in the previous 5 Year Plan.

A breakdown of the proposed expenditures by county is summarized on the last page of this document (Attachment A).

### **Aviation**

The State Transportation Board is also responsible for approval of the Five-Year Aviation Program. For the period 2007-2011, the Five-Year Aviation Program totals \$716.9 million. Of this amount, \$589.0 million comes from federal grant sources, \$96.1 million from the State of Arizona and \$31.8 million from local governments. The primary source of the federal funds is taxes on airline tickets, distributed by the Federal Aviation Administration. State monies are primarily derived from the flight property tax, aircraft in-lieu taxes, and taxes on aviation fuel.

## **Summary**

The Five-Year Construction process is a continual process. As the new Five-Year program is adopted, the process for the next five-year program has already begun. The effort to improve the programming process continues each year. Increasing technology has enabled the Department to upgrade models to better forecast risk and uncertainties that could impact revenues or construction related costs. Finally, every effort is made to include public involvement into the programming process.

STATE OF ARIZONA

**Joint Committee on Capital Review**

STATE  
SENATE

ROBERT L. BURNS  
CHAIRMAN 2005  
PAULA ABOUD  
LINDA AGUIRRE  
TIMOTHY S. BEE  
ROBERT CANNELL  
RON GOULD  
KAREN S. JOHNSON

1716 WEST ADAMS  
PHOENIX, ARIZONA 85007

PHONE (602) 926-5491

FAX (602) 926-5416

<http://www.azleg.gov/jlbc.htm>

HOUSE OF  
REPRESENTATIVES

TOM BOONE  
CHAIRMAN 2006  
AMANDA AGUIRRE  
ANDY BIGGS  
JACK A. BROWN  
PHIL LOPES  
RUSSELL K. PEARCE  
STEPHEN TULLY

DATE: September 12, 2006

TO: Representative Tom Boone, Chairman  
Members, Joint Committee on Capital Review

THRU: Richard Stavneak, Director

FROM: Leah Ruggieri, Fiscal Analyst

SUBJECT: University of Arizona – Review of Residence Life Building Renewal Phases III and IV  
Bond Projects

**Request**

A.R.S. § 15-1683 requires Committee review of any university projects financed with system revenue bonds. The University of Arizona (UA) requests Committee review of the \$21.9 million Residence Life Building Renewal Phases III and IV. This project would replace the plumbing systems in Coronado Hall and Apache Santa-Cruz Hall, the fire sprinkler systems in Cochise Hall and Apache Santa-Cruz Hall, and renovate the bathrooms in Colonia De La Paz Hall. These renovations would extend the useful life of these residential facilities, minimize the risk of disruptive failures, and improve building safety.

The Committee has favorably reviewed previous phases of Residence Life Building Renewal. The Committee heard the \$8.6 million Phase I in March 2004, the \$6.5 million Phase II in July 2005, and the \$3.9 million Phase IIA in May 2006. Replacement of the fire sprinkler system in Cochise Hall was originally included in Phase IIA, but was moved to Phase III because JCCR approval to sell the bonds for Phase IIA was not achieved within the required time frame. UA anticipates that the entirety of Residence Life Building Renewal would consist of 5 phases totaling \$40.9 million.

**Recommendation**

The JLBC Staff recommends that the Committee give a favorable review of the request with the following standard university financing provisions:

- UA shall report to the Committee before expenditure of any allocations that exceed the greater of \$100,000 or 10% of the reported contingency amount total for add-alternates that do not expand the scope of the project. UA shall also report to the Committee before any reallocation exceeding \$100,000 among the individual planned renovations, renewals, or extensions.
- UA shall submit for Committee review any allocations that exceed the greater of \$100,000 or 10% of the reported contingency amount total for add-alternates that expand the scope of the project. In case

(Continued)

of an emergency, UA may immediately report on the scope and estimated cost of the emergency rather than submit the item for review. JLBC Staff will inform the university if they do not concur with the emergency nature of the change in scope.

- A favorable review by the Committee does not constitute endorsement of General Fund appropriations to offset any auxiliary revenues that may be required for debt service, or any operations and maintenance costs when the project is complete. Auxiliary funds derive from substantially self-supporting university activities, including student housing.

The direct construction costs of the plumbing installations for Apache-Santa Cruz Hall fall within the range UA has experienced in previous phases of Residence Life Building Renewal. Meanwhile, per-square-foot costs for the plumbing installations at Coronado Hall are significantly higher than those of similar projects. However, UA explains that there are more plumbing fixtures per student room to upgrade in this building's layout. The \$0.5 million fire sprinkler system replacements in Cochise Hall and Apache-Santa Cruz Hall are also significantly higher in cost than similar projects. UA explains that the price differential is primarily due to material and labor escalations over time, precision work and specialized equipment that are needed, and additional care and efforts required because of the historic status of these buildings.

### **Analysis**

UA anticipates issuing system revenue bonds later this spring with an AAA credit rating and a term of 25 years. Depending on market conditions and advice from bond counsel, UA will select an appropriate balance of fixed rate bonds with an annual interest rate under 7.5% and variable rate bonds with an initial interest rate under 6.0%. Auxiliary revenues, generated from student housing fees, would service the debt. Usually, system revenue bonds serviced by auxiliary funds must offer a higher interest rate than those serviced by tuition collections because the bond market views auxiliary fees as a less stable revenue source than tuition receipts.

UA does not anticipate any new operating and maintenance costs for the project. The university estimates an annual debt service of \$1,859,000, with a 25-year total of \$46.5 million. A.R.S. § 15-1683 allows each state university to incur a projected annual debt service for bonds and certificates of participation of up to 8.0% of each institution's total projected annual expenditures. This calculation is known as the debt ratio. The \$21.9 million system revenue bond issuance would increase the UA debt ratio from 5.07% to 5.18%.

UA would contract this bond project using Construction Manager at Risk (CMAR). In CMAR, the university competitively selects a General Contractor according to quality and experience. The General Contractor manages a construction project, including the associated architect and other subcontractors, from design to completion. The General Contractor chooses a qualified subcontractor for each trade based on qualifications alone or on a combination of qualifications and price.

Additionally, CMAR defines a guaranteed maximum price, after which the General Contractor must absorb almost all cost increases, except those caused by scope changes or unknown site conditions.

UA anticipates Phases III and IV of Residence Life Building Renewal would have a combined design cost of \$2.2 million, a direct construction cost of \$18.4 million, and a \$1.3 million contingency fund. The direct construction amount consists of:

- \$15.9 million for plumbing in Coronado Hall and Apache-Santa Cruz Hall
- \$1 million for asbestos abatement in Coronado Hall
- \$1 million for fire sprinklers in Cochise Hall and Apache-Santa Cruz Hall
- \$500,000 for shower base renovation in La Paz Hall

(Continued)

The university indicates that the projects would be constructed from May to August in the years 2007 through 2009, when students are not present.

Table 1 below lists the per square foot construction costs for plumbing installations in all four phases of Residence Life Building Renewal that have been presented to the Committee. Since the expense of replacing plumbing in residences depends on many variables, including student density, disability access, and original system configuration, it is difficult to make meaningful comparisons among projects. Table 1, however, demonstrates that the \$34 per square foot direct construction cost of the plumbing installations for Apache-Santa Cruz Hall falls within the range UA has experienced in previous phases of Residence Life Building Renewal. The per square foot cost for plumbing replacement for Coronado Hall, however, is significantly higher than the other phases. UA explains that there are more plumbing fixtures per student room to upgrade in this building's layout. Therefore, the JLBC Staff finds that the per square foot cost is reasonable.

<u>Phase</u>	<u>Review Date</u>	<u>Affected Halls</u>	<u>Direct Costs per Square Foot</u>
1	March 2004	Gila, Yuma, Arizona	\$26
2A	May 2006	Manzanita/Mohave	\$34
<b>4</b>		<b>Apache-Santa Cruz</b>	<b>\$34</b>
2	July 2005	Maricopa, Sonora	\$66
<b>3</b>		<b>Coronado</b>	<b>\$93</b>

Fire sprinkler system expenses can also vary substantially based on the functions and original configurations of the affected buildings. However, as Table 2 below illustrates, per square foot costs for fire sprinkler system replacement in Cochise Hall and Apache-Santa Cruz Hall are significantly higher than those of similar projects.

UA explains that the price differential is primarily due to material and labor escalations over time, precision work and specialized equipment that are needed, and additional care and efforts required because of the historic status of these buildings. Therefore, the JLBC Staff finds that the per square foot costs are reasonable.

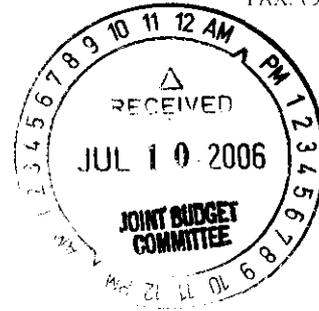
<u>Project</u>	<u>Review Date</u>	<u>Affected Buildings</u>	<u>Direct Costs per Square Foot</u>
UA Residence Life Building Renewal Phase 2	July 2005	Gila, Yuma, Arizona Halls	\$0.38
<i>Average</i>			<b>\$1.46</b>
NAU Building System Repair and Replacement	October 2004	33 Buildings of Differing Functions	\$1.61
ASU Academic Renovations and Deferred Maintenance Phase 1	September 2005	Social Sciences	\$2.38
<b>UA Residence Life Building Renewal Phase 4</b>		<b>Apache-Santa Cruz</b>	<b>\$7.89</b>
<b>UA Residence Life Building Renewal Phase 3</b>		<b>Cochise Hall</b>	<b>\$12.29</b>

Senior Vice President  
for Business Affairs

THE UNIVERSITY OF  
**ARIZONA**  
TUCSON ARIZONA

Administration Building  
Tucson, Arizona 85721  
(520) 621-5977  
FAX: (520) 621-7714

July 6, 2006



The Honorable Tom Boone, Chairman  
Joint Committee on Capital Review  
1716 W. Adams  
Phoenix, AZ 85007

Dear Chairman Boone:

**Subject: University of Arizona Residence Life Building Renewal Project**

On behalf of the Arizona Board of Regents (ABOR), I respectfully request that the University of Arizona be placed on the next available agenda of the Joint Committee on Capital Review for the next phase of our multi-year, multi-phase Resident Life Building Renewal Phase III and IV.

The Board of Regents approved the project on June 23, 2006. The justification report is enclosed. It is important to recognize that the renovation of our residence halls does not utilized State funds as they are auxiliaries and must stand on their own revenues for operations and maintenance. Additionally, the work can only be performed during the summer when the facilities are vacant.

Although, this year we received Building Renewal funds, they may not be used for auxiliary facilities. The Joint Committee on Capital Review has granted favorable review of our prior requests for these projects.

If you require additional information, please don't hesitate to call me at (520) 621-5977. Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read 'Joel D. Valdez', written over a horizontal line.

Joel D. Valdez  
Senior Vice President for Business Affairs

JDV:dk

Attachment

cc: President Robert Shelton  
Joel Sideman  
Greg Fahey  
✓Lorenzo Martinez  
Chares Ingram  
Ted Gates  
Robert Smith



**EXECUTIVE SUMMARY**

---

---

**Arizona Board of Regents**

**FY 2007 CAPITAL DEVELOPMENT PLAN-PROJECT JUSTIFICATION REPORT**

**The University of Arizona – Residence Life Building Renewal Phase III & IV**

---

**1. Project Need:**

The primary purpose of the Residence Life Building Renewal projects is to extend the useful life of aging residential facilities and reduce the risk of potentially disruptive system failures. The work must be completed during the summer to retain the use of the facilities as residence halls during the academic year. Phase III will address building deficiencies in Coronado Hall over two summers due to the size and complexity of the required improvements. Cochise Hall will also be completed in the summer of 2007 and the remaining Phase IV buildings, Apache-Santa Cruz and Colonia De La Paz, will be completed in 2009.

Initial Board approval for the first of four phases was obtained in August 2003, and the first phase was completed during the summer of 2004. Phase II was originally planned to be finished during the summer of 2005. Delays in obtaining Joint Committee on Capital Review (JCCR) approval to sell bonds deferred the summer 2005 construction period to spring and summer 2006. The next group of buildings (Phase II, Part A) received ABOR Project Approval at the March 2006 Board meeting with the goal to complete the project during the summer of 2006. Since obtaining JCCR approval to sell bonds was not achieved within the required timeframe, the schedule was recently revised. In order to maintain the current \$3.9 million budget, Cochise Hall was reassigned from Phase IIA to Phase III.

The University combined Phase III and IV given the similar nature of the projects (ABOR Policy, Chapter VII, 7-102.C) and the need to obtain the necessary approvals to meet the summer construction schedule. The current plan is to request Project Implementation Approval (PIA) in the fall, which will include permission to obtain JCCR approval to finance the project prior to obtaining Project Approval (PA) from the Board. This approach provides additional opportunities for the University to present and receive the required approval to sell bonds from the JCCR. The final Board approval would combine PA and permission to sell bonds, and would be scheduled for early 2007. These approvals would allow the University to proceed with the design, sale of bonds, and construction as expeditiously as possible. The approach maintains Board oversight of a major capital project, while providing flexibility to obtain the required Legislative approvals for financing this Building Renewal project.

The Residence Life Building Renewal Phase III & IV first appeared in the University's FY 2005 Capital Improvement Plan (Two-Year Capital Forecast) approved by the Board in September

**EXECUTIVE SUMMARY**

---

2003. The project was also listed in the Two-Year Forecast section in both the FY 2006 and FY 2007 Capital Improvement Plans.

**2. Programming and Design Costs, and Exceptions (if required) to Achieve Project Implementation:**

Programming and design costs for the project through schematic design are anticipated to be within the limits defined in ABOR Policy, Chapter VII (7-107.E.3).

**3. Estimated Project Scope and Cost:**

This multi-phased project will extend the useful life of several University residence halls that have begun to exhibit signs of degenerative system failures. Areas that would be addressed include: replacement of mechanical, electrical, and plumbing systems; and renovation of bathrooms. Design consultants have examined the facilities, confirmed the scope, and developed a phasing plan and cost estimate. The total project budget for all phases is anticipated to be \$40.9 million, with Phase III and IV listed at \$17.7 and \$4.2 million, respectively, as illustrated below.

**Proposed Residence Life Building Renewal Plan / Schedule**

Phase	Schedule	Buildings	Approval / Status	Budget
I	2004	Arizona, Gila, Yuma	Completed	\$8,600,000
II	2006	Maricopa (Spring), Sonora (Summer)	PA 2005	\$6,500,000
IIA	2007	Manzanita-Mohave	PA 2006	\$3,900,000
III	2007 / 2008	Coronado Hall, Cochise Hall	CIP	\$17,700,000
IV	2009	Apache-Santa Cruz, Colonia De La Paz	CIP	\$4,170,000
Total				\$40,870,000

Projects would be constructed from May-August in the above-identified years unless otherwise noted.

**4. Conformance with ABOR Space Guidelines:**

The project objective is to extend the useful life of existing residence life facilities by correcting building infrastructure deficiencies. Compliance with ABOR space guidelines is therefore not applicable.

**EXECUTIVE SUMMARY**

---

**5. Project Compliance with Mission, Strategic Plans, Campus Master Development Plans and Community Input Process:**

The Department of Residence Life is committed to providing housing that promotes student success through interactive living-learning communities where students can thrive in a safe and supportive environment. Over 75 percent of the University's students housed in residence halls are freshmen. Residence Life is particularly concerned with helping students make a successful transition from home to a university environment. Consequently, Residence Life provides an extensive array of programs and services focused on creating first-year learning communities. A primary part of its mission is to provide clean, comfortable, and memorable living spaces while promoting safety and security.

Residence Life has implemented a planning process to manage deferred maintenance and building renewal activities for the past sixteen years. The Long Range Plan (LRP) for facilities is a five-year projection of deferred maintenance, building renewal, life/safety and building enhancements that are necessary to maintain a high building condition standard required for a residential program. Over the past sixteen years, Residence Life has expended over \$20.0 million on LRP projects. Priorities are based upon the urgency, availability of financing, and the ability of staff and/or contractors to complete the work within the allotted timeframe. Most projects are completed over the summer in order to maintain needed bed inventory during the academic year.

A number of LRP projects have grown in size, scope and cost over the past few years, and can no longer be accomplished with available auxiliary funding. The LRP is designed as a planning and implementation tool for planned projects that can be completed within a one-year time period. This ensures that sufficient funds are available to complete the project. The Residence Life Building Renewal Project requires a higher level of advance planning due to the extent and complexity of the building deficiencies, and can only be accomplished as a major capital project.

**6. Fiscal Impact and Financing Plan:**

Total Project Budget:	\$21,870,000
Source of Funds:	System Revenue Bonds
Operations & Maintenance	No change in Operation & Maintenance costs is anticipated
Annual Debt Service:	\$1,859,000
Debt Service Funding Source:	Auxiliary

**7. Backfill/Use Plan:**

There is no release space associated with the Residence Life Building Renewal Phase III and IV projects.

**EXECUTIVE SUMMARY**

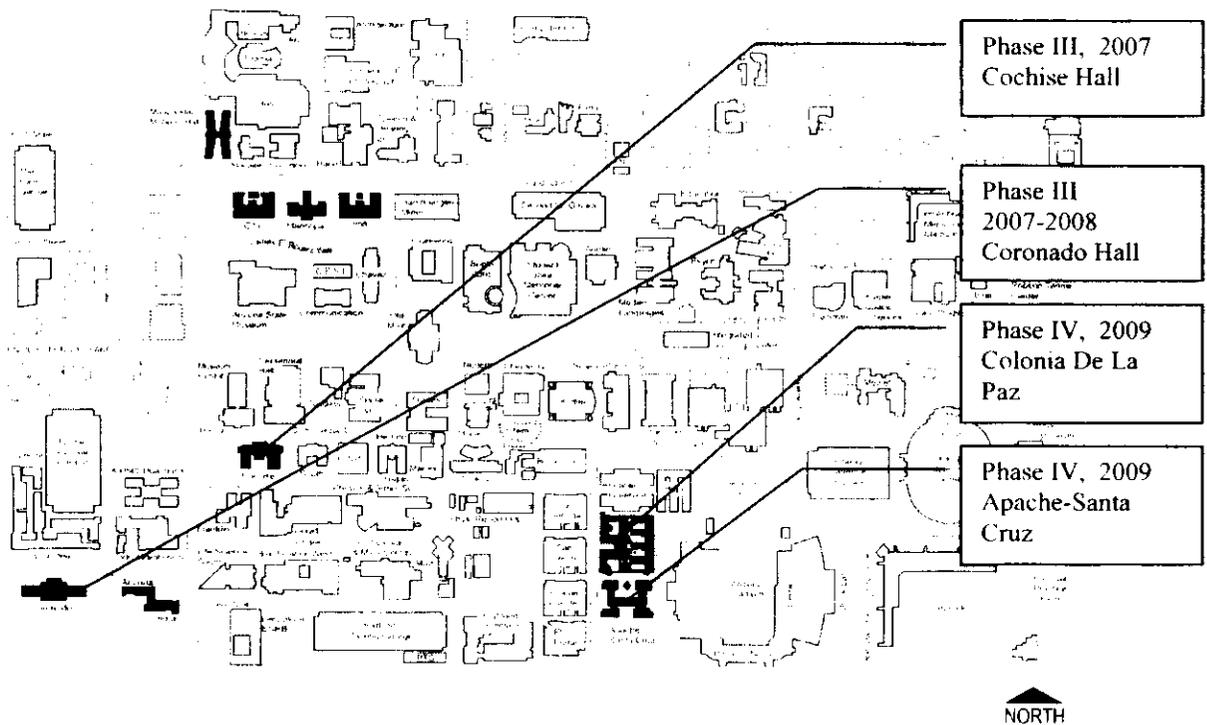
**8. Alternatives**

The project provides a guaranteed source of funds for all phases and is independent of budget fluctuations that have delayed identified repairs. Creating a major capital project to address these building deficiencies allows the University to complete the work within a known timeframe. Project delays invite the possibility of incurring higher costs and disruption to building occupants' (i.e., undergraduate students) associated with a critical system failure. Proceeding with the project is viewed as the most responsible course of action at this time.

**9. Related Projects or Proposals**

The Residence Life Building Renewal Project is divided into multiple phases that encompass ten residential facilities as illustrated below. There are no other known projects or proposals related to the Phase III - IV projects.

**Project Location Map**



August 9, 2006

The Honorable Tom Boone  
Chairman, Joint Committee on Capital Review  
Arizona House of Representatives  
1700 W. Washington  
Phoenix, AZ 85007



Dear Representative Boone:

**Subject: University of Arizona Residence Life Building Renewal Project**

As requested, I am providing the following additional information regarding the on-going Residence Life Building Renewal Project. Please contact me or my Associate Director, Pete Dourein, if you have any questions.

On behalf of the Arizona Board of Regents (ABOR) we have respectfully requested that the University of Arizona Residence Life Building Renewal Phase III and Phase IV projects be reviewed at this time, to allow these renovation projects to move forward with construction as expeditiously as possible when site and occupancy conditions allow. The Phase III project will replace plumbing systems in Coronado Hall and the fire sprinkler system in Cochise Hall. The Phase IV project will replace the plumbing and fire sprinkler systems in Apache-Santa Cruz Hall and renovate the shower bases in La Paz Hall. Replacing these systems will extend the useful life of these residential facilities, minimize the risk of disruptive failures, and improve building safety.

The University anticipates issuing system revenue bonds with an AAA crediting rating and a term of 25 years for this work. Depending on market conditions and advice from bond counsel, the University will select an appropriate balance of fixed rate bonds with an annual interest rate not to exceed 7.5% and variable rate bonds with an initial interest rate not to exceed 6%. For Phase III the University estimates an annual debt service of \$1.4 million, with a 25-year total of \$35.3 million. The \$17.7 million system revenue bond issuance for Phase III will increase the UA debt ratio from 5.07% to 5.16%. The \$4.2 million system revenue bond issuance for Phase IV will increase the UA debt ratio by .02% State (A.R.S.) and .03% ABOR. The projected highest debt ratio is 5.48% State and 8.68% ABOR. Auxiliary revenues, generated from student housing fees, will service the debt payments. The University does not anticipate any new operating and maintenance costs for the project.

The University will construct this project with the Construction Manager at Risk (CMAR) delivery method. With CMAR, the University competitively selects a General Contractor according to qualifications and experience. The CMAR provides important constructability, costing and value engineering information in the pre construction phase, and full construction services during the construction phase. The CMAR selects a pre-qualified subcontractor for each trade based on qualifications, experience, past performance and competitive pricing. Additionally, the CMAR defines an agreed-upon guaranteed maximum price for the project, and he is at risk for potential additional costs.

The University anticipates Phase III of Residence Life Building Renewal will have design costs of \$1.6 million, a direct construction cost of \$15.2 million, and a \$0.9 million contingency fund. The direct construction amount consists of \$13.7 million for plumbing in Coronado Hall, \$1.0 million for significant asbestos abatement in Coronado Hall, and \$0.5 million for fire sprinklers in Cochise Hall. The University anticipates the work will occur during summer 2007 and 2008, when students are not present. Any project delays would carry over to other academic recesses.

The University anticipates Phase IV of Residence Life Building Renewal will have design costs of \$0.6 million, a direct construction cost of \$3.2 million, and a \$0.4 million contingency fund. The direct construction amount consists of \$2.2 million for plumbing in Apache-Santa Cruz Hall, \$0.5 million for fire sprinklers in Apache-Santa Cruz Hall, and \$0.5 million for shower base renovation in La Paz Hall. The University anticipates the work will occur during summer 2009, when students are not present. Any project delays would carry over to other academic recesses. If Phase III work should proceed faster than anticipated, then Phase IV work could proceed ahead of its anticipated schedule.

The direct construction costs (\$13.7 million) of the plumbing installations for Coronado Hall (147,356 GSF) are justifiably somewhat higher than the University has experienced in previous phases of Residence Life Building Renewal, primarily since there are more plumbing fixtures per student room to upgrade in this building's layout. The Coronado Hall design features a semi-private bathroom for each pair of resident rooms, rather than a group restroom per floor. Plumbing replacement costs are difficult to compare due to many variables, including schedule/phasing, student density, disability access, and original system and building configuration. However, after adjusting for these significant conditions, we find that Phase III costs are still somewhat comparable to other phases of resident hall renovations.

<b>University of Arizona Residence Life Building Renewal Plumbing Costs</b>			
<u>Phase</u>	<u>Construction Year</u>	<u>Affected Halls</u>	<u>Direct Costs per Square Foot</u>
1	2004	Gila, Yuma, Arizona,	\$26
2	2006	Maricopa, Sonora	\$66
2A	2007	Manzanita/Mohave	\$34
3	2007 & 2008	Coronado	\$93
4	2009	Apache-Santa Cruz	\$34

The direct construction costs (\$0.5 million) of the fire sprinkler system replacement for Cochise Hall (43,714 GSF) and Apache-Santa Cruz (63,385 GSF) are higher than the University has experienced in previous projects as well. This differential is primarily due to material and labor escalations, precision work and specialized equipment that are needed, and the added care and effort required by the historic status of this building. Significant protection of the existing building is required during the careful removal and demolition of the existing systems, plus precision work is required to install the new system while preserving the historic and structural integrity of the building. Adjusting for these factors, the costs for this part of the work are also comparable to other projects we have experienced.

The Residence Life Building Renewal Phase III and Phase IV Projects have received capital development plan approval by ABOR. The University will be submitting the financing request to ABOR for approval at its January meeting. If you require additional information, please don't hesitate to call me at (520) 626-5668. Thank you for your assistance.

Sincerely,



Bob Smith, AIA  
Director

RS/pd

Representative Tom Boone

August 9, 2006

Page 3

cc: Senator Bob Burns, Vice Chairman, Joint Committee on Capital Review  
Richard Stavneak, Director, Joint Legislative Budget Committee  
Gary Yacinto, Director, Office of Strategic Planning and Budget  
Lorenzo Martinez, Budget Analyst, Joint Legislative Budget Committee  
Judith Padres, Budget Analyst, Office of Strategic Planning and Budgeting  
Leah Ruggieri, Fiscal Analyst, Joint Legislative Budget Committee  
Joel Valdez, Senior Vice President, Business Affairs, University of Arizona  
Greg Fahey, Associate Vice President, Government Relations, University of Arizona  
Peter Dourlein, Associate Director, Facilities Design/Construction, University of Arizona

STATE OF ARIZONA

## Joint Committee on Capital Review

STATE  
SENATE

ROBERT L. BURNS  
CHAIRMAN 2005  
PAULA ABOUD  
LINDA AGUIRRE  
TIMOTHY S. BEE  
ROBERT CANNELL  
RON GOULD  
KAREN S. JOHNSON

1716 WEST ADAMS  
PHOENIX, ARIZONA 85007

PHONE (602) 926-5491

FAX (602) 926-5416

<http://www.azleg.gov/jlbc.htm>

HOUSE OF  
REPRESENTATIVES

TOM BOONE  
CHAIRMAN 2006  
AMANDA AGUIRRE  
ANDY BIGGS  
JACK A. BROWN  
PHIL LOPES  
RUSSELL K. PEARCE  
STEPHEN TULLY

DATE: September 13, 2006

TO: Representative Tom Boone, Chairman  
Members, Joint Committee on Capital Review

THRU: Richard Stavneak, Director

FROM: Leah Ruggieri, Fiscal Analyst

SUBJECT: Arizona State University – Review of Polytechnic Academic Complex Lease-Purchase Project

### Request

A.R.S. § 15-1682.01 requires Committee review of any university projects financed with Certificates of Participation (also known as COPs or lease-purchase). Arizona State University (ASU) - Polytechnic, on behalf of the Arizona Board of Regents (ABOR), requests Committee review of a new \$103 million Polytechnic Academic Complex. ASU would finance these projects with a total new COP issuance of \$103 million.

### Recommendation

The JLBC Staff recommends that the Committee give a favorable review of the request with the following standard university financing provisions:

- ASU shall report to the Committee before expenditure of any allocations that exceed the greater of \$100,000 or 10% of the reported contingency amount total for add-alternates that do not expand the scope of the project.
- ASU shall submit for Committee review any allocations that exceed the greater of \$100,000 or 10% of the reported contingency amount total for add-alternates that expand the scope of the project. In case of an emergency, ASU may immediately report on the scope and estimated cost of the emergency rather than submit the item for review. The JLBC Staff will inform the university if they do not agree with the change of scope as an emergency.
- A favorable review by the Committee does not constitute endorsement of General Fund appropriations to offset any auxiliary revenues that may be required for debt service, or any operations and maintenance costs when the project is complete. Auxiliary funds derive from substantially self-supporting university activities, including student housing.

(Continued)

ASU anticipates issuing COPs in October 2007 with a Standard & Poor's AAA credit rating and a term of 30 years. The estimated interest rate is 6.0%. Total annual debt service would be approximately \$7.5 million. Construction for the project will actually begin in December 2006, though the associated construction costs between this time and the bond issuance are relatively small and will be reimbursed with bond proceeds, once they become available.

The FY 2007 General Appropriation Act appropriated \$10.6 million to ASU as a discretionary adjustment to be used for any operational or capital functions at any campus. ASU plans to use this discretionary adjustment to pay the \$7.5 million annual debt service. The total 30-year debt service would be \$224.5 million.

Furthermore, ASU estimates that, upon completion, the Polytechnic Academic Complex would require new operating and maintenance costs of almost \$1.7 million. ASU intends to request legislative appropriations to support these new costs.

A.R.S. § 15-1683 allows each state university to incur a projected annual debt service for bonds and certificates of participation of up to 8.0% of each institution's total projected annual expenditures. This calculation is known as the debt ratio. The \$103 million COP issuance would increase the ASU debt ratio from 4.8% to 5.3%.

### **Analysis**

The Polytechnic Academic Complex includes 240,000 square-feet that would provide space for enrollment growth and program expansion of the Morrison School of Management and Agribusiness, the College of Science and Technology, the School of Educational Innovation and Teacher Preparation, and East College. The Complex, which would comprise 3 primary new buildings and 1 renovated building, would be located in the core of the Polytechnic Campus. The buildings include 2 classroom/office buildings and a Science and Technology Building, all of which contain student lab space. Additionally, the project would include a facility used to store hazardous waste in preparation for shipment to an off-site facility per regulatory requirements.

To make room for the new project, 3 buildings are slated for demolition, 2 of which are unoccupied. The third building holds a small number of staff and support. Spaces would be vacated at ASU – Polytechnic due to the move of academic departments to the new buildings. ASU has in place a proposed reuse of the vacated spaces. Construction would begin in December 2006 and is projected to end in August 2008.

The total cost for the Polytechnic Academic Complex is \$103 million with a contingency of \$7.3 million. The Polytechnic Academic Complex would have a total cost per-square-foot of \$430 and a direct construction cost per square foot of \$280. *Table 1* compares the per-square-foot costs of the Polytechnic Academic Complex to those of other university non-research-related capital projects. As *Table 1* below illustrates, the magnitude of these expenses are higher in comparison to those of other university non-research-related capital projects previously approved by the Committee since 2002. It is difficult to evaluate the reasonableness of the per-square-foot cost of the Polytechnic Academic Complex when compared to these projects, as the Complex involves the construction of student lab space, which is more expensive than the construction of offices and classroom space. The non-research-related capital projects listed in *Table 1* did not involve the construction of student labs.

Additionally, materials costs have risen markedly in the past few years due to increasing worldwide demand. Marshall Valuation Services, a supplier of cost data on the improvement and replacement costs

(Continued)

of buildings, documents an increase of 24.5% between 2002 and 2006 in the construction cost of a typical building designed for classroom space. Between 2005 and 2006 alone, the cost per-square-foot to construct a 2-4 story office building in Phoenix increased by 11.7% according to RSMeans, a supplier of construction cost information.

<u>Project</u>	<u>Review Date</u>	<u>Total Project Cost</u>	<u>Total Cost Per Square Foot</u>	<u>Direct Construction Cost Per Square Foot</u>
ASU-Mediated Classroom & Social Sciences Building	March 2002	\$58,700,000	\$212	\$138
NAU-New College of Business	November 2003	22,000,000	220	182
ASU-Memorial Union Expansion	March 2002	38,830,000	251	146
<b>AVERAGE</b>			<b>\$270</b>	<b>\$191</b>
UA-Architecture Building Expansion	June 2005	9,400,000	281	202
UA-Poetry Center	June 2005	6,800,000	385	286
<b>Polytechnic Academic Complex</b>		<b>103,000,000</b>	<b>430</b>	<b>280</b>

The Complex will be LEED Silver Certified. LEED Silver Certification is achieved when buildings are designed to maintain specified energy efficiencies. While the LEED Certification is expected to cost \$1.3 million, it is anticipated that the savings generated through greater efficiencies will be \$448,000 per year in utilities and other costs.

ASU has contracted this project using Construction Manager at Risk (CMAR) and hired a single architect to design the Complex. In CMAR, the university competitively selects a General Contractor according to quality and experience. The General Contractor manages a construction project, including the associated architect and other subcontractors, from design to completion. The General Contractor chooses a qualified subcontractor for each trade based on qualifications alone or on a combination of qualifications and price.

Additionally, CMAR defines a guaranteed maximum price, after which the General Contractor must absorb almost all cost increases, except those caused by scope changes or unknown site conditions.

RS/LR:lm

**ASU**  
ARIZONA STATE UNIVERSITY



August 31, 2006

The Honorable Tom Boone, Chair  
Joint Committee on Capital Review  
1700 W. Washington  
Phoenix, AZ 85007

Dear Representative Boone:

In accordance with ARS 15-1683, the Arizona Board of Regents requests that the following bond financed projects for ASU be placed on the next Joint Committee on Capital review Agenda for review:

Polytechnic Academic Complex

Police Department Facility and Barrett College and  
South Campus Academic Village Site Preparation

Enclosed is pertinent information relating to these projects.

If you have any questions or desire any clarification on the enclosed material, please contact me at (480) 727-9920.

Sincerely,

A handwritten signature in cursive script that reads "Carol Campbell".

Carol Campbell  
Executive Vice President and CFO

Enclosures

c: Lorenzo Martinez, Assistant Director, JCCR  
Joel Sideman, Executive Director, Arizona Board of Regents  
Ted Gates, Assistant Executive Director for Capital Resources, Arizona Board of Regents  
Richard Stanley, Senior Vice President and University Planner  
Virgil Renzulli, Vice President for Public Affairs  
Scott Cole, Deputy Executive Vice President, University Services  
Steve Miller, Deputy Vice President, Public Affairs  
Lisa Frace, Associate Vice President for Budget and Planning  
Gerald Snyder, Associate Vice President for Finance and Treasurer  
James Sliwicky, Director, Budget Planning and Management  
Scott Smith, Director, State Relations

**OFFICE OF THE EXECUTIVE VICE PRESIDENT AND CHIEF FINANCIAL OFFICER**  
Business and Finance

PO Box 877505, TEMPE, AZ 85287-7505  
(480) 727-9920 FAX: (480) 727-9922

## **EXECUTIVE SUMMARY**

### **ACTION ITEM:**

Polytechnic Academic Complex, Project Implementation, Arizona State University at the Polytechnic campus.

### **ISSUE:**

The University requests Project Implementation Approval for the Polytechnic Academic Complex project at ASU at the Polytechnic campus. The Academic Complex project includes three previously approved projects (CDP June 22, 2006): Classroom Office Building I, Classroom Office Building II, and Science and Technology Building including a hazardous materials storage facility.

### **BACKGROUND:**

In the June 2006 Capital Development Plan, ASU submitted three separate Polytechnic projects: Classroom Office Building I, Classroom Office Building II, and Science and Technology Building. At that time, it was proposed that the three projects be funded by General Fund Appropriation from the Arizona State Legislature. Funds sufficient to pay the debt service on this \$103 million project have been appropriated.

As planning and programming progressed, it was determined that the most efficient, economical and time-sensitive route would be to create a thematically and aesthetically unified complex of buildings. Therefore, ASU hired a single architect and CMAR to construct the Polytechnic projects as one project to ensure efficiency and unity. ASU proposes the combination of the three projects into one project called the Polytechnic Academic Complex. The Complex encompasses interconnected facilities serving the academic functions listed in the Project Description section on the following page.

The square footage has been reduced from 280,000 to 240,000 square feet for the complex. This was accomplished without sacrificing the functionality of the buildings, by sharing some common use spaces across departments and reducing the number of offices planned.

The overall project cost for the Polytechnic Academic Complex will remain \$103,000,000.

### **PREVIOUS BOARD ACTION:**

- |   |                |
|---|----------------|
| • 2007-2009 Capital Improvement Plan        | September 2005 |
| • 2005 Revised Capital Development Approval | February 2006  |
| • 2007 Capital Development Approval         | June 2006      |



## **EXECUTIVE SUMMARY**

### **PROJECT JUSTIFICATION:**

ASU at the Polytechnic campus opened its doors to under 1,000 students in the fall of 1996, offering nine degree programs through two colleges that had moved from the ASU Tempe campus. As of fall 2006, more than 6,500 students are enrolled and 35 degree programs are offered in a variety of professional and technological fields. Enrollment is projected to continue at a strong pace over the next 5-7 years, reaching 10,000 students around 2012.

As a polytechnic campus, programs in the sciences, engineering, and technologies will be a significant part of this growth and account for about 35% of all majors. A component of this project will provide new classrooms, laboratories, and academic office space to support instruction in science, engineering, and technology programs.

As ASU at the Polytechnic campus develops, a greater variety of professional programs will be added. Existing programs of this sort (e.g., technical communication, applied psychology) will continue to grow and new programs (e.g., applied art and design) will be added in response to student demand. In addition, all students at the Polytechnic campus must enroll in the variety of general studies courses required for graduation (e.g., English, history, mathematics). Given the combination of a large number of majors and the need for all students to complete coursework in general studies, a component of this project will provide new classrooms and office space to support instruction in general university education.

This project will also accommodate the anticipated growth in programs in education and business professions, which are anticipated to represent a significant share of enrollment growth.

As research continues to increase at the Polytechnic campus, the amount of waste generated has also increased. Hazardous materials storage is required to handle increased waste streams, according to life safety regulations for toxic and radioactive waste.

### **FISCAL IMPACT AND FINANCING PLAN:**

This project was included in the Revised 2006 Capital Development Plan, submitted in February 2006 and the 2007 Capital Development Plan submitted in June 2006, which shows that debt service on all outstanding debt would be 6.2% of total projected expenditures (State Law basis, max 8%) and 7.7% of projected unrestricted expenditures (ABOR Policy basis, max 10%). The debt service for this project is .51% (51/100<sup>th</sup> of one percent) of total projected expenditures (State Law) and .64% (64/100<sup>th</sup> of one percent) of projected unrestricted expenditures (ABOR Policy).

### **RECOMMENDATION:**

**That the Board grant Project Implementation Approval of the Polytechnic Academic Complex project for ASU at the Polytechnic campus.**

**EXECUTIVE SUMMARY**

**Capital Project Information Summary**

**University:** ASU at the Polytechnic campus

**Project Name:** Polytechnic Academic Complex

**Project Description/Location:**

The Polytechnic Academic Complex at the Polytechnic campus is a 240,000 square foot, \$103,000,000 complex to be situated near the center of the Polytechnic campus (see attached site diagram).

**Project Schedule (Beginning Month/Year):**

Planning	August 2005
Design	August 2006
Construction	December 2006
Occupancy	August 2008

**Project Budget:**

Total Project Cost	\$	103,000,000
Direct Construction Cost	\$	67,206,000
Total Project Cost per GSF	\$	430
Construction Cost per GSF	\$	280
Change in Annual Oper. /Main. Cost:		
Utilities	\$	677,279
Personnel	\$	365,357
All Other Operating	\$	643,133
Subtotal	\$	1,685,767

**Funding Sources:**

Capital

A. Certificates of Participation      \$103,000,000  
(Funding source for Debt Service: State Appropriations)

Operation/Maintenance

A. General Fund Appropriations      \$1,685,767

**EXECUTIVE SUMMARY**

**Capital Project Budget Summary**

**University:** Arizona State University at the Polytechnic campus

**Project:** Polytechnic Academic Complex

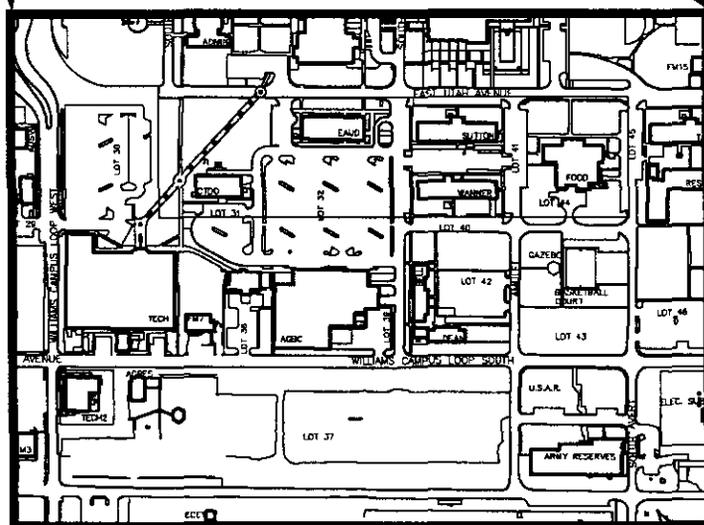
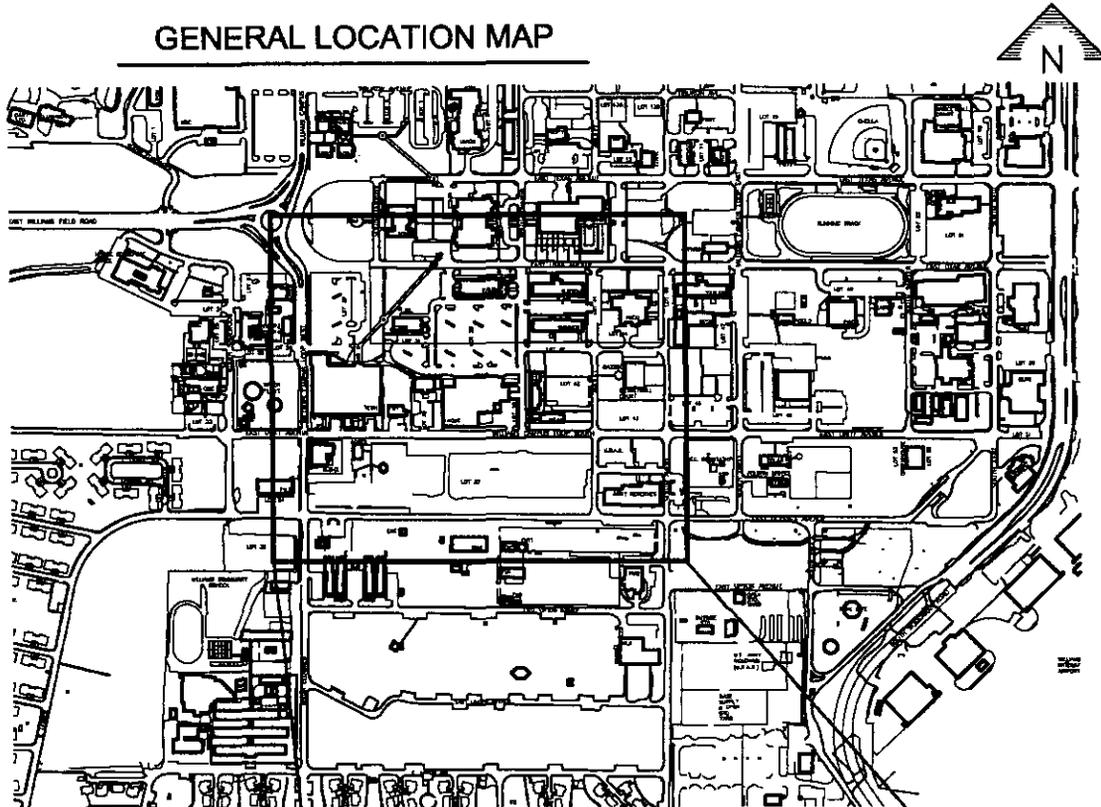
	<b>Capital Development Plan</b>	<b>Project Implementation Approval</b>	<b>Project Approval</b>
<b>Capital Costs</b>			
1. Land Acquisition	-	-	-
2. Construction Cost	-	-	-
A. New Construction	55,395,000	64,171,000	-
B. Renovation	\$ 3,700,000	\$ 1,500,000	-
C. Special Fixed Equipment	-	-	-
D. Site Development (excl. 2.E.)	6,100,000	-	-
E. Parking and Landscaping	1,535,000	1,535,000	-
F. Utilities Extensions	420,000	-	-
G. Inflation Adjustment	-	-	-
Subtotal Construction Cost	<u>\$ 67,150,000</u>	<u>\$ 67,206,000</u>	<u>\$ -</u>
<b>3. Fees (% of Construction Cost)</b>			
A. Construction Mgr	\$ 1,005,000	\$ 725,000	-
B. Architect/Engineer	8,040,000	8,300,000	-
C. Other	-	1,189,000	-
Subtotal Consultant Fees	<u>9,045,000</u>	<u>10,214,000</u>	<u>-</u>
4. FF&E Movable	8,179,965	7,500,000	-
5. Contingency, Design Phase	\$ 6,700,000	\$ 3,630,000	-
6. Contingency, Constr. Phase	6,700,000	3,630,000	-
7. Parking Reserve	-	-	-
8. Telecommunications Equipment	2,802,000	3,630,000	-
Subtotal Items 4-8	<u>24,381,965</u>	<u>18,390,000</u>	<u>\$ -</u>
<b>9. Additional University Costs</b>			
A. Surveys and Tests	\$ 20,000	\$ 25,000	-
B. Move-in Costs	50,000	50,000	-
C. Printing Advertisement	6,000	15,000	-
D. Facilities Support	500,000	318,250	-
E. Keying, signage	-	100,000	-
F. Project Management Cost (2.07%)	1,386,900	2,083,522	-
G. State Risk Mgt. Ins. (.0034 **)	255,135	263,228	-
H. Other*	205,000	4,335,000	-
Subtotal Addl. Univ. Costs	<u>2,423,035</u>	<u>7,190,000</u>	<u>-</u>
<b>TOTAL CAPITAL COST</b>	<u><u>\$ 103,000,000</u></u>	<u><u>\$ 103,000,000</u></u>	<u><u>\$ -</u></u>

\* Items in this category include: (Demolition, Environmental Control, Hazardous Materials Abatement, Site Improvements Surrounding Academic Complex)

\*\* State Risk Management Insurance factor is calculated on construction costs and consultant fees.

**EXECUTIVE SUMMARY**

**GENERAL LOCATION MAP**



**POLYTECHNIC ACADEMIC COMPLEX LOCATION**

# **JOINT COMMITTEE ON CAPITAL REVIEW**

## **ARIZONA STATE UNIVERSITY PROJECT REVIEW Polytechnic Academic Complex September 2006**

### **PROJECT DESCRIPTION - POLYTECHNIC ACADEMIC COMPLEX**

The Polytechnic Academic Complex is a proposed 240,000 gross square feet complex of buildings designed for the center of the campus. This project will provide the space for enrollment growth and program expansion of the Morrison School of Management and Agribusiness, the College of Science and Technology, the School of Educational Innovation and Teacher Preparation, and East College.

This complex of buildings will be strategically located in the core of campus, serving as a social and academic hub for students. A series of courtyards and connecting interior hallways have been integrated into the proposed design. This project will foster student and faculty interaction and support the university's mission of intellectual fusion. This dynamic environment will act as an energizing force for the Polytechnic campus.

The complex is comprised of three primary new buildings and one renovated building:

- New Science and Technology Building: 67,700 gross square feet including a Renovated Hazardous Materials Facility: 6,700 gross square feet.
- New Classroom and Office Building I: 98,400 gross square feet
- New Classroom and Office Building II: 67,200 gross square feet

The complex is designed to add to the existing inventory of general university classrooms, classroom laboratories and other specialized instructional spaces, and provide faculty and departmental offices needed to serve a campus enrollment of approximately 10,000 students. The buildings would accommodate the student growth projected in the sciences, engineering, computing studies, social sciences, humanities, business programs, education programs, and the applied arts over the next several years. Classrooms and laboratories will be fully mediated with current technology.

The project would also include a facility used to store hazardous waste in preparation for shipment to an off-site facility per regulatory requirements. The area would be a renovated high-bay, warehouse-type space with impervious chemical resistant flooring and would include berms for containment of potential spills of hazardous materials. The facility will be equipped with a fire sprinkler system, security and alarm system, telephone and Ethernet connections, and a compressed air system. Bio-safety cabinets, flammable storage cabinets, and a large fume hood would also be provided for this area.

### **BUSINESS CASE**

ASU at the Polytechnic campus opened its doors to under 1,000 students in the fall of 1996, offering nine degree programs through two colleges that had moved from the ASU Tempe campus. As of fall 2006, more than 6,500 students are enrolled and 35 degree programs are offered in a variety of professional and technological fields. Enrollment is projected to continue at a strong pace over the next 5-7 years, reaching 10,000 students around 2012.

As a polytechnic campus, programs in the sciences, engineering, and technologies will be a significant part of this growth and account for about 35% of all majors. A component of this project will provide new

# JOINT COMMITTEE ON CAPITAL REVIEW

## ARIZONA STATE UNIVERSITY PROJECT REVIEW Polytechnic Academic Complex September 2006

classrooms, laboratories, and academic office space to support instruction in science, engineering, and technology programs.

As ASU at the Polytechnic campus develops, a greater variety of professional programs will be added. Existing programs of this sort (e.g., technical communication, applied psychology) will continue to grow and new programs (e.g., applied art and design) will be added in response to student demand. In addition, all students at the Polytechnic campus must enroll in the variety of general studies courses required for graduation (e.g., English, history, mathematics). Given the combination of a large number of majors and the need for all students to complete coursework in general studies, a component of this project will provide new classrooms and office space to support instruction in general university education.

This project will also accommodate the anticipated growth in programs in education and business professions, which are anticipated to represent a significant share of enrollment growth.

As research continues to increase on the Polytechnic campus, the amount of waste generated has also increased. Hazardous materials storage is required to handle the increased waste streams according to life safety regulations for toxic and radioactive waste.

### PROPOSED SCHEDULE

- JCCR Review September 2006
- Construction start December 2006
- Completion August 2008

### PROJECT BUDGET SUMMARY:

Total Project Cost	\$	103,000,000
Direct Construction Cost	\$	67,206,000
Total Project Cost per GSF	\$	429
Construction Cost per GSF	\$	280

### OPERATIONS AND MAINTENANCE:

Estimated Annual Operations and Maintenance Cost:

Utilities	\$	677,279
Personnel	\$	365,357
All Other Operating	\$	643,133
Total	\$	1,685,767

Operations & Maintenance funding costs of \$1,685,767 per year will be pursued through the standard legislative appropriations process for new facility support.

# **JOINT COMMITTEE ON CAPITAL REVIEW**

## **ARIZONA STATE UNIVERSITY PROJECT REVIEW Polytechnic Academic Complex September 2006**

### **FURNITURE, FIXTURES, AND EQUIPMENT**

The estimated cost for FF&E is \$7,500,000 and will be covered in the cost of the project.

### **PARKING/LANDSCAPING:**

The estimated cost for Parking/Landscaping is \$1,535,000 and will be covered in the cost of the project.

### **ACADEMIC AND OPERATIONS DISRUPTIONS AND MITIGATION PLAN**

The primary disruption will be to the circulation paths surrounding the construction site. Fencing and alternate paths will be provided to ensure safe circulation for the students and faculty. These special traffic routes will be in place to minimize disruption to students and faculty. The majority of construction traffic will be done during off-hours. The university creates mitigation plans for each individual project and takes into account student, staff, and faculty needs as well as traffic flow to facilitate both education and administration.

### **EXECUTIVE ORDER 2005-5 COMPLIANCE COSTS**

This complex will be LEED Silver Certified. JCCR directed ASU to compare compliance costs of the Governor's Executive Order 2005-05, concerning energy efficiency and operating and other savings generated through those efficiencies. For this building, LEEDs Certification is expected to cost the university \$1,345,000. It is anticipated that the savings generated through these efficiencies will be \$448,000 per year in utilities and other costs.

### **CONTRACTING METHOD**

The contracting method for this project is construction manager at risk or CMAR. ASU has shown that any additional cost associated with the CMAR process is more than offset by the reduction in change orders and errors and omissions; and in addition, to an overall increase in quality to the project.

### **BACKFILL**

There are three buildings that are slated for demolition. Two of these buildings are currently unoccupied. One of the buildings holds a small number (11 people) of staff and support. Efforts are being made to relocate them into already available space in other portions of campus.

Space that would be vacated due to movement of academic departments to the new buildings and the subsequent domino moves include:

- Sutton Hall – all offices
- Wanner Hall – all offices

# JOINT COMMITTEE ON CAPITAL REVIEW

## ARIZONA STATE UNIVERSITY PROJECT REVIEW Polytechnic Academic Complex September 2006

- Academic Center Building – classrooms, Department of Engineering office suite, most IT offices
- Quad Complex – 2 of the Quad buildings now occupied by Student Affairs
- Administrative Services Building – all offices
- Administration Building – some offices

Proposed space reuse plan:

### *Sutton Hall*

- To accommodate the anticipated growth of Student Affairs, most of their functions would be relocated to the first two floors of Sutton Hall from the Quad complex.
- Administration & Financial Services currently fills the Administrative Services Building. The department would be relocated to the third floor of Sutton Hall.

### *Administrative Services Building*

With Administration and Financial Services relocating to Sutton Hall, the Admin Services Building could become the Parking and Transit Office because of its accessibility to the campus community and public visibility.

### *Wanner Hall*

- Most of the IT offices would be relocated to the first floor of Wanner from their current location in the Academic Center to accommodate growth and free space in the Academic Center building.
- The Faculty Development and e-Learning and Research Support Services would be relocated to one floor in Wanner to accommodate growth and to free-up the space they currently occupy in the Administration Building,
- The third floor of Wanner will be reserved for “swing” space to accommodate needs for additional faculty or staff offices that have not yet been determined.

### *Academic Center Building*

When the new academic buildings are completed and the subsequent department and staff moves, four classrooms in the Academic Center Building will be available for conversion to expanded space for student computing, Library Services, and/or University College services.

### *Quad Complex*

Currently, Public Affairs is located in the Administration Building. Most of Public Affairs could be moved to the remaining two buildings in the Quad Complex to provide more accessibility for these highly public functions.

### *Administration Building*

The relocation of positions or functions now housed in the Administration Building (Faculty Development and e-Learning, Research Support Services, most of Public Affairs, various IT functions, etc.) will free-up space in the building to accommodate growth in Academic Affairs and Planning and Budget.

STATE OF ARIZONA

## Joint Committee on Capital Review

STATE  
SENATE

ROBERT L. BURNS  
CHAIRMAN 2005  
PAULA ABOUD  
LINDA AGUIRRE  
TIMOTHY S. BEE  
ROBERT CANNELL  
RON GOULD  
KAREN S. JOHNSON

1716 WEST ADAMS  
PHOENIX, ARIZONA 85007

PHONE (602) 926-5491

FAX (602) 926-5416

<http://www.azleg.gov/jlbc.htm>

HOUSE OF  
REPRESENTATIVES

TOM BOONE  
CHAIRMAN 2006  
AMANDA AGUIRRE  
ANDY BIGGS  
JACK A. BROWN  
PHIL LOPES  
RUSSELL K. PEARCE  
STEPHEN TULLY

DATE: September 13, 2006

TO: Representative Tom Boone, Chairman  
Members, Joint Committee on Capital Review

THRU: Richard Stavneak, Director

FROM: Tyler Palmer, Fiscal Analyst

SUBJECT: Arizona Exposition & State Fair Board - Review of FY 2007 Building Renewal Allocation Plan.

### Request

A.R.S. § 41-1252 requires the Joint Committee on Capital Review (JCCR) review of building renewal expenditure plans. For FY 2007, the Arizona Exposition and State Fair (AESF) was appropriated \$1,508,400 from the Arizona Exposition and State Fair Fund for building renewal. The AESF requests the Committee favorably review its FY 2007 Building Renewal Plan regarding \$430,600 of its appropriation, leaving \$1,077,800 for additional projects.

### Recommendation

The JLBC Staff recommends that the Committee give a favorable review of the \$430,600 for the 5 submitted projects with the provision that AESF submit for Committee review an allocation plan for the remaining \$1,077,800 if monies are to be used for additional projects.

### Analysis

Laws 2006, Chapter 345 appropriated a total of \$1,508,400 in FY 2007 from the Arizona Exposition and State Fair Fund to AESF to fully fund the building renewal formula.

The agency has proposed a Building Renewal Plan of \$430,600 in FY 2007 for 5 projects including \$38,300 for contingencies. The following table displays the requested allocation for each project. In general, the amounts include 1.34% for project management fees and 10% for contingencies.

(Continued)

<b><u>Project</u></b>	<b><u>Building Renewal Allocations</u></b>
Repair Coliseum roof	\$ 129,400
Seal coating and striping south parking lot	100,200
Seal coat and repair 20th Avenue parking lot	61,200
Paving access road east of Coliseum	77,900
Paving walkway between the Home Arts and Entries buildings	<u>61,900</u>
<b>Total</b>	<b>\$ 430,600</b>
Unallocated	1,077,800

The allocation plan is consistent with building renewal guidelines and the appropriation. Based on the information provided by the agency and similar projects reviewed by the Committee in the past, the costs appear reasonable.

Repair Coliseum Roof

The Coliseum roof is constructed with 10 x 10 square foot concrete panels. A recent inspection of the roof noted a small depression in 3 or 4 of the panels. An engineer has recommended temporary structural support until a more thorough assessment is conducted. The estimated cost of the forensic study and the temporary repair is \$129,400.

Seal Coating and Striping South Parking Lot

Paving on the 89,000 square yard south parking lot was completed in 2004. The paving industry recommends that to maximize asphalt life it should be seal coated after 3-5 years or 2 years for heavy use. The AESF plans on seal coating and striping this lot in the summer of 2007 at an estimated cost of \$100,200. The AESF may accomplish this work through an existing maintenance contract with the state procurement office. This contract allows state agencies to use an existing bid to complete projects with cost estimates within the RS Means building cost data. Staff has requested more information on the use of this lot.

Seal Coat and Repair 20<sup>th</sup> Avenue Parking Lot

The 47,700 square yard 20<sup>th</sup> Avenue parking lot was last seal coated in 2001. The pavement in this parking lot has begun cracking. The estimated cost to seal coat and repair this area is \$61,200. The AESF may accomplish this work through an existing maintenance contract with the state procurement office. This contract allows state agencies to use an existing bid to complete projects with cost estimates within the RS Means building cost data.

Paving Access Road East of Coliseum

The 4,300 square yard access road east of the Coliseum has deteriorated and needs to be resurfaced. The road is used for deliveries and emergency services. The project would include removal of the existing asphalt, recompacting the sub grade, reinstalling new asphalt, and installing a concrete gutter. The estimated cost to repave the access road is \$77,900. The Arizona Department of Administration (ADOA) General Services Division has compared this cost estimate with the RS Means construction cost data and believes it appears reasonable.

Paving Walkway between the Home Arts and Entries Buildings

Paving the 2,100 square yard dirt walkway between the Home Arts and Entries buildings will increase its rental viability as commercial and vendor space. The estimated cost of paving this walkway is \$61,900. The ADOA General Services Division has compared this cost estimate with the RS Means construction cost data and believes it appears reasonable.

RS/TP:ym



September 1, 2006



The Honorable Tom Boone  
Joint Committee on Capital Review  
Arizona House of Representatives  
1700 West Washington  
Phoenix, Arizona 85007

RE: Request for appropriation from the Joint Committee on Capital Review

Dear Representative Boone,

The Arizona Exposition and State Fair (AESF) respectfully requests approval of the Joint Committee on Capital Review (JCCR) for the expenditure of monies on capital improvements or related building renewal projects.

AESF seeks JCCR approval on the following capital/building renewal projects:

1. Repair of Coliseum roof;	\$129,441.00
2. Seal coating and striping of South Parking Lot;	\$100,206.00
3. Seal coat and repair of 20 <sup>th</sup> Avenue Parking Lot;	\$ 61,237.00
4. Paving access road east of Coliseum;	\$ 77,938.00
5. Paving walkway between Home Arts and Entries building.	\$ 61,860.00
Total	\$430,682.00

A brief description of each project is as follows:

**1. Repair of Coliseum Roof**

A recent inspection of the roof noted a small depression involving some of the concrete roof panels. Pending a forensic examination after the fair, an engineer is recommending a temporary structural improvement to protect the roof. The repair is anticipated to be a time and materials project utilizing existing State contracts. AESF is proceeding with the suggested structural supports and seeks approval to utilize funds for both the repair and forensic study of the roof.

**2. Seal Coating and Striping of the South Parking Lot**

The South Parking Lot was paved in 2004. To maximize asphalt life, the paving industry recommends seal coating after three to five years, sooner for lots with heavy use. AESF has a substantial investment in its parking lots, relies heavily upon their use as a revenue stream and seeks to aggressively pursue preventative maintenance to increase the longevity of the current surface. Maintenance to the South Parking Lot may be accomplished by existing state contract.

**3. Seal Coat and Repair of the 20<sup>th</sup> Avenue Parking Lot**

The last seal coat application to the 20<sup>th</sup> Avenue parking lot occurred in 2001. Exposure to the elements has created cracks throughout the existing pavement. AESF has a substantial investment in its parking lots, relies heavily upon their use as a revenue stream and seeks to aggressively pursue preventative maintenance to increase the longevity of the current surface. Maintenance to the 20<sup>th</sup> Avenue Parking Lot may be accomplished by existing state contract.

**4. Paving Access Road East of Coliseum**

The access road east of the Coliseum has deteriorated and requires resurfacing. This area connects the Fairgrounds north and south parking lots, serves as an access point for emergency services and deliveries coming onto the grounds. Repaving of this access road was included as part of the paving projects approved at the May 2005 JCCR meeting, however bid pricing exceeded the projects authorization and only the repaving of the Fairgrounds entrances was accomplished.

**5. Paving Walkway Between Home Arts and Entries Buildings**

The walkway on the south side of the Fairgrounds between the Home Arts and Entries building is used for commercial and vendor space rentals. This walkway is currently dirt and poses safety issues including breathing problems and trip hazards. Paving of this area will increase its rental viability and eliminate existing safety issues.

AESF Capital Improvement Request  
Page 3 of 3  
September 1, 2006

Costs of the above projects are based on contracted services and the RS Means schedule. AESF utilizes ADOA General Services to identify the most expedient and fiscally responsible process to accomplish these projects, whether through bid or state contracts.

Please see the attached budget worksheet for project cost analysis and a site map for reference. AESF has included a letter from ADOA General Services reviewing the above projects and confirming the pricing for each.

If you have any questions or require additional information concerning these requests, please contact me at 602-252-6771.

Sincerely,



Wanell Costello  
Deputy Director

CC: The Honorable Robert L. Burns  
The Honorable Russell K. Pearce  
Marcel Benberou, OSPB  
Lorenzo Martinez, JLBC  
Tyler Palmer, JLBC

Arizona Exposition and State Fair Project Worksheet											
PROJECT: Budgets - AZ Exhibition & State Fair											
PROJECT NUMBER: #3008 thru #3012 DATE PREPARED: August 29, 2006											
SENIOR PROJECT MANAGER: Mike Rank REVISED:											
GENERAL MANAGER:											
Project No. Original JCCR Estimate Current Estimate at Completion Project Shortfall											
#3008 \$129,441 \$0 \$0											
#3009 \$100,206 \$0 \$0											
#3010 \$61,237 \$0 \$0											
#3011 \$77,938 \$0 \$0											
#3012 \$61,860 \$0 \$0											
TOTAL \$430,662 \$0 \$0											
TOTAL FUNDING for AZ State Fair Campus \$430,662											
Original JCCR Estimate Current Estimate @Completion											
Cost Codes Repair Coliseum Roof #3008 Current Bid Prices Seal Coat South Parking Lot #3009 Current Estimate Seal Coat 20th Avenue Lot #3010 Current Estimate Paving East Coliseum Drive #3011 Current Estimate Paving Entries Walkway #3012 Current Estimate											
<b>Professional Services:</b>											
1. Base A/E Fees \$15,000											
2. Reimbursables (Est.) \$1,500											
Subtotal \$16,500 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0											
<b>Construction Services (GC):</b> 1700											
1. Roofing Repairs \$100,000											
2. Seal Coating \$90,000											
3. Seal Coating \$55,000											
4. Paving \$70,000											
5. Paving \$53,000 \$0											
Subtotal \$100,000 \$0 \$90,000 \$0 \$55,000 \$0 \$70,000 \$0 \$53,000 \$0											
<b>Separate Contracts:</b>											
Subtotal \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0											
<b>Project Support:</b>											
1. ADOA Project Management 1200 \$1,050 \$900 \$550 \$700 \$550											
2. Risk Management at .34% 1314 \$391 \$306 \$187 \$238 \$181											
Subtotal \$1,441 \$0 \$1,206 \$0 \$737 \$0 \$938 \$0 \$3,560 \$0											
<b>Contingency Allowance (10%)</b> 0 \$11,500 \$9,000 \$5,500 \$7,000 \$5,300											
<b>TOTAL PROJECT COST</b> \$129,441 \$0 \$100,206 \$0 \$61,237 \$0 \$77,938 \$0 \$61,860 \$0											
<b>Funds Remaining (Additional Funds Required)</b>											
NOTES:											