

STATE OF ARIZONA

## Joint Committee on Capital Review

STATE  
SENATE

RUSSELL K. PEARCE  
CHAIRMAN 2009  
PAULA ABOUD  
AMANDA AGUIRRE  
SYLVIA ALLEN  
JORGE LUIS GARCIA  
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DAVID SCHAPIRA  
KYRSTEN SINEMA

**\*\* REVISED \*\***

### JOINT COMMITTEE ON CAPITAL REVIEW

Thursday, November 19, 2009

**2:00 P.M.(Note Time Change)**

Senate Appropriations, Room 109

### MEETING NOTICE

- Call to Order
- [Approval of Minutes of September 22, 2009.](#)
- DIRECTOR'S REPORT (if necessary).
- EXECUTIVE SESSION - Arizona Department of Administration/Arizona Department of Corrections - Review of Request for Information for a State Prison Concession Agreement per A.R.S. § 38-431.03A2.
- 1. [ARIZONA GAME AND FISH DEPARTMENT - Review of FY 2010 Building Renewal Allocation Plan and Ben Avery Shooting Facility Improvements and Consider Approval of Appropriations Transfers.](#)
- 2. [ARIZONA DEPARTMENT OF TRANSPORTATION - Review of FY 2010 Building Renewal Allocation Plan.](#)
- 3. [SCHOOL FACILITIES BOARD - Review of FY 2010 New School Construction Report.](#)

**4. ARIZONA STATE UNIVERSITY - Review of Interdisciplinary Science and Technology Building 4 Bond Project.**

The Chairman reserves the right to set the order of the agenda.

11/17/09

sls

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

Tuesday, September 22, 2009

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The Chairman called the meeting to order at 1:00 pm., Tuesday, September 22, 2009 in Senate Appropriations Room 109. The following were present:

Members:	Senator Pearce, Chairman	Representative Kavanagh, Vice-Chairman
	Senator Aguirre	Representative Crandall
	Senator Aboud	Representative Lujan
	Senator Allen	Representative McComish
	Senator Garcia	Representative Schapira
	Senator Gray	
	Senator Melvin	

Absent:	Representative McLain
	Representative Sinema

**APPROVAL OF MINUTES**

Hearing no objections from the members of the Committee, Chairman Russell Pearce stated the minutes of June 16, 2009 would stand approved.

**DEPARTMENT OF VETERANS' SERVICES - Review of the Tucson Veterans' Home.**

Ms. Amy Upston, JLBC Staff, stated that this item is a review of the construction of a new Veterans' Home in Tucson. The FY 2007 Capital Outlay Bill appropriated \$10 million from the General Fund for the construction of a Veterans' Home in Tucson. The JLBC Staff presented options to the Committee.

Colonel Joey Strickland, Director, Department of Veterans' Services, responded to member questions.

*Representative Kavanagh moved that the Committee give a favorable review of the estimated General Fund cost of \$10 million (\$28.5 million Total Fund cost) for Department of Veterans' Services to construct a new Veterans' Home in Tucson. The motion carried.*

(Continued)

## ARIZONA DEPARTMENT OF ADMINISTRATION

### **A. Review of the Department of Health Services' Arizona State Hospital Forensic Unit Project.**

Mr. Art Smith, JLBC Staff, stated that this item is a review of Department of Health Services' (DHS) Arizona State Hospital (ASH) Forensic Unit project. At its June 2009 meeting, DHS requested review of the scope of work for the entire project, but instead the JCCR gave a favorable review for renovating ASH's 24<sup>th</sup> Street entrance with the provision that ADOA seek JCCR review before beginning the rest of the project. The JLBC Staff presented options to the Committee.

Mr. John Cooper, Chief Executive Officer, Arizona State Hospital, responded to member questions.

Mr. Roger Berna, General Manager, Construction Services, Arizona Department of Administration, responded to member questions.

*Representative Kavanagh moved that the Committee give a favorable review to ADOA's request for the construction of a new Forensic Unit at DHS' Arizona State Hospital in Phoenix with an estimated cost of \$32.2 million. The motion carried.*

### **B. Review of FY 2010 Building Renewal Projects.**

Ms. Leatta McLaughlin, JLBC Staff, stated that this item is a review of the ADOA's building renewal projects. In FY 2010 ADOA was appropriated \$1 million for building renewal. In prior years, ADOA has submitted specific lists of projects for Committee review. However, due to the limited funding of \$1 million this year, ADOA believes that they cannot commit to a specific list of projects so their plan is to expend the \$1 million on emergencies as the need arises. The JLBC Staff recommended a favorable review.

*Representative Kavanagh moved that the Committee give a favorable review for ADOA to expend \$1 million on building renewal emergency projects as the need arises with the following provisions:*

- 1. ADOA notify the Chairman and JLBC Staff as they identify specific projects.*
- 2. The Chairman will notify ADOA if he does not agree that the project is an emergency and will request that the Committee review the project.*

The motion carried.

### **C. Consider Recommending FY 2010 Quarterly Rent Payments and Rent Exemption.**

Mr. Dan Hunting, JLBC Staff, stated that this item is a request from ADOA to allow several small agencies to adjust their rent payments for FY 2010. Statute allows ADOA to make these adjustments upon recommendation of this Committee. The JLBC Staff recommended the 4 rent adjustments.

*Representative Kavanagh moved that the Committee recommend the FY 2010 proposed payment plans for the Office of Pest Management, the Board of Homeopathic and Integrated Medicine Examiners, and the Board of Equalization to make payments at the end of each quarter in FY 2010 instead of 1 annual payment due by the beginning of FY 2010. Additionally he moved that the Committee recommend the FY 2010 rent exemption for the Personnel Board. The motion carried.*

**NORTHERN ARIZONA UNIVERSITY - Review of Health and Learning Center, Police Relocation, and Utility Extensions Bond Projects.**

Ms. Leah Kritzer, JLBC Staff, stated that this item includes 3 Northern Arizona University (NAU) projects. NAU is proposing to spend a total of \$114.3 million in system revenue bonds, of which \$107 million would be for a Health and Learning Center, \$750,000 for the relocation of the NAU Police Department, and \$6.5 million for a utilities extension project. The JLBC Staff presented options to the Committee.

Mr. John Haeger, President, NAU, responded to member questions.

Ms. Christy Farley, Associate Vice President, Government Affairs, NAU, responded to member questions.

*Representative Kavanagh moved that the Committee give a favorable review to NAU's request for a \$114.3 million system revenue bond with the standard university financing provisions listed below.*

*Standard University Financing Provisions:*

- *NAU shall report to the Committee before expenditure of any allocations that exceed the greater of \$1,000,000 or 10% of the reported contingency amount total for add-alternates that do not expand the scope of the project. NAU shall also report to the Committee before any reallocation exceeding \$1,000,000 among the individual planned renovations, renewals, or extensions.*
- *NAU shall submit for Committee review any allocations that exceed the greater of \$1,000,000 or 10% of the reported contingency amount total for add-alternates that expand the scope of the project. In case of an emergency, NAU 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 revenues that may be required for debt service, or any operations and maintenance costs when the project is complete.*
- *NAU shall not use bonding to finance any costs whose typical life span is less than the bond repayment period. The exceptions to this stipulation are circumstances where such repairs are required to complete a major renovation.*

Senator Gray requested a roll call vote.

The motion carried by a roll call vote of 8-3-0-2. (Attachment 1)

Without objection, the meeting adjourned at 2:52 p.m.

Respectfully submitted:

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Sandy Schumacher, Secretary

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Leatta McLaughlin, Principal Fiscal Analyst

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Senator Russell Pearce, Chairman

NOTE: A full audio recording of this meeting is available at the JLBC Staff Office, 1716 W. Adams. A full video recording of this meeting is available at <http://www.azleg.gov/jlbc/meeting.htm>.

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KYRSTEN SINEMA

DATE: November 3, 2009

TO: Senator Russell Pearce, Chairman  
Members, Joint Committee on Capital Review

THRU: Richard Stavneak, Director

FROM: Dan Hunting, Senior Fiscal Analyst

SUBJECT: Arizona Game and Fish Department – Review of FY 2010 Building Renewal Allocation Plan and Ben Avery Shooting Facility Improvements and Consider Approval of Appropriations Transfers

**Request**

A.R.S. § 41-1252 requires Committee review of expenditure plans for building renewal monies. The Arizona Game and Fish Department (AGFD) requests Committee review of its FY 2010 Building Renewal Allocation Plan. Laws 2009, 1<sup>st</sup> Regular Session, Chapter 10 appropriated \$473,200 from the Game and Fish Fund to AGFD to fund 100% of the building renewal formula in FY 2010.

A.R.S. § 41-1252 also requires Committee review of expenditure plans for capital projects. AGFD is requesting Committee review of \$489,300 for improvements to the Ben Avery Shooting Facility, which is located just off Interstate 17 on the Carefree Highway.

Finally, A.R.S. § 35-173 requires Committee approval of the transfer of spending authority for land acquisition and capital projects. AGFD requests the transfers of appropriations for shooting ranges in the Lake Havasu and greater Flagstaff areas.

**Recommendation**

Building Renewal Allocation Plan

The JLBC Staff recommends that the Committee give a favorable review of the department's Building Renewal Allocation Plan to expend \$473,200 from the Game and Fish Fund in FY 2010. The plan includes the following expenditures:

- \$105,800 for fish hatchery projects.
- \$48,100 for shooting range projects.
- \$283,900 for office projects.
- \$35,400 for contingencies.

(Continued)

These monies are not available to help resolve the FY 2010 budget shortfall due to federal regulations that restrict their use.

#### Ben Avery Shooting Facility Improvements

The JLBC Staff recommends that the Committee give a favorable review of the department's \$489,300 expenditure plan for infrastructure improvements at the Ben Avery Shooting Facility, with the provision that the remainder of this project will still require Committee review prior to expenditure. These monies are not available to help resolve the FY 2010 budget shortfall due to federal regulations that restrict their use.

#### Shooting Range Appropriations Transfers

##### *Lake Havasu Area Shooting Range*

The Committee has at least the following 2 options:

1. Approve the transfer of the department's Laws 2004, Chapter 276 \$300,000 Tri-State Shooting Range appropriation to the Laws 2003, Chapter 261 \$300,000 Lake Havasu Shooting Range appropriation. The scope, purpose and estimated cost of the project would still require Committee review prior to expenditure.
2. Disapprove the transfer.

##### *Flagstaff Area Shooting Range*

The Committee has at least the following 2 options:

1. Approve the transfer of the department's Laws 2004, Chapter 276 \$800,000 Bellemont Shooting Range appropriation to the Laws 2001, Chapter 237 \$500,000 Flagstaff Shooting Range appropriation. The scope, purpose and estimated cost of the project would still require Committee review prior to expenditure.
3. Disapprove the transfer.

### **Analysis**

#### Building Renewal Allocation Plan

Laws 1986, Chapter 85 established the Joint Committee on Capital Review (JCCR) and charged it with developing a Building Renewal formula to guide the Legislature in appropriating monies for maintenance and repair of state buildings. A.R.S. § 41-1252 requires JCCR review of the expenditure plan for Building Renewal monies. Laws 2009, 1<sup>st</sup> Regular Session, Chapter 10 appropriated a total of \$473,200 in FY 2010 from the Game and Fish Fund to AGFD for building renewal activities.

AGFD has more than 270 structures within its building and infrastructure system across the state totaling over 542,000 square feet. Facilities include the department headquarters in Phoenix, 6 regional offices, fish hatcheries, and multiple residences and storage buildings. The FY 2010 proposed Building Renewal expenditure plan is illustrated in *Table 1*:



<b>Table 1</b>		
<b>Category</b>	<b>Building Renewal Allocation</b>	<b>Total Cost<sup>1/</sup></b>
<b>Fish Hatchery Projects</b>		
Tonto Creek – <i>Pavement Restoration</i>	\$ 57,800	\$ 57,800
Canyon Creek – <i>Pavement Restoration</i>	48,000	48,000
<b>Shooting Range Projects</b>		
Ben Avery Shooting Facility – <i>Air Gun/Indoor Archery Facility</i>	48,100	48,100
<b>Other Projects</b>		
Yuma Regional Office – <i>Office Renovation/Expansion</i>	135,600	954,000
Region 2 - House Rock Wildlife Area – <i>Diesel Generator Replacement</i>	11,800	11,800
Region 5 - Cluff Wildlife Area – <i>Window Replacement</i>	21,800	21,800
Pinetop Regional Office – <i>Asphalt Surfacing and Interior Finishes</i>	62,500	62,500
Headquarters – <i>Major Maintenance Fund</i>	52,200	52,200
<b>Unanticipated modifications or repairs</b>	<u>35,400</u>	<u>N/A</u>
<b>Total</b>	<b>\$473,200</b>	<b>\$1,256,200</b>

<sup>1/</sup> Includes additional funding from Game and Fish Capital Improvement Fund.

The Yuma Regional Office project is a major building renovation and expansion project for which building renewal funds will supplement a FY 2010 capital improvement appropriation of \$818,400. AGFD plans to construct 2,550 square feet of office space and 3,750 square feet of warehouse and boat storage space. For the existing pace, 6,000 square feet of interior space will be painted and new flooring will be installed, while 11,200 square feet of roofing will be renovated.

The submitted material provides additional detail for each project. The projects are consistent with building renewal guidelines and appropriations.

#### Ben Avery Shooting Facility Improvements

A.R.S. § 41-1252 requires that the Committee review the scope, purpose, and estimated cost before the release of monies for construction of new capital projects costing over \$250,000. Laws 2009, 1<sup>st</sup> Regular Session, Chapter 10 appropriated AGFD \$950,000 from the Game and Fish Capital Improvement Fund for infrastructure improvements at the Ben Avery Shooting Facility. The department is seeking review of expenditures totaling \$489,300. Of this amount, \$282,100 would be used for water and sewer line extensions to the following proposed new facilities on the site including the Wildlife Center, Winter Range, Mounted Shooters RV Campground, and a multipurpose event building. The remaining \$207,200 would be spent on paving and maintenance of existing drives at the facility and slurry seal of a parking lot. AGFD expects to expend the remaining \$460,700 appropriation on construction of the RV Campground and to complete connections with the City of Phoenix water system, which will still require Committee review before expenditure.

#### Shooting Range Appropriations Transfers

A.R.S. §35-173 requires Committee approval of transfers of spending authority for land acquisition and capital projects.

#### Lake Havasu Area Shooting Range

Laws 2004, Chapter 276 appropriated the department \$300,000 from the Game and Fish Capital Improvement Fund for development of the Tri-State Shooting Range in the Lake Havasu area. The department is asking to transfer this funding to the \$300,000 Laws 2003, Chapter 261 appropriation, which was also intended for the development of a shooting range in the Lake Havasu area. There have been delays in finding an appropriate site for a shooting range. The site selection issues appear to have been resolved through a transfer of land from the federal government to AGFD. The department expects to begin expenditures from these consolidated appropriations in FY 2011, when the land transfer is finalized.

(Continued)

*Flagstaff Area Shooting Range*

Laws 2001, Chapter 237, appropriated \$500,000 from the Game and Fish Capital Improvement Fund for the development of a shooting range in the Flagstaff area. Laws 2004, Chapter 276 also appropriated AGFD \$800,000 from the Game and Fish Capital Improvement Fund for development of a multi-purpose shooting range in the Bellemont area west of Flagstaff. A court ordered injunction postponing construction and the threat of litigation have delayed construction and AGFD no longer considers Bellemont a viable site for this project. Due to the difficulties in finding a suitable site for the shooting range, no expenditures have been made from this appropriation and it is in danger of lapsing. AGFD is proposing to transfer this appropriation to the Laws 2001, Chapter 237 Flagstaff Shooting Range Development appropriation.

The department is proposing to use the Flagstaff Shooting Range Development appropriation to secure a suitable site within 30 miles of Flagstaff. Opposition to the Bellemont site west of Flagstaff and the Willard Springs site near Munds Park south of the city has led the department to investigate alternative sites in the region. If a site on National Forest land is chosen, the department may spend approximately \$200,000 from the appropriation in FY 2010 for an environmental protection assessment of the area. A private parcel is also under consideration and if this site is chosen for the shooting range, the department may purchase the site for approximately \$1 million.

RS:DH:ss



THE STATE OF ARIZONA  
**GAME AND FISH DEPARTMENT**

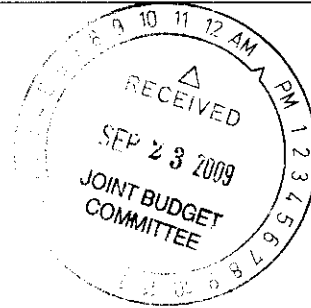
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September 18, 2009

Senator Russell K. Pearce, Chairman  
Joint Committee on Capital Review  
Arizona House of Representatives  
Capitol Complex  
1700 W. Washington  
Phoenix, AZ 85007-2890



Re: Request for Placement on Joint Committee on Capital Review Agenda

Dear Senator Pearce:

The Arizona Game and Fish Department respectfully requests placement on the next scheduled agenda of the Joint Committee on Capital Review to review the following:

1. Transfer of FY05 Appropriation No. 03035 - Bellemont Shooting Range (Expires 6/30/10) to FY02 Appropriation No. 03023 - Flagstaff Shooting Range (Expires 6/30/22)
2. Re-title Appropriation No. 03023 - Flagstaff Shooting Range To Northern Arizona Shooting Range Land Acquisition and Development
3. Transfer of FY05 Appropriation No. 03033 - Tri-state Shooting Range Development (Expires 6/30/10) to Appropriation No. 03031 - Tri-state Shooting Range Development (Expires 6/30/2022)
4. FY10 Appropriation No. 03050 - Ben Avery Shooting Facility Improvements (approval of partial expenditure)
5. FY10 Building Renewal Expenditure Plan

The information for this review is attached.

Sincerely,

Fred J. Bloom, P.E.  
Chief Engineer

FJB:fb

cc: Eileen Klein, Director, OSPB  
Bill Greeney, OSPB  
Representative John Kavanagh  
Richard Stavneak, Staff Director, JLBC  
Leatta McLaughlin, JLBC  
Dan Hunting, JLBC  
Tony Guiles, AGFD

## **1. Transfer of FY05 Appropriation No. 03035 - Bellemont Shooting Range (\$800,000 - Expires 6/30/10) To FY02 Appropriation No. 03023 – Flagstaff Shooting Range (\$500,000 - Expires 6/30/22)**

Flagstaff is the largest city in Arizona without a public shooting range, forcing recreational shooters to use makeshift areas, such as cinder pits in the forest, and causing law enforcement personnel to travel to other cities with shooting ranges for training. A local shooting range would provide multi-purpose shooting facilities that may include rifle sight-in, pistol, shotgun, clay target, and archery venues. Beginning in 1998 the Arizona Game and Fish Department (Department) began its efforts to acquire a site to construct a shooting range facility. After a lengthy site evaluation process, the Department selected what has been commonly referred to as the Bellemont site; approximately 15 miles west of Flagstaff on US Forest Service land. The Department completed an Environmental Assessment (required by the National Environmental Policy Act) with a favorable memorandum of decision by the Forest Service. The property would be acquired via a land exchange between the Department and the Forest Service. However, the Department abandoned its efforts to execute the land exchange due to a Court ordered injunction postponing construction of the range as well as imminent litigation by adjacent private landowners.

The Department is requesting JCCR to approve transfer of Appropriation No. 03035 - Bellemont Shooting Range (\$800,000), which expires at the end of the current fiscal year, to Appropriation No. 03023 Flagstaff Shooting Range. This would allow the Department to proceed beyond this fiscal year at its currently established funding level with its efforts to establish a shooting range facility in the Flagstaff area. Actual expenditures will be submitted to the JCCR for review and approval prior to implementation.

## **2. Re-title Appropriation No. 03023 - Flagstaff Shooting Range To Northern Arizona Shooting Range Land Acquisition and Development**

The Arizona Game and Fish Department continues to pursue alternative sites to achieve its objective of providing a safe, professionally designed and operated shooting facility in northern Arizona. Department staff has reviewed an additional 23 potential sites that include public, private, state, and tribal lands in an effort to identify the most suitable location and possibly reduce the timeline or costs associated with developing a fully operational local/community public shooting range. At its June 27, 2009 meeting in Phoenix, the commission directed the Department to execute an Agreement to Initiate (ATI) with the Coconino National Forest for an alternative site approximately 16 miles south of Flagstaff, referred to as the Willard Springs site. However, due to objections by an organized group of residents in the Munds Park community, the Department will also be investigating three additional site locations. The Cochrane Hill and the Winona/Telephone Range sites, both Coconino National Forest properties, will undergo cultural surveys to determine if acquiring either of these sites would more adequately meet the critical need for a local recreational public shooting range near Flagstaff, while avoiding possible litigation by the Munds Park residents. A third alternative, a private land holding south of Winona is also under evaluation and would be a fee simple purchase and would likely be the most expeditious alternative. All three alternate sites are located 30 minutes east of Flagstaff.

Pursuant to ARS 17-292 the Arizona Game and Fish Capital Improvement Fund may be expended by the Department, subject to legislative appropriation for “acquiring real property for game and fish facilities.” Because both viable public and private property alternatives have been identified, the Department is requesting eligible expenditures under this appropriation include all costs associated with site acquisition such as appraisals, National Environmental Policy Act requirements and the purchase of real property. The details of any such proposed acquisition would be presented to the JCCR for review and approval.

### **3. Transfer of FY05 Appropriation No. 03033 – Tri-state Shooting Range Development (\$300,000 - Expires 6/30/10) to FY 04 Appropriation No. 03031 Tri-state Shooting Range Development (\$300,000 - Expires 6/30/2022)**

Due to ongoing negotiations between the Department, the Bureau of Land Management and the Fort Mohave Indian Tribe, it is inevitable that progress on establishing this shooting range site near Lake Havasu City will be delayed beyond this fiscal year. However in April of this year, U.S. Representative Trent Franks introduced House Bill 2100 which directs the Secretary of the Interior, through the Bureau of Land Management (BLM), to convey specified public lands in Mohave County, Arizona, to the Arizona Game and Fish Department to permit the Department to use such lands as a public shooting range. Since this appropriation will expire June 30, 2010, the Department is requesting the JCCR approve transfer of Appropriation No. 03033 to Appropriation 03031. This would allow the Department to proceed beyond this fiscal year at its currently established funding level with its efforts to establish a shooting range facility in the Lake Havasu area. Actual expenditures will be submitted to the JCCR for review and approval prior to implementation.

### **4. Approval of Partial Expenditure of FY10 Appropriation No. 03050 – Ben Avery Shooting Facility Improvements**

This \$950,000 appropriation is intended to provide funding for various infrastructure improvements at the Ben Avery Shooting Facility including water, sewer and road improvements. The Department is requesting review and approval of the expenditure of \$282,150 for water and sewer line extensions to its proposed Wildlife Center, Winter Range and Mounted Shooters RV campground and multipurpose covered event building. Bids from a Department contractor are attached.

The Department is also requesting approval for the expenditure of \$207,190 for paving and paving maintenance of Archery and Skeet Drives and slurry seal of the Clay Target Center parking lot at its Ben Avery Shooting Facility. Bids from a State contractor are attached.

### **5. FY10 Building Renewal Expenditure Plan**

The Department is requesting approval of its FY10 Building Renewal Expenditure Plan. Details are attached.

<b>AGFD FY 2010 BUILDING RENEWAL EXPENDITURE PLAN</b>		<b>\$473,200</b>
<b>FY 10 AGFD APPROPRIATION</b>		
<b>FISH HATCHERY PROJECTS</b>		
<i>Tonto Creek Pavement Restoration</i>		
Cut and Replace Repair, Crack Seal and Type II Slurry Seal		\$57,750
<i>Canyon Creek Pavement Restoration</i>		
Cut and Replace Repair, Crack Seal and Type II Slurry Seal		\$48,000
<b>SUBTOTAL:</b>		<b>\$105,750</b>
<b>SHOOTING RANGE PROJECTS</b>		
<i>Ben Avery Shooting Facility - Air Gun/Indoor Archery Facility</i>		
Roll Up Door Replacement, Insulation and Electrical/Lighting Upgrades		\$29,700
Electrical System Renovation		\$18,410
<b>SUBTOTAL:</b>		<b>\$48,110</b>
<b>OTHER PROPERTIES</b>		
<b>(See attached summary of Hatchery Projects)</b>		
<i>Yuma Regional Office</i>		
Regional Office Renovation/Expansion (Building Renewal Eligible Components)		\$135,650
<i>Region 2 - House Rock Wildlife Area</i>		
Diesel Generator Replacement		\$11,800
<i>Region 5 - Cluff Wildlife Area</i>		
Residence and Office Improvements (HVAC, Window Replacement)		\$21,800
<i>Pinetop Regional Office</i>		
Asphalt Surfacing and Pavement Restoration		\$16,500
Interior Finishes - Flooring and Painting		\$46,000
<i>Headquarters Major Maintenance Fund (Held in trust by Wells Fargo)</i>		\$52,230
<b>SUBTOTAL:</b>		<b>\$283,980</b>
<b>TOTAL PLANNED BUILDING RENEWAL EXPENDITURES</b>		<b>\$437,840</b>
<i>Unanticipated Building Modifications, Repairs, Health and Life Safety Items, Contingencies</i>		<b>\$35,360</b>
<b>TOTAL FY 2009 BUILDING RENEWAL ESTIMATED EXPENDITURE:</b>		<b>\$473,200</b>

AGFD FY 10 BUILDING RENEWAL PROJECT ESTIMATE SUMMARY				
PROJECT LOCATION/DESCRIPTION	Project Construction Estimate	Design/Construction Admin	FY 10 Building Renewal Portion	Supplemental Funding Sources
<b>FISH HATCHERY PROJECTS</b>	<i>Based on recent similar work bids by the Departments On-Call Contractor</i>			
<i>Tonto Creek Pavement Restoration</i>				
Cut and Replace Repair, Crack Seal and Type II Slurry Seal 7700 sqyds @ 7.50/sqyd	\$57,750	N/A	\$57,750	None
<i>Canyon Creek Pavement Restoration</i>				
Cut and Replace Repair, Crack Seal and Type II Slurry Seal 6400 sqyds @ 7.50/sqyd	\$48,000	N/A	\$48,000	None
<b>SUBTOTAL:</b>	<b>\$105,750</b>		<b>\$105,750</b>	
<b>SHOOTING RANGE PROJECTS</b>				
<i>Ben Avery Shooting Facility - Air Gun/Indoor Archery Facility</i>				
Roll Up Door Replacement, Insulation and Lighting Replacement	\$29,700		\$29,700	
Electrical System Renovation - APS Distribution per Quote	\$18,410	\$6,800	\$18,410	Shooting Range Development Fund
<b>SUBTOTAL:</b>	<b>\$48,110</b>	<b>\$6,800</b>	<b>\$48,110</b>	
<b>OTHER PROPERTIES - APS Distribution</b>				
<i>Yuma Regional Office</i>				
Regional Office Renovation/Expansion (See attached cost estimate)	\$954,000	\$195,000	\$135,650	GF Capital Improvement Fund
<i>Region 2 - House Rock Wildlife Area</i>				
Generac QT025T 25 kW Diesel Generator Replacement (Per vendor quote)	\$11,800	N/A	\$11,800	None
<i>Region 5 - Cluff Wildlife Area</i>				
Replace Windows in Residence and Office (Per contractor quote)	\$21,800	N/A	\$21,800	None
<i>Pinetop Regional Office</i>				
Asphalt Surfacing and Pavement Restoration	\$16,500	N/A	\$16,500	None
Slurry Seal 3000 sqyds @ \$5.50 sqyd				
Interior Finishes - Flooring (Per vendor quote )	\$35,000	N/A	\$35,000	None
Interior Finishes - Painting (Per contractor quote )	\$11,000		\$11,000	
<i>Headquarters Major Maintenance Fund (Held in trust by Wells Fargo)</i>				
(Per Trustee Indenture Agreement)	\$52,230	N/A	\$52,230	None
<b>SUBTOTAL:</b>	<b>\$1,102,330</b>		<b>\$283,980</b>	
<b>TOTAL PROJECT AMOUNT:</b>	<b>\$1,256,190</b>		<b>\$437,840</b>	
<b>BALANCE TO UNANTICIPATED ACTIVITIES:</b>			<b>\$35,360</b>	
<b>TOTAL PLANNED EXPENDITURE:</b>			<b>\$473,200</b>	

**AGFD FY 10 BUILDING RENEWAL PROJECT JUSTIFICATION**

PROJECT LOCATION	PROJECT DESCRIPTION
<b>FISH HATCHERY PROJECTS</b>	
<i>Tonto Creek Pavement Restoration</i>	This project is part of the Hatchery cyclic maintenance program. Pavement is maintained at Hatchery entrance, parking lots and circulation surfaces around fish rearing area.
Cut and Replace Repair, Crack Seal and Type II Slurry Seal	
<i>Canyon Creek Pavement Restoration</i>	This project is part of the Hatchery cyclic maintenance program. Pavement is maintained at Hatchery entrance, parking lots and circulation surfaces around fish rearing area.
Cut and Replace Repair, Crack Seal and Type II Slurry Seal	
<b>SHOOTING RANGE PROJECTS</b>	
<i>Ben Avery Shooting Facility - Air Gun/Indoor Archery Facility</i>	
Roll Up Door Replacement, Insulation and Lighting Replacement, Electrical Upgrades and HVAC Installation	The Ben Avery Shooting Facility has experienced a growing demand for an improved air gun facility. At the same time, this facility can provide a location for youth indoor archery. The Department is in the process of renovating an existing pre-engineered metal building for this purpose.
<b>OTHER PROPERTIES</b>	
<i>Yuma Regional Office</i>	
Regional Office Renovation/Expansion (See attached cost estimate)	The Department is pursuing the renovation and expansion of three of its Regional Offices (three others have already been implemented) at Flagstaff, Yuma and Kingman over the next three years. The Flagstaff project is currently under construction. The Yuma project was postponed from FY 09 due to funding/cash flow issues relating to available Capital Improvement fund cash, which relies on license sales revenues as well as need for additional building renewal funding from FY 10. This allocation will be applied toward building renewal eligible costs identified in the scope of work. This project is anticipated to go to bid in May 2010.
<i>Region 2 - House Rock Wildlife Area</i>	
Diesel Generator Replacement (See attached quote)	The Department has recently implemented several upgrades to the House Rock Wildlife Area manager's headquarters including the solar power system. However the headquarter relies on a generator backup system. The existing generator is over 15 years old and is unreliable. Generator replacement is included in the Department's cyclic maintenance program.
<i>Region 5 - Cluff Wildlife Area</i>	
Residence and Office Improvements (See attached cost estimate)	The HVAC system in the residence is 14 year old and unreliable. Recent repair estimates were cost prohibitive relative to purchasing a new unit. The new equipment will be a minimum of 14 SEER and will be far more efficient. Additionally, the window in both the office building and the residence are in very poor condition as they leak, cannot be opened or closed and wood encasements are rotting. The window will be replaced with windows that match the historic architecture of the building and have superior insulation properties.
<i>Pinetop Regional Office</i>	
Asphalt Surfacing and Pavement Restoration (See attached cost estimate)	This is a continuation of pavement restoration at this facility from last year. Large sections of failing pavement were cut out, removed and replaced with hot asphalt. This funding will be used to complete crack sealing and apply a Type II Slurry Seal.
Interior Finishes - Flooring and Painting (See attached cost estimate)	This is a continuation of the Departments cyclic maintenance plan for it Regional Offices. This is the third of three Regional Offices scheduled for new flooring and interior painting (Tucson and Mesa were done over the last two fiscal years).
<i>Headquarters Major Maintenance Fund (Held in trust by Wells Fargo)</i>	As part of our lease purchase agreement for its new Headquarters facility, the Department deposits a portion of its annual building renewal allocation into a trust fund for long term major maintenance items per an established schedule.



## Yuma Regional Office Renovation/Expansion

### NEED

*Office Space:* Regional activities and programs have undergone significant changes and growth since the construction of this facility in 1991. A corresponding increase in regional personnel has typically stretched workspace and storage allocation beyond design capacity. This is currently reflected by crowded personal workspaces, decreased space for office equipment and records storage, and overflow of such storage into the warehouses, compromising their intended use. There is also a need to increase the size of the region's conference room to better accommodate the public during activities such as Commission meetings and other events. As such, the Department is pursuing expansion and upgrade strategies for this facility.

*Storage/warehouse Space:* This is a critical need at this location as well. Currently office overflow storage is filling more and more warehouse space. This creates a problem by reducing space to be used for essential equipment that should be stored in these areas. Also, increasing inventories of equipment and materials has created a situation where exposure to extreme temperature and sun has significantly reduced its useful life. This in turn has resulted in a need to reevaluate parking space needs to help alleviate congestion at the facility.

*Technology Upgrades:* Although not included in the cost estimates below, upgrades to specialty features such as data communications and information technology should be evaluated in order to allow all the Regional offices to keep pace with technological advancements. With more room to operate and better technology, these facilities have the potential to be more efficient and useful to the public and more productive for the employees stationed at these various locations. An example of this would be the use of a teleconferencing system or an IT enabled classroom that would provide direct links between the regional offices and the AGFD headquarters. A result, there would be a reduction in commuting expenses of regional employees, thus reducing operation and maintenance costs to vehicles, fuel expenses, etc.

### SCOPE AND ESTIMATED COSTS

#### ■ Additional Space

*Office Workspace/File Storage:* Approximately 1,800 sq. ft. of office space and/or file storage space is required to alleviate space concerns in the Regional Office. The 1,800 sq. ft. could be configured to create adequate workspace area for up to nine persons.

**Total cost estimate for office workspace/file storage: \$288,000.00  
(+ 10% mobilization and 10% contingency) = \$345,600.00\***

*\*Calculated using a cost of \$160 per sq. ft. of additional space, i.e. \$160 x 1,800 sq. ft.  
(includes 12% overhead for architectural fees)*

*Conference Room:* 750 sq. ft. of additional conference room space is proposed. The addition of 750 sq. ft. will be a vast improvement for regionally sponsored activities and events, allowing larger attendance at these events.

**Total cost estimate for conference room: \$120,000.00**  
**(+ 10% mobilization and 10% contingency) = \$144,000.00\*\***

*\*\*Calculated using a cost of \$160 per sq. ft. of additional space, i.e. \$160 x 1,800 sq. ft. (includes 12% overhead for architectural fees)*

*Warehouse/Boat Storage:* The new warehouse space is based on adding a building module based on the standard existing footprint at all the Regional Offices. The approximate area of the existing warehouse modules is 3,750 sq. ft. The additional space will be configured as a combination of closed/secure storage and open bay storage based on the needs of each Region.

**Total cost estimate for warehouse/boat storage: \$281,250.00\***

*\*Calculated using a cost of \$75 per sq. ft. of additional space, i.e. \$75 x 3,750 sq. ft.*

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▪ **Renovation of Existing Structure (Based on 6000 sq.ft. Existing Total Building Area)**

*Carpet/Flooring*

.75 X 6000 sq.ft. = 4500 sq.ft. = 500 yrds X \$27.50/yrd = **\$13,750**

*Paint (interior)*

.90 X 6000 sq.ft. = 5400 sq.ft. (ceiling) + .9 X 1.6 X 6000 = 8640 sq.ft (walls)  
= 14040 sq.ft. X \$.90/sq.ft. = **\$12,700**

*Paint (exterior)*

1.6 X 6000 = 8640 sq.ft X .95 = **\$8,200**

*Roofing*

11200 sq.ft X \$5/sq.ft. (metal tile type) = **\$56,000**

**Total: \$90,650**

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▪ **Modifications to Existing Workspace**

This is a contingency estimate to allow for alterations to existing space such as adding/removing walls, modifying front counter/public areas, etc.

500 sq.ft. @ \$90/sq.ft. = **\$45,000**

**Total: \$45,000**

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▪ **Building Systems Upgrades (Based on Build Out)**

HVAC – 8900 sq.ft./500 = 18 tons HVAC capacity required (equipment only)  
\$1500/ton X 18 tons = **\$27,000**

Plumbing – None anticipated

Electrical Service – 600 amp service upgrade ~**\$12,000**

**Total: \$39,000**

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▪ **Infrastructure**

*Paving:* No areas of pavement will be affected by this expansion. The parking area is currently very small and requires additional area. However, there is not much space to work with. There is a setback requirement on the west side, which would not be able to provide enough space to add additional parking. The parking on the south side of the building is limited because the setback would not conform to City of Yuma road standards. The property would lose a large amount of space, which is currently being used as parking, if required to conform to City of Yuma standards. The standard is not currently enforced, as there have been no plans to develop past the existing property boundaries.

*Utilities:* All connections are currently to city, municipal, or corporate providers.

*Landscaping:* Landscaping of a typical 650 sq. ft. area, broken up around the perimeter of the building has been quoted, on average, at \$8,500 for generic flora and other landscape material. This figure is hard to determine, as landscaping should be performed on a case-by-case evaluation for appearance and type of environment. A specific value is not assigned here, only a general landscape contractor's quote.

**Total cost estimate for landscaping: \$8,500.00**

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**COST ESTIMATE SUMMARY**

<b>Category</b>	<b>Region 4</b>
Additional Space	\$770,850
Renovation*	\$90,650
Modifications*	\$45,000
Building Systems	\$39,000
Infrastructure	\$8,500
<b>TOTAL:</b>	<b>\$954,000</b>

**\*These items are eligible for Building Renewal funds (\$135,650).**

STATE OF ARIZONA

**Joint Committee on Capital Review**

STATE  
SENATE

RUSSELL K. PEARCE  
CHAIRMAN 2009  
PAULA ABOUD  
AMANDA AGUIRRE  
SYLVIA ALLEN  
JORGE LUIS GARCIA  
CHUCK GRAY  
AL MELVIN

1716 WEST ADAMS  
PHOENIX, ARIZONA 85007

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HOUSE OF  
REPRESENTATIVES

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RICH CRANDALL  
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NANCY MCLAIN  
DAVID SCHAPIRA  
KYRSTEN SINEMA

DATE: November 3, 2009

TO: Senator Russell Pearce, Chairman  
Members, Joint Committee on Capital Review

THRU: Richard Stavneak, Director

FROM: Juan Beltran, Fiscal Analyst

SUBJECT: Arizona Department of Transportation – Review of FY 2010 Building Renewal Allocation Plan

**Request**

A.R.S. § 41-1252 requires Committee review of expenditure plans for building renewal monies. The Arizona Department of Transportation (ADOT) requests that the Committee review its \$1,050,000 FY 2010 Building Renewal Allocation Plan, including \$1,000,000 from the State Highway Fund and \$50,000 from the State Aviation Fund. In addition, the plan includes \$71,200 from the FY 2009 building renewal contingency allocation.

ADOT has allocated \$1,000,000 from the State Highway Fund among 97 projects, leaving a contingency balance of \$42,900 and \$60,000 for project management support. ADOT has also allocated \$121,200 from the State Aviation Fund for 5 projects.

**Recommendation**

The JLBC Staff recommends that the Committee give a favorable review of the FY 2010 Building Renewal allocation plan. The proposed expenditure plan is consistent with building renewal guidelines and appropriations. The JLBC Staff also recommends that ADOT report any project reallocations above \$100,000.

**Analysis**

The FY 2010 Capital Outlay Bill (Laws 2009, 1<sup>st</sup> Regular Session, Chapter 10) appropriated a total of \$1,050,000 for building renewal in FY 2010, including \$1,000,000 from the State Highway Fund and \$50,000 from the State Aviation Fund. The FY 2010 Building Renewal appropriation represents 12% of the amount generated by the revised building renewal formula for the ADOT Building System and 31% for the Grand Canyon Airport for FY 2010. The formula is based on the square footage and replacement cost of existing buildings.

(Continued)

ADOT expects to allocate the Building Renewal monies from the State Highway Fund in the following categories for 97 projects:

<b><u>Category</u></b>	<b><u>Projects</u></b>	<b><u>State Highway Fund</u></b>	<b><u>% of Total</u></b>
Roof Repairs/Replacement	53	\$ 354,800	35.5%
Building Systems (HVAC, Electrical, Plumbing)	20	317,300	31.7%
Fire/Life/Safety	13	145,700	14.6%
Project Management Support	N/A	60,000	6.0%
Contingency	N/A	42,900	4.3%
Exterior Preservation (Doors, Windows, Siding)	6	26,800	2.7%
Major Renovation (Reconfigure, Remodel)	1	25,000	2.5%
Infrastructure (Sewers)	3	25,000	2.5%
Americans with Disabilities Act	<u>1</u>	<u>2,500</u>	<u>0.2%</u>
<b>Total</b>	<b>97</b>	<b>\$1,000,000</b>	<b>100.0%</b>

The following 2 State Highway Fund projects require \$50,000 or more:

<b><u>Project</u></b>	<b><u>Allocation</u></b>
<b>Fire/Life/Safety</b>	
Repair catwalk - Williams Vehicle Washrack	\$ 60,000
<b>Building Systems (HVAC, Electrical, Plumbing)</b>	
Replace motorized inlet dampers - Phoenix Equipment Services Complex	<u>60,300</u>
<b>Total</b>	<b>\$120,300</b>

ADOT expects to allocate the \$121,200 (\$50,000 FY 2010 and \$71,200 FY 2009) of Building Renewal monies from the State Aviation Fund for 5 projects at the Grand Canyon Airport including installing a required UV disinfection system and re-plumbing a water treatment plant, repairing existing water meters, performing water system repairs, and repairing deteriorated water storage tanks and valves.

The attached material submitted by ADOT lists each project and its estimated cost. The projects are consistent with Building Renewal guidelines and appropriations.

RS/JB:sls  
Attachment



# Arizona Department of Transportation

## Office of the Director

206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Janice K. Brewer  
Governor

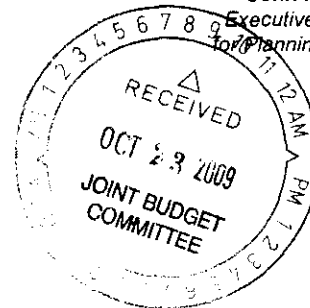
John S. Halikowski  
Director

October 22, 2009

John A. Bogert  
Chief of Operations

John McGee  
Executive Director  
for Planning & Policy

Senator Russell Pearce, Chairman  
Joint Committee on Capital Review  
1716 W. Adams Street  
Phoenix, Arizona 85007



Dear Senator Pearce:

We respectfully request that the Arizona Department of Transportation's (ADOT) planned FY2010 Building Renewal projects be placed on the next Joint Committee on Capital Review (JCCR) meeting agenda for review and approval.

The following summary outlines the scope of work:

### State Highways Fund Building Renewal Projects:

Category 1 - Fire/Live/Safety	\$ 145,733
Category 2 - Roof Repairs/Replacement	354,827
Category 3 - Preservation of Asset	26,755
Category 4 - Major Building Systems	317,324
Category 6 - Major Renovation	25,000
Category 7 - ADA Compliance	2,500
Category 8 - Infrastructure	25,000
Project Management Support	60,000
Contingency	<u>42,861</u>
Sub Total	\$ <u>1,000,000</u>

### Aviation Fund Building Renewal Projects:

Category 4 - Major Building Systems	15,000
Category 8 - Infrastructure	<u>35,000</u>
Sub total	<u>50,000</u>

FY2010 Total \$1,050,000

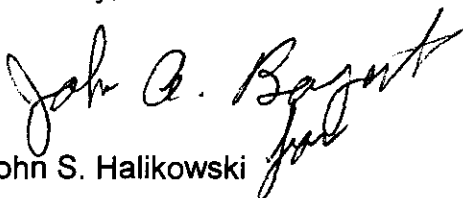
Senator Russell Pearce, Chairman  
October 22, 2009  
Page Two

In addition, we are submitting the following FY2009 Aviation Fund Building  
Renewal project:

Repair Grand Canyon Airport Water Storage Tanks	\$ 71,223
--	-----------

Your favorable review and approval of our request is appreciated.

Sincerely,

  
John S. Halikowski

cc: Representative John Kavanagh, Vice-Chairman  
Richard Stavneak, JLBC  
Juan Beltran, JLBC  
Brandon Nee, OSPB  
John Hetzel, ADOT

**STATE OF ARIZONA**  
**FY 2010 CAPITAL IMPROVEMENT PLAN**  
**DEPARTMENT OF TRANSPORTATION FY 2010 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY**

Project Description	Estimated Cost
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**STATE HIGHWAY FUND**

**CATEGORY 1 - FIRE/LIFE SAFETY**

Statewide ITD Facilities - Install missing mezzanine load limit signage	\$ 2,000
East Flagstaff Traffic Signals Bldg 3176 - Replace unserviceable stairwell handrail	\$ 2,000
Williams Vehicle Washrack - Repair catwalk to eliminate hazard	\$ 60,000
Show Low Training Bldg Bldg 3279 - Replace failing steps	\$ 2,883
Wickenburg Maint Yard - Repair/replace unserviceable stairs & handrails	\$ 10,000
Tucson Signing & Striping Warehouse (I-10/I-19 yard) - Install pigeon control measures	\$ 10,000
Statewide Equipment Services Facilities - Install missing mezzanine load limit signage	\$ 2,000
Safford Equipment Services Office - Replace asbestos containing deteriorated flooring	\$ 15,000
Phoenix Equipment Services Heavy Duty Shop - Tie-in 3 air wash smoke detect into fire alarm panel	\$ 4,000
ADOT Statewide - Install/replace emergency exit signs & lights	\$ 2,000
ADOT Statewide - Asbestos and lead paint abatement	\$ 7,500
Flagstaff MVD Bldg 3150 - Install gutter heat strip to prevent ice hazard	\$ 3,350
Tucson North MVD - Replace unsafe walkways	\$ 25,000
<b>TOTAL</b>	<b>\$ 145,733</b>

**CATEGORY 2 - ROOFS**

Flagstaff Office/Modular Bldg 324 - Repair failing roof	\$ 900
Flagstaff District Office Bldg 3152 - Replace failing roof	\$ 1,782
Flagstaff Office/Shop Bldg 3151 - Repair failing roof	\$ 2,400
Flagstaff District Bldg 3154 - Replace failing roof	\$ 6,560
Flagstaff Storage Bldg 3432 - Replace failing roof	\$ 450
Gray Mountain Water System/Well Head Bldg 3696 - Replace failing roof	\$ 400
Gray Mountain Water System/Pump House Bldg 3195 - Replace failing roof	\$ 1,975
Gray Mountain Residence Bldg 3198 - Replace failing roof	\$ 8,260
Gray Mountain Residence Bldg 3199 - Replace failing roof	\$ 8,210
Gray Mountain Residence Bldg 3200 - Replace failing roof	\$ 8,210
Gray Mountain Residence Bldg 3201 - Replace failing roof	\$ 8,210
Gray Mountain Residence Bldg 3202 - Replace failing roof	\$ 8,500
Gray Mountain Maintenance Office Bldg 3205 - Repair failing roof	\$ 6,815
Gray Mountain Storage Bldg 3206 - Replace failing roof	\$ 3,700
Gray Mountain Storage Bldg 3445 - Replace failing roof	\$ 475
Gray Mountain Storage/Sign Bldg 3444 - Replace failing roof	\$ 12,325
Snowflake Office/Traffic Signals Bldg 3282 - Repair failing roof	\$ 3,665
Snowflake Storage Bldg 3283 - Repair failing roof	\$ 500
St. Johns Fuel Station Bldg 3773 - Replace failing roof	\$ 1,350
St. Johns Storage Bldg 3398 - Repair failing roof	\$ 1,910
Springerville Fuel Station Bldg 3775 - Replace failing roof	\$ 1,680
Kayenta Storage Bldg 3342 - Repair failing roof	\$ 3,025
Kayenta Office/Maintenance Bldg 3343 - Replace failing roof	\$ 4,050
Window Rock Office/Construction Bldg 3363 - Repair failing roof	\$ 3,195
Teec Nos Pos Residence Bldg 3367 - Repair failing roof	\$ 3,075
Teec Nos Pos Residence Bldg 3368 - Repair failing roof	\$ 2,595
Teec Nos Pos Fuel Station Bldg 3371 - Repair failing roof	\$ 360
Teec Nos Pos Storage Bldg 3380 - Replace failing roof	\$ 675
Winslow Maintenance Office Bldg 3229 - Replace failing roof	\$ 8,100
Winslow Office/Equipment Storage Bldg 3230 - Replace failing roof	\$ 28,700
Winslow West Storage Bldg 3233 - Replace failing roof	\$ 2,325



**STATE OF ARIZONA**  
**FY 2010 CAPITAL IMPROVEMENT PLAN**  
**DEPARTMENT OF TRANSPORTATION FY 2010 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY**

Project Description	Estimated Cost
Winslow East Storage Bldg 3235 - Replace failing roof	\$ 18,900
Fort Rock Water System Well House Bldg 3658 - Replace failing roof	\$ 500
Fort Rock Water System/Pump House Bldg 3062 - Replace failing roof	\$ 1,050
Grey Peak Generator Shed - Repair failing roof	\$ 5,200
Ajo Maintenance Office - Replace failing roof	\$ 5,000
Phoenix Equipment Services Complex - Repair roof drains	\$ 7,680
Show Low Equipment Services Shop - Repair failing roof	\$ 1,000
St Johns Equipment Services Shop Bldg 3315 - Repair failing roof	\$ 10,925
Safford Equipment Services Shop (2132) - Patch & recoat roof; replace failing gutters	\$ 20,000
ADOT Statewide - Repair roofs	\$ 5,000
Teec Nos Pos Office/MVD Bldg 3364 - Replace failing roof	\$ 3,950
Teec Nos Pos Storage Bldg 3366 - Repair failing roof	\$ 2,895
Chinle Office/MVD Bldg 3353 - Replace failing roof	\$ 7,650
Window Rock Office/MVD/POE Bldg 3362 - Replace failing roof	\$ 7,895
Springerville Office/MVD/POE Bldg 3324 - Repair failing roof	\$ 15,000
Springerville POE Storage Bldg 3403 - Replace failing roof	\$ 900
Show Low Office/MVD Bldg 3273 - Repair failing roof	\$ 10,245
Tuba City MVD Bldg 3237 - Replace failing roof	\$ 14,000
Tuba City Storage Bldg 3236 - Replace Failing roof	\$ 660
Cottonwood MVD Bldg 3098 - Replace failing roof	\$ 35,000
Tucson Regional MVD Inspection Bay - Replace/repair failed roof	\$ 5,000
Nogales MVD - Replace failing clay tile roof and rafters	\$ 32,000
<b>TOTAL</b>	<b>\$ 354,827</b>

<b>CATEGORY 3 - PRESERVATION OF ASSET</b>	
Mesa Maint Yard (Recker Rd) Bldg 1367 - Replace unserviceable overhead rollup door	\$ 3,500
Administration Bldg - Repaint rusted and deteriorated exterior canopy supports on westside	\$ 3,500
Sierra Vista MVD - Replace failing entry doors	\$ 4,000
South Mountain MVD - Replace unserviceable man gates	\$ 4,755
Casa Grande MVD - Rectify security issue by replacing failing entry doors (2 sets)	\$ 8,000
Claypool MVD - Rectify security issue by replacing failing entry doors (2)	\$ 3,000
<b>TOTAL</b>	<b>\$ 26,755</b>

<b>CATEGORY 4 - MAJOR BUILDING SYSTEMS</b>	
Engineering Bldg - Perform chiller and other HVAC repairs	\$ 20,000
Central Materials Lab - Perform HVAC repairs	\$ 10,000
Flagstaff Maintenance Yard Bldg 3747 - Repair 2 electrical outlets for block heaters for loaders	\$ 540
Globe Maintenance Office - HVAC unit heat strip repairs	\$ 5,000
Tucson ITG Office - Replace failing inefficient HVAC system	\$ 15,000
Tucson District Office Training Center - Replace failing inefficient HVAC system	\$ 10,000
Yuma District Office - Replace failing inefficient HVAC units	\$ 30,000
Phoenix Equipment Services Complex - Repair floor drains	\$ 8,500
Phoenix Equipment Services Heavy Duty Shop - Replace 5 unserviceable evaporative coolers	\$ 25,000
Phoenix Equipment Services Complex - Replace unserviceable motorized inlet dampers on 8 air washers	\$ 60,284
Safford Equipment Services Shop - Replace failing downdraft evap coolers	\$ 15,000
Tucson Equipment Services Shop - Replace failing evap coolers	\$ 17,500
Tucson Equipment Services Shop - Replace failing HVAC units	\$ 10,500
ADOT Statewide - Repair HVAC systems	\$ 20,000
ADOT Statewide - Repair plumbing systems	\$ 5,000
ADOT Statewide - Repair electrical systems	\$ 5,000

**STATE OF ARIZONA**  
**FY 2010 CAPITAL IMPROVEMENT PLAN**  
**DEPARTMENT OF TRANSPORTATION FY 2010 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY**

Project Description	Estimated Cost
ADOT Statewide - Retrofit unserviceable light fixtures	\$ 5,000
Administration Bldg - Design for replacement of unserviceable SES and motor control electrical system	\$ 20,000
MVD Facilities - Repair HVAC systems	\$ 10,000
Avondale MVD - Replace unserviceable cooling tower	\$ 25,000
<b>TOTAL</b>	<b>\$ 317,324</b>

<b>CATEGORY 6 - RECONFIGURE OR REMODEL</b>	
Phoenix Regional Lab - Repair fog room	\$ 25,000
<b>TOTAL</b>	<b>\$ 25,000</b>

<b>CATEGORY 7 - ADA</b>	
SE Mesa MVD Bldg 1331 - Replace unserviceable ADA door opener at north entrance	\$ 2,500
<b>TOTAL</b>	<b>\$ 2,500</b>

<b>CATEGORY 8 - INFRASTRUCTURE</b>	
Casa Grande Construction Office - Repair sewer & septic systems	\$ 5,000
ADOT Statewide - Repair well systems	\$ 5,000
Duncan POE - Assess septic system for serviceability	\$ 15,000
<b>TOTAL</b>	<b>\$ 25,000</b>

<b>TOTAL OF ALL PROJECTS REQUESTED</b>	<b>\$ 897,139</b>
<b>PROJECT MANAGEMENT SUPPORT</b>	<b>\$ 60,000</b>
<b>CONTINGENCY</b>	<b>\$ 42,861</b>
<b>TOTAL AUTHORIZED FUNDS</b>	<b>\$ 1,000,000</b>

<b>RECAP</b>	
<b>CATEGORY 1 - FIRE/LIFE/SAFETY</b>	<b>\$ 145,733</b>
<b>CATEGORY 2 - ROOFS</b>	<b>\$ 354,827</b>
<b>CATEGORY 3 - PRESERVATION OF ASSET</b>	<b>\$ 26,755</b>
<b>CATEGORY 4 - MAJOR BUILDING SYSTEMS</b>	<b>\$ 317,324</b>
<b>CATEGORY 5 - INTERIOR BUILDING FINISHES</b>	<b>\$ -</b>
<b>CATEGORY 6 - RECONFIGURE OR REMODEL</b>	<b>\$ 25,000</b>
<b>CATEGORY 7 - ADA COMPLIANCE</b>	<b>\$ 2,500</b>
<b>CATEGORY 8 - INFRASTRUCTURE</b>	<b>\$ 25,000</b>
<b>PROJECT MANAGEMENT SUPPORT</b>	<b>\$ 60,000</b>
<b>CONTINGENCY</b>	<b>\$ 42,861</b>
<b>TOTAL</b>	<b>\$ 1,000,000</b>

**STATE OF ARIZONA**  
**FY 2010 CAPITAL IMPROVEMENT PLAN**  
**DEPARTMENT OF TRANSPORTATION FY 2010 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY**

Project Description	Estimated Cost
---------------------	----------------

**STATE AVIATION FUND**

<b>CATEGORY 4 - MAJOR BUILDING SYSTEMS</b>	
Grand Canyon Airport Bldg 3551 - Install required UV disinfection system in water treatment plant	\$ 12,000
Grand Canyon Airport Bldg 3551 - Replumb circulation pump piping in water treatment plant	\$ 3,000
<b>TOTAL</b>	<b>\$ 15,000</b>

<b>CATEGORY 8 - INFRASTRUCTURE</b>	
Grand Canyon Airport - Repair/replace existing water meters	\$ 14,500
Grand Canyon Airport - Perform water system repairs	\$ 20,500
<b>TOTAL</b>	<b>\$ 35,000</b>

<b>TOTAL OF ALL PROJECTS REQUESTED</b>	<b>\$ 50,000</b>
<b>CONTINGENCY</b>	<b>\$ -</b>
<b>TOTAL AUTHORIZED FUNDS</b>	<b>\$ 50,000</b>

<b>RECAP</b>	
<b>CATEGORY 4 - MAJOR BUILDING SYSTEMS</b>	<b>\$ 15,000</b>
<b>CATEGORY 8 - INFRASTRUCTURE</b>	<b>\$ 35,000</b>
<b>TOTAL</b>	<b>\$ 50,000</b>

STATE OF ARIZONA  
 FY 2009 CAPITAL IMPROVEMENT PLAN  
 DEPARTMENT OF TRANSPORTATION FY 2009 ADDED BUILDING RENEWAL PROJECT LIST - BY CATEGORY

Project Description	Project Cost	Dist/Div	Category Number *	Region
<b>AERONAUTICS PROGRAM</b>				
Grand Canyon Airport Water Storage Tanks - Repair deteriorated water storage tanks and valves	\$ 71,223	AERO	4	N
<b>TOTAL</b>	<b>\$ 71,223</b>			
<b>Total of Added Building Renewal Projects</b>	<b>\$ 71,223</b>			
<b>Project List Favorably Reviewed by JCCR on 11/13/08</b>	<b>\$ 64,300</b>			
<b>Contingency Amount</b>	<b>\$ 21,377</b>			
<b>Appropriated State Aviation Fund Amount FY 2009</b>	<b>\$ 156,900</b>			

STATE OF ARIZONA

**Joint Committee on Capital Review**

STATE  
SENATE

RUSSELL K. PEARCE  
CHAIRMAN 2009  
PAULA ABOUD  
AMANDA AGUIRRE  
SYLVIA ALLEN  
JORGE LUIS GARCIA  
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DAVID SCHAPIRA  
KYRSTEN SINEMA

DATE: November 3, 2009

TO: Senator Russell Pearce, Chairman  
Members, Joint Committee on Capital Review

THRU: Richard Stavneak, Director

FROM: Leatta McLaughlin, Principal Fiscal Analyst

SUBJECT: School Facilities Board – Review of FY 2010 New School Construction Report

**Request**

Pursuant to A.R.S. § 15-2002, the School Facilities Board (SFB) requests the Committee review its demographic assumptions, proposed construction schedule, and new school construction cost estimates for FY 2010. The board is annually required to submit this information by June 15.

**Recommendation**

The Committee has at least the following 2 options:

1. A favorable review.
2. An unfavorable review.

The board estimates that it will oversee 15 new school construction projects in FY 2010 and will spend a total of \$50.8 million. This amount includes completing projects that started construction prior to the FY 2009 new construction moratorium and starting construction on projects that meet the FY 2010 newly authorized federal bonding program.

**Analysis**

*New Construction Moratorium*

A moratorium on new construction projects was authorized for FY 2009 by the FY 2009 Education Budget Reconciliation Bill (BRB) (Laws 2008, Chapter 287). The bill prohibited SFB from authorizing or awarding funding for the design or construction of any new school facility, except for full-day kindergarten (FDK), or for school site acquisition in FY 2009. The moratorium was enacted due to declines in the state's housing market and the state's population growth rate. The moratorium also required SFB to provide monies for architectural and engineering fees, project management services, and preconstruction services if a school district qualifies for additional space in FY 2009 due to the

(Continued)

implementation of FDK. It also required school districts to submit capital plans during FY 2009 and permitted SFB to review and award new school projects subject to future appropriations.

The FY 2010 Education BRB (Laws 2009, 3<sup>rd</sup> Special Session, Chapter 12) continues to prohibit SFB from authorizing or awarding funding for the design or construction of any new school facility, including FDK but excluding \$100.0 million in new bonding authority (see below), or for school site acquisitions. The bill continues to require school districts to submit capital plans during FY 2010 and permits SFB to review and award new school facilities subject to future appropriations. The bill also requires kindergarten students to be counted as half-time Average Daily Membership (ADM) pupils for purposes of determining minimum school facility adequacy requirements, thereby not requiring SFB to fund new classroom costs for FDK beginning in FY 2010. In addition, the bill restricts SFB from providing new construction projects inflationary funding above the statutory formula amount beginning in FY 2010.

#### *FY 2010 Bonding*

The FY 2010 Education BRB requires SFB to issue up to \$100.0 million of Qualified School Construction Bonds (QSCBs) as authorized by the American Reinvestment and Recovery Act (ARRA) of 2009 to be spent on new construction projects only. The proceeds will first be given to school districts whose projected FY 2010 ADM exceeds the district-wide space capacity. ARRA allows the state to issue up to \$186.3 million of QSCBs in CY 2009, and the proceeds from these bonds can be used for the construction, rehabilitation, or repair of a public school facility or for the acquisition of land. The proceeds have to be spent within 3 years after issuance. SFB has not yet issued its QSCBs.

These bonds were designed so that bondholders would receive federal tax credits in lieu of interest, and it was the intent that the tax credit amount would provide 100% of the required interest. However, that has not been the case in the QSCB market to date. By the beginning of October, over 20 QSCBs had been issued nationwide. Since the QSCB market has turned out to be much more narrow than the traditional tax-exempt bond market, issuers have had to pay interest on these bonds above the bondholders' federal tax credit amount. Of the QSCBs issued by the beginning of October, the additional interest required by the issuer was an average of 1.64% for AA rated bonds, 3.14% for A rated bonds, and 4.14% for BBB rated bonds.

#### *Demographic Assumptions*

SFB bases its demographic assumptions on its analysis of the school district forecasts of ADM included in the FY 2010 Capital Plans submitted by districts to the board. To conduct the analysis, SFB uses district population data, grade progression estimates, historical ADM growth, and, if applicable, residential housing growth. Analysis of student enrollment growth is performed on a district-by-district basis for districts that submitted a Capital Plan to the board, but only the demographic estimates (not the analysis) are included in the New Construction Report.

The following demographics are included in the FY 2010 New Construction Report for districts that submitted a Capital Plan: FY 2008 actual new home occupancies, FY 2009 – FY 2016 SFB estimated new home occupancies, FY 2007 – FY 2008 actual ADM, and both district and SFB estimated ADM for FY 2009 – FY 2017.

For districts that submitted a Capital Plan to the board, SFB expects "enrollment growth" districts to increase at a slower rate in FY 2009 and FY 2010 than in FY 2008. The board expects enrollment growth to be 1.8% in FY 2009 and 2.3% in FY 2010. Actual enrollment growth was 5.3% in FY 2008. These estimates are higher than overall statewide enrollment growth since the calculation only focuses on districts with increasing population.

For FY 2010 within Maricopa County, SFB expects growth of approximately 3.0% in the southeastern portion of the county, including the cities of Chandler, Higley, and Queen Creek. In the northern part of

(Continued)

the county, including Deer Valley and Dysart, the board also expects growth of about 1.1%. In the western and southern districts of Phoenix, including Tolleson, the board expects growth of 1.3%. In the districts outlying the western edge of the Phoenix metro area, including Agua Fria, Buckeye, and Saddle Mountain, SFB expects growth of 3.1%.

In the other areas of the state, the board expects an increase of 8.4% in Pinal County, 1.4% in Yuma and La Paz Counties, 1.2% in Southern Arizona, 3.5% in Gila and Greenlee Counties, and a decline of (0.3)% in Northern Arizona for FY 2010.

Due to the decline in the state's housing market, student population is expected to grow slower than compared to the previous few years. Even before the FY 2009 new construction moratorium was authorized, SFB put 16 of their new construction projects on hold due to student growth not materializing as fast as previously projected.

#### *Construction Schedule*

The board estimates it will oversee 15 new school construction projects in FY 2010. Of the total, SFB estimates 6 prior year projects that began construction prior to the FY 2009 moratorium will be completed in FY 2010 and 9 projects will begin construction in FY 2010 as a result of the newly authorized federal bond program. Of these 15 projects, 7 are currently above their student threshold. This means that the district's FY 2009 actual ADM count is above their district-wide ADM capacity.

#### *Cost Estimates*

The board estimates spending a total of \$50.8 million in FY 2010, including:

- \$1.3 million for land. This estimate is for Sahuarita Unified High School, which is the only project scheduled to break ground in FY 2010 that currently does not have land.
- \$49.5 million for construction projects. Of this amount, SFB estimates that \$12.9 million will be spent on completing construction for 6 prior year projects, \$27.3 million will be spent on 10 new projects that will begin construction due to the newly authorized federal bonds, and \$9.3 million will be spent paying off the remaining balances of 57 projects that have already completed construction.

To finance the projected \$50.8 million in expenditures, the board expects to use QSCB financing as authorized by the FY 2010 Education BRB. The board expects to allocate funding from the following revenue sources:

- FY 2010 beginning cash balance of \$32.2 million.
- \$100.0 million in lease-purchase proceeds, which is expected to be issued in January or February 2010. This is based on the newly approved QSCB authority authorized by the FY 2010 Education BRB.

RS/LMc:sls  
Attachment



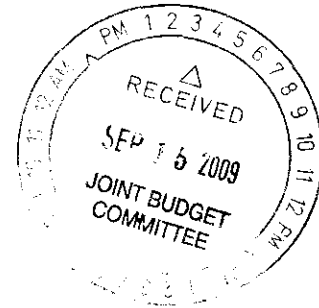
STATE OF ARIZONA  
SCHOOL FACILITIES BOARD

Governor of Arizona  
Janice K. Brewer

Executive Director  
John Arnold

June 15, 2009

Senator Russell Pearce, Chairman  
Joint Committee on Capital Review  
1716 West Adams  
Phoenix, Arizona 85007



Dear Chairman Pearce:

A.R.S. §15-2002, subsection A, paragraph 13, requires the School Facilities Board (SFB) to submit demographic assumptions, construction schedules, and cost estimates for the new construction program to the Joint Committee on Capital Review by June 15.

The FY 09 budget authorized the SFB to approve new construction projects, subject to legislative appropriation. The budget also changed how kindergarten students are counted in ADM and provided \$8 million for design costs for projects that were awarded as a result of the new methodology. The SFB awarded seven projects in the FY 09 cycle, valued at \$41.4 million. The Board also cancelled or revised five projects valued at \$64.1 million, for a total net savings of \$22.7 million.

Included in this report are:

- **Demographic Context**

In the FY 2009 Capital Plan cycle, SFB staff reviewed capital plans on a regional basis. Concentrating on an entire region at once proved to be more efficient than simply reviewing Plans in the order in which they were received. Nine major regions were identified and are listed below. Regional overviews are provided in this section in addition to individual district overviews. This section also includes a summary of the statewide new construction climate and its projected impact on the SFB.

- **Projected Schedules of Projects that are Under Construction or Board Approved**

Schedules are provided for all new construction projects approved by the SFB that are not yet completed.

- **New Construction Revenue and Cost Estimates by Fiscal Year**



This is a schedule of SFB's New School Facilities Fund revenues and expenditures for FY 2008, and projected revenues and expenditures for FY 2009 and FY 2010. It is based on projects that were approved or conceptually approved in the FY 2009 Capital Plan cycle and prior years.

- **Projects Scheduled to be Approved in FY 10**

This is a list of conceptually-approved projects that could be approved in the next capital plan cycle if ADM projections materialize.

- **Backup Information used in FY 2009 Capital Plan Cycle**

This section contains the ADM projections established for the districts that applied to the SFB for new construction in their FY 2009 Capital Plans, and information that was used in the analyses. The backup is divided into the following nine geographic regions:

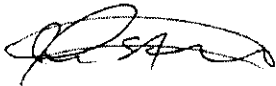
Western Maricopa County  
Maricopa County – East Valley  
Northern Maricopa County  
Pinal County  
Yuma and La Paz Counties  
Southern Arizona  
Northern Arizona  
Mohave County  
Gila, Graham, and Greenlee Counties

- **Appendix – ADM Projections Submitted by Districts not Requesting New Construction**

Even districts that do not seek new construction funds from the SFB are asked to submit student population projections in their capital plans. This section contains the projections submitted by the districts that complied.

This report will also be posted on the SFB website. Please feel free to contact me with any questions or comments.

Sincerely,



John Arnold

Xc: Jan Brewer, Governor  
Eileen Klein, OSPB Director  
Members of the School Facilities Board

## **Table of Contents**

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- III. New Construction Revenue and Cost Estimates by Fiscal Year
- IV. Projects Scheduled to be Approved in FY 2010
- V. Backup Information used in FY 2009 Capital Plan Cycle
  - a. Western Maricopa County
  - b. Maricopa County - East Valley
  - c. Northern Maricopa County
  - d. Pinal County
  - e. Yuma and La Paz Counties
  - f. Southern Arizona
  - g. Northern Arizona
  - h. Mohave County
  - i. Gila, Graham, and Greenlee Counties

Appendix – ADM Projections Submitted by Districts not Requesting New Construction

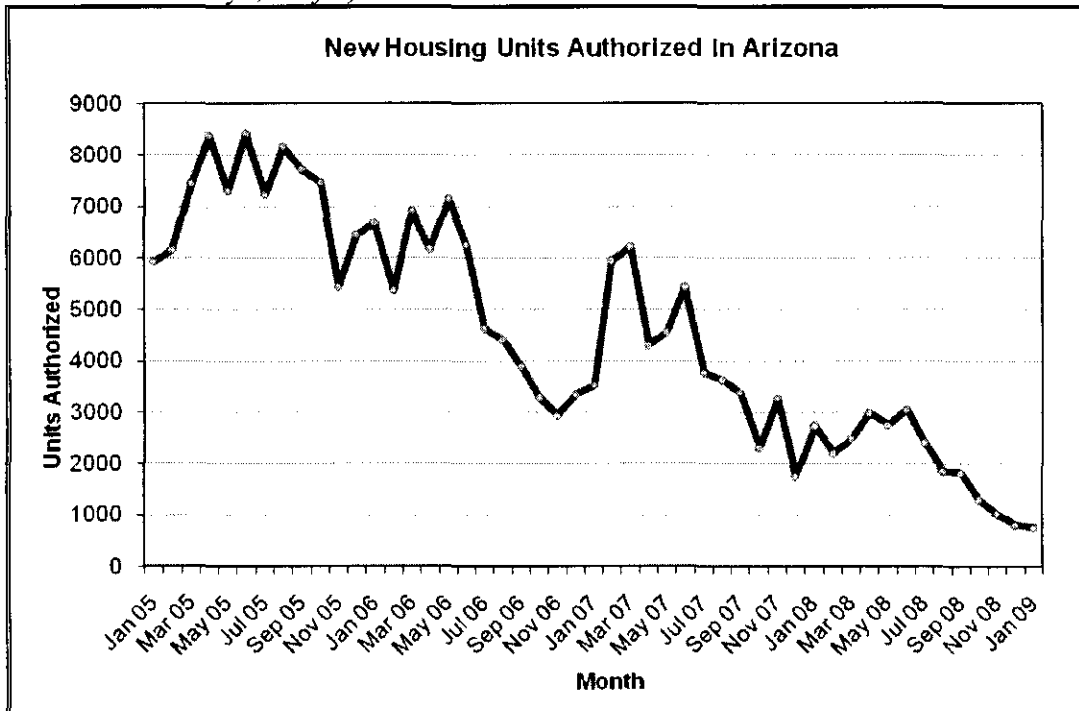
Demographic Context

## Economic and Demographic Context for New School Construction

Updated June 15, 2009

The housing market in Arizona has experienced dramatic changes in the past four years (Chart 1). The housing boom reached its peak in the summer of 2005 and the number of permits started to decline in the fall of that year. The market went sideways for about half a year before the bubble finally burst in the summer of 2006. Permitting activities picked up speed in the spring of 2007, giving the false indication of a rebound. The upturn was followed by an even deeper decline that lasted at least until January 2009, the latest month we have data for. Chart 1 shows the monthly number of residential housing permits issued in Arizona between January 2005 and January 2009. The average monthly number of permits issued in the last three months of this period is only about one-tenth of the monthly number of permits issued in the peak months of spring and summer of 2005.

Chart 1: New housing permits in Arizona – June 2005 to January 2009 (Source: *Arizona's Economy\**, U of A)



\* Various issues published between July 2005 and April 2009.

Chart 2: New housing permits and units sold in Phoenix metro area – January 2005 to January 2009. (Source: *Arizona's Economy*)

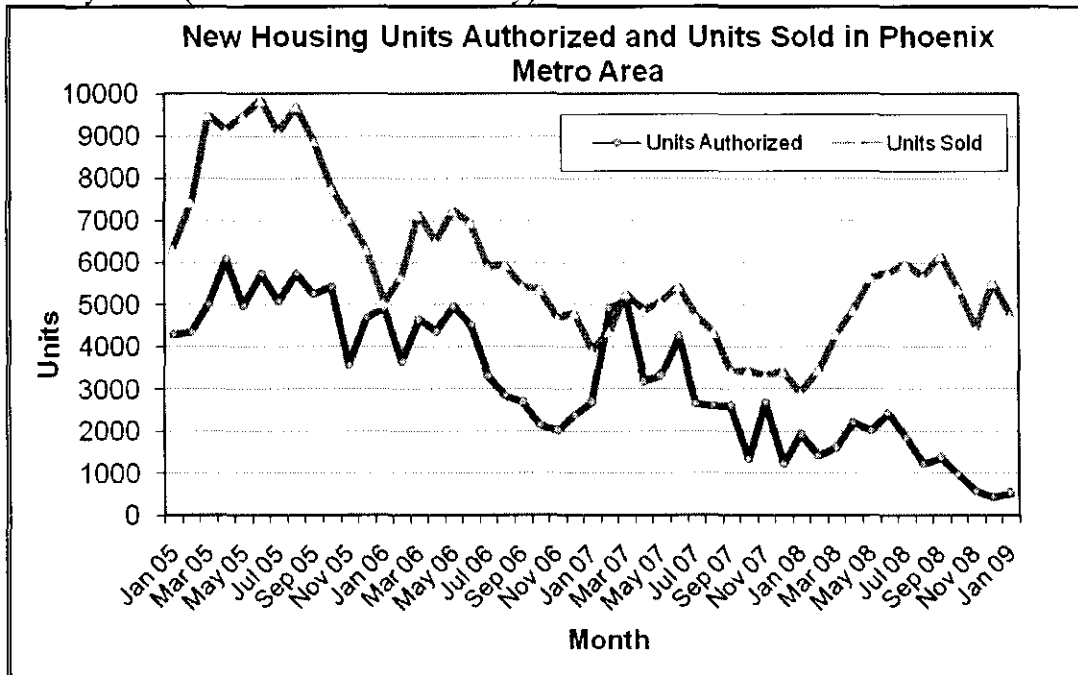


Chart 2 contains information about permits and housing sales (both new and existing) for the Phoenix metro area (Maricopa and Pinal counties). This follows pretty much the same pattern as the State. The situation in the Tucson metro area (Pima County) is very similar.

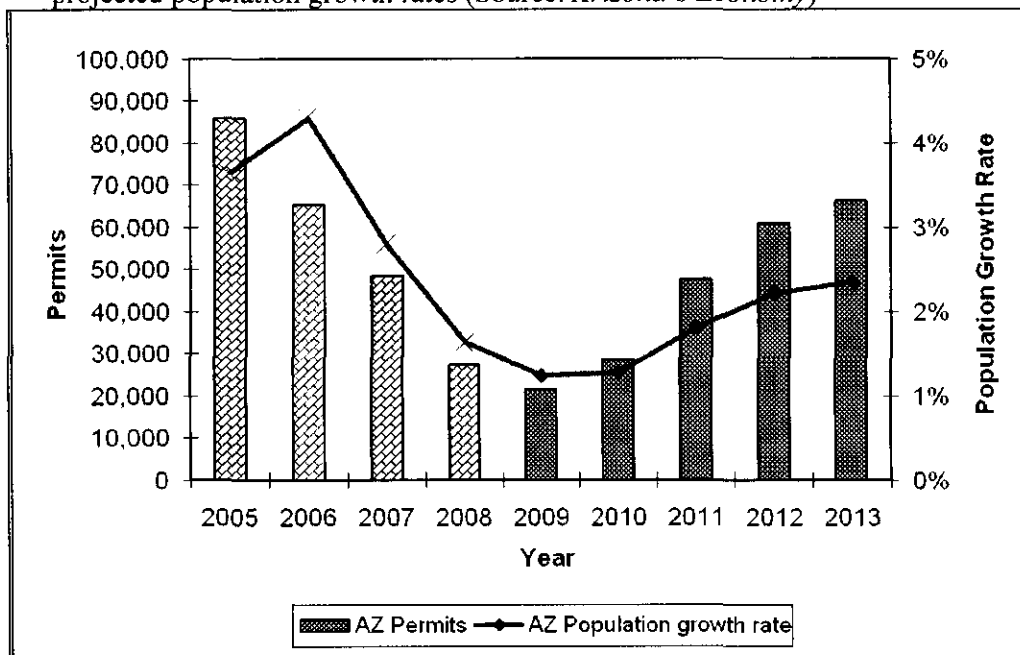
Much has been said about what caused this downturn in the housing market. In a sense, the State, especially in the two major metro areas, was “pre-building” in 2004 and 2005 as a result of investor purchases. “When the bubble burst and the speculators were no longer buying houses, it became obvious that the market was flooded. Some analysts estimate the surplus was as high as 80,000 homes at its peak.” (*Arizona Capital Times*, May 29, 2009, Vol. 110 Issue 22, p. 24). These units need to be absorbed. The situation was confounded by the credit crisis that began to surface in early 2007, became more and more severe throughout the year, and developed into a full-blown crisis in the fall of 2008. The declining housing prices and the difficulty of obtaining credit drove many would-be buyers to the sidelines, prolonging the process of absorbing the housing overstock.

Few economists predicted the severity and length of this housing downturn. In the December 2006 issue of the *Arizona Blue Chip Economic Forecast* (by W. P. Carey School of Business at ASU), the consensus forecast by a panel of 18 economists and institutions was that permits for single-family units in Arizona would drop by 7.5% in 2007 from 2006 while permits for multifamily units would drop by 0.8%. As it turned out, Arizona’s residential building permits declined by 24% in 2007 on top of an almost identical drop in the previous year (*Arizona's Economy*, January 2008 issue). In the December 2007 issue of the *Arizona Blue Chip Economic Forecast*, the forecasters made

almost identical predictions for 2008 as they did for 2007: permits for single-family units in Arizona would drop by 7.5% and permits for multifamily units would drop by 0.2%. They were again wildly off the mark: Residential permits declined by 43.6% in 2008 as compared to 2007 (*Arizona's Economy*, January 2009 issue).

All of this has affected and is expected to continue to affect the state's population growth. Arizona had the highest population growth rate in the nation in 2006 and it ranked No. 2 in 2007 and 2008 (Census Bureau). The growth rate is not yet available for 2009, but is projected to drop to about 1% (see Chart 3).

Chart 3: Actual and projected new residential permits compared with actual and projected population growth rates (Source: *Arizona's Economy*)



Because of the slowdown in population growth and some high profile, proposed school closures widely reported in the media, many people got the impression that Arizona's student enrollment is declining rapidly. A rule change by the Department of Education also further fueled such speculation. The rule change mostly affected how students who concurrently enroll in a high school and a technical institute are accounted for. These students used to be counted at more than one school; now they are counted only once. This rule change, along with some other factors, resulted in the apparent decline of more than 6% in Arizona's K-12 public school enrollment. SFB staff has sometimes been asked to comment on the state's "dramatic decline" in enrollment. Therefore, it is necessary to examine the numbers more closely and separate the myth from fact.

It is true that many school districts experienced enrollment declines in FY 2009. However, many other districts experienced enrollment growth. Statewide ADM at public school districts declined slightly (-0.47%). ADM growth has been decelerating in the past

couple of years before finally turning negative this year. Part of the deceleration could be attributed to the faster growth rate of charter school enrollments (see Table 1).

Table 1: ADM growth in public school districts and charter schools

<b>Fiscal Yr</b>	<b>100<sup>th</sup> day ADM (Districts) *</b>	<b>District ADM growth rate</b>	<b>100<sup>th</sup> day ADM (Charters) **</b>	<b>Charter ADM growth rate</b>
FY 2001	825,636		52,577	
FY 2002	844,361	2.27%	62,462	18.80%
FY 2003	862,451	2.14%	70,046	12.14%
FY 2004	878,739	1.89%	77,422	10.53%
FY 2005	906,299	3.14%	83,540	7.90%
FY 2006	934,027	3.06%	85,707	2.59%
FY 2007	955,573	2.31%	90,289	5.39%
FY 2008	967,940	1.29%	94,656	4.79%
FY 2009	963,367	-0.47%	100,606	6.29%

\* From tables prepared by Arizona Department of Education (ADE) for the SFB.

\*\* From ADE's LEA information request website:

<http://www.ade.az.gov/schoolfinance/forms/LEAQuery/InformationRequest.aspx>.

There are 218 public school districts that enrolled students in FY 2009. Among these districts, 92 experienced enrollment growth and 126 had declining enrollment between FY 2008 and FY 2009 (as measured by 100<sup>th</sup> day ADM). But this is only part of the story. The other part is that the declining districts tend to be those that have sufficient capacity and the growing districts tend to be those without available capacity. Table 2 lists the ten districts in the state that lost the most ADM and the ten districts that gained the most ADM in FY 2008.

Table 2: Top 10 districts that lost ADM and top 10 districts that gained ADM

District	FY 09 100th ADM	ADM Chang - FY08 to FY09
Top ADM Losers		
Mesa Unified	68,813	-2,058
Tucson Unified	56,410	-1,472
Cartwright Elementary	18,597	-1,292
Roosevelt Elementary	11,609	-828
Tempe Union High	12,291	-661
Maricopa County Regional	308	-648
Washington Elementary	23,212	-606
Amphitheater Unified	15,625	-590
Peoria Unified	37,438	-569
Pendergast Elementary	10,431	-425
Top ADM Gainers		
Chandler Unified	36,998	1,654
Dysart Unified	23,865	830
Maricopa Unified School	6,213	815
J O Combs Unified School	3,910	653
Vail Unified	9,370	551
Litchfield Elementary	9,913	522
Scottsdale Unified	26,505	480
Higley Unified	9,631	438
Florence Unified School	7,323	433
Sahuarita Unified	4,816	391

In summary, Arizona's residential housing market experienced an incredible bubble-bust cycle in the past few years. Few people had expected the extent of the crash. Population growth and student enrollment growth have also slowed significantly. All of these conditions are reflected in the current fiscal year's award for new schools construction, which is the lowest since the Students First program was implemented both in terms of the number of awards and in terms of dollars (even counting the funds that are not available due to the moratorium). There is no doubt that the current slow-down is severe; however, there is still need for new school construction in certain communities, mostly in the suburbs of the Phoenix and Tucson metro areas.

Going forward, SFB staff will continue to closely monitor the condition in the housing market and trends of population growth to best plan for new school construction.



## Regional Overviews

In the FY 2009 Capital Plan cycle, as in the previous cycle, SFB staff reviewed capital plans on a regional basis. Every effort was made to review all districts in the same region at the same time. However, it was sometimes not possible to get all the districts in the same region on the same agenda of a particular month's board meeting due to a variety of reasons. For instance, some districts might not have all the required information in place in time for the meeting, or they might disagree with staff's recommendation and request a delay. For each board meeting where capital plans were on the agenda, staff provided an overview for the region or regions under review. The March 5 meeting was an exception. Twenty-three (23) districts from 10 counties were reviewed on that agenda. Since those districts were from such diverse regions, there were no common themes for them except that the current recession affected all of them to different degrees. For that reason, no regional overview was provided on that agenda. As a result, not all counties were discussed in the separate regional overviews provided over the course of this Capital Plan cycle. To make up for this deficiency, staff prepared the following comparisons between the counties.

Table1: Population of Arizona counties – 2000, 2007, 2008 (Source: Arizona Department of Commerce).

County	April 1, 2000 Population	July 1, 2007 Population	July 1, 2008 Population	Growth Rate 2007 to 2008	Annual Growth Rate: 2000 to 2008
Pinal	179,727	327,670	350,558	6.99%	8.43%
Yavapai	167,517	223,934	227,348	1.52%	3.77%
Mohave	155,032	204,122	205,862	0.85%	3.50%
Maricopa	3,072,149	3,907,492	3,987,942	2.06%	3.21%
Yuma	160,026	201,298	203,779	1.23%	2.97%
Santa Cruz	38,381	46,907	47,471	1.20%	2.61%
Pima	843,746	1,003,235	1,014,023	1.08%	2.25%
Cochise	117,755	137,200	139,434	1.63%	2.07%
Navajo	97,470	113,796	114,780	0.86%	2.00%
Coconino	116,320	134,898	135,613	0.53%	1.88%
Graham	33,489	37,338	38,633	3.47%	1.75%
Gila	51,335	56,885	57,361	0.84%	1.35%
Apache	69,423	75,496	76,156	0.87%	1.13%
La Paz	19,715	21,529	21,544	0.07%	1.08%
Greenlee	8,547	8,394	8,950	6.62%	0.56%
<b>Arizona</b>	<b>5,130,632</b>	<b>6,500,194</b>	<b>6,629,454</b>	<b>1.99%</b>	<b>3.16%</b>

Table 1 compares the last two years' population estimates of Arizona counties with their populations enumerated in the 2000 census. The counties are ranked in descending order of annual population growth rates between 2000 and 2008. It is clear that Pinal was by far the fastest growing county in Arizona. The growth rates of Yavapai, Mohave, Maricopa, Yuma, Santa Cruz, Pima counties were within one percentage point of the state's average

annual growth rate. The other counties were significantly behind, but all had positive growth. For the last year of the period, Graham and Greenlee counties experienced faster than usual growth due to the expansion of existing copper mines and the opening of new ones. However, the recession has severely affected the mining industry since; whether the population gain in these two counties can be sustained remains to be seen.

Table 2: ADM of Arizona counties – FY 2001, FY2008 and FY 2009 (Source: Arizona Department of Education).

County	FY 2001 ADM	FY 2008 ADM	FY 2009 ADM	Growth Rate: FY 08 to FY 09	Annual Growth Rate: FY 01 to FY 09
Pinal	26,583	44,994	46,696	3.78%	7.30%
Maricopa	498,650	609,963	606,835	-0.51%	2.48%
Yuma	30,225	35,852	35,760	-0.25%	2.12%
Yavapai	21,511	24,295	23,872	-1.74%	1.31%
Santa Cruz	9,270	10,326	10,167	-1.54%	1.16%
Mohave	21,739	23,530	23,072	-1.95%	0.75%
Pima	124,967	132,403	131,252	-0.87%	0.62%
Graham	5,731	5,761	5,929	2.91%	0.43%
Greenlee	1,928	1,778	1,874	5.35%	-0.35%
Cochise	19,826	18,844	18,640	-1.08%	-0.77%
Navajo	20,393	19,380	19,112	-1.39%	-0.81%
Coconino	18,896	17,606	17,182	-2.40%	-1.18%
Gila	8,711	7,781	7,735	-0.59%	-1.48%
La Paz	2,642	2,453	2,344	-4.47%	-1.49%
Apache	14,564	12,974	12,898	-0.58%	-1.51%
<b>Arizona</b>	<b>825,636</b>	<b>967,940</b>	<b>963,367</b>	<b>-0.47%</b>	<b>1.95%</b>

Table 2 compares the latest two fiscal years' ADM with that of FY 2001. It should be noted that these ADM numbers only include public school districts, not charter schools. The counties are ranked in descending order of annual ADM growth rate between FY 2001 and FY 2009. Consistent with population growth, Pinal County's ADM grew the fastest in the period. Its average annual growth rate was nearly three times that of Maricopa County, the nearest competitor in terms of ADM growth rate. Growth rates for both counties dropped significantly in the current fiscal year. Maricopa County even turned negative, which has never happened in recent history. Eleven other counties also had a net loss for the year. Over the period between FY 2001 and FY 2009, seven of the 15 counties experienced a net decline. Graham and Greenlee counties, which had robust growth this year, were essentially flat for the eight-year period.

STATE OF ARIZONA

## Joint Committee on Capital Review

STATE  
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HOUSE OF  
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RICH CRANDALL  
DAVID LUJAN  
JOHN MCCOMISH  
NANCY McLAIN  
DAVID SCHAPIRA  
KYRSTEN SINEMA

DATE: November 18, 2009

TO: Senator Russell Pearce, Chairman  
Members, Joint Committee on Capital Review

THRU: Richard Stavneak, Director

FROM: Kimberly Cordes-Sween, Principal Fiscal Analyst

SUBJECT: Arizona State University – Review of Interdisciplinary Science and Technology  
Building 4 Bond Project

### Request

A.R.S. § 15-1683 requires Committee review of any university projects financed with system revenue bonds. Arizona State University (ASU) requests Committee review of its proposed Interdisciplinary Science and Technology Building 4 (ISTB 4) to be financed with a \$187.4 million system revenue bond issuance, including \$160.0 million for project construction costs.

The project's annual debt service would ultimately be approximately \$14.1 million. ASU plans to pay the debt service cost with indirect costs recovered from new research projects located in this building.

### Recommendation

The Committee has at least the following 3 options:

1. A favorable review.
2. A favorable review with the following 2 provisions:
  - a. Debt service payments cannot be paid from General Fund monies or tuition collections.
  - b. The total construction cost cannot exceed \$160.0 million. If it does, ASU must come before JCCR again for review prior to beginning project construction.
3. An unfavorable review.

Under any option, the JLBC Staff recommends the following standard university financing provisions:

#### Standard University Financing Provisions

- ASU shall report to the Committee before expenditure of any allocations that exceed the greater of \$1,000,000 or 10% of the reported contingency amount total for add-alternates that do not expand the

(Continued)

scope of the project. ASU shall also report to the Committee before any reallocation exceeding \$1,000,000 among the individual planned renovations, renewals, or extensions.

- ASU shall submit for Committee review any allocations that exceed the greater of \$1,000,000 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. 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 revenues that may be required for debt service, or any operations and maintenance costs when the project is complete.

### **Analysis**

ASU plans to construct a new 293,000 square foot, 8-level, Interdisciplinary Science and Technology Building on its Main Campus to house the School of Earth and Space Exploration, a number of Fulton School of Engineering research programs, and certain research units from the College of Liberal Arts and Sciences. The School of Earth and Space Exploration includes earth and planetary scientists and astronomers. The building would also include environmental engineering, energy research, and various chemistry and bioscience research programs. ASU states that these research areas will provide the university with the capacity to win funding for large scale interdisciplinary projects in the areas of climate science, energy sources, and earth systems that require specific infrastructure needs not readily available on its campus.

The proposed project will consist of lab space, offices, and a 250-seat auditorium and gallery area. The auditorium space will be used for university classrooms, K-12 educational programs, and for-profit public events. The building will include 169 lab modules and 60 faculty offices for approximately 360 research assistant and graduate students, 60 faculty members, and 120 post-doctoral students.

### **Financing**

The total estimated bond issuance is \$187.4 million, including \$160.0 million for project costs, \$1.5 million in issuance costs, and \$25.9 million for capitalized interest/net premium costs. Capitalized interest is when interest payments are delayed and, as a result, are accrued on top of the principal balance, thereby increasing the outstanding principal amount on the loan. In this case, the project is \$160.0 million (plus \$1.5 million in issuance costs). But since interest payments are being delayed until FY 2013, an additional \$25.9 million in accrued interest is added to the original loan and payments will then be made on the then outstanding balance of \$187.4 million in FY 2013. ASU will be bonding for the full \$187.4 million to cover these additional expenses.

ASU plans on issuing Aa3/AA rated system revenue bonds for the project in the winter or spring of 2010 with an estimated 5.7% annual interest rate and a term of 30 years. The university estimates annual debt service payments of \$8.7 million in FY 2013 and \$14.1 million starting in FY 2014, with a 30-year total cost of \$375.3 million.

The building will be funded solely from ASU's Indirect Cost Recovery Fund. The Indirect Cost Recovery Fund includes revenues for indirect costs that may be attributable to specific federal research grants or other projects. The indirect cost recovery rate, an additional charge on each grant, is negotiated between the university and the federal government. The average recovery rate for research projects is approximately 25% of total direct research spending.

(Continued)

As a result of new research grants generated by ISTB 4, ASU anticipates that the project will generate sufficient indirect cost recovery revenue to cover the project costs. ASU anticipates \$48 million in new research expenditures from federal grants due to this project and an additional \$12 million in indirect cost recovery monies deposited into the Indirect Cost Recovery Fund, which would cover a large portion of the annual debt service payment of \$14.1 million. In addition, in FY 2009, ASU received approximately \$44.2 million of revenue from existing research projects and ASU indicates that indirect cost recovery revenues have grown 73% in the past 5 years, from FY 2004 to FY 2009. According to ASU, if there are insufficient Indirect Cost Recovery Funds to cover the project, other university-generated funding will be used.

Indirect cost proceeds could potentially be transferred to the General Fund or used to offset existing university expenses. In this circumstance, however, ASU has stated that the increase in available indirect cost recovery monies would only occur with construction of the building. ASU anticipates annual operating and maintenance costs of \$4.0 million when the project is completed in May 2012, which will also be covered by university Indirect Cost Recovery Funds. This cost includes utilities at \$2.3 million, personnel at \$781,000, and other operating costs at \$948,000.

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% of each institution's total projected annual expenditures. This calculation is known as the debt ratio. The \$187.4 million system revenue bond issuance would increase the ASU debt ratio by 0.72% from 5.6% to 6.32%.

#### Construction Costs

Total project costs are estimated at \$160.0 million, which includes direct construction costs, architect fees, furniture and equipment costs, and contingency fees. The direct construction costs total \$111.0 million, which includes construction labor and material costs only. The total cost per square foot for the building would be \$546 and the direct construction cost per square foot of \$378. The original project was projected at \$457 per square foot for direct construction costs but has since been adjusted downward to reflect current market conditions. In comparison, the 2004 ISTB 1 Building and the 2005 Biodesign Building B had total costs of \$412 and \$456 per square foot and direct construction costs of \$285 and \$320 per square foot, respectively. This reflects a 33% and 18% increase in construction costs over 4 or 5 years. According to ASU, the higher costs are due to the high number of wet and dry labs, as well as mass spectrometer and clean rooms, which cost more to construct than other types of research building space.

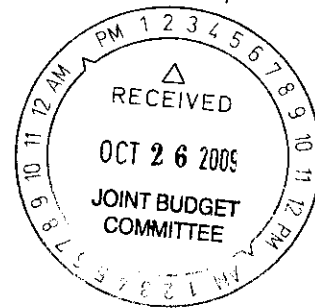
ASU would contract this bond project using Construction Manager at Risk (CMAR). In CMAR, the university competitively selects a general contractor according to quality and experience. The general contractor manages a construction project, including the associated architect and other subcontractors, from design to completion. The general contractor chooses a qualified subcontractor for each trade based on price competition, selecting the lowest bid. Additionally, CMAR defines a guaranteed maximum price (GMP), after which the general contractor must absorb almost all cost increases except those caused by scope changes or unknown site conditions. Occasionally, in the case of substantial materials price inflation, a university will partially cover higher costs to maintain good contractor relations. ASU does not anticipate having a GMP until mid-January.

RS/KCS:ss

**ASU**  
ARIZONA STATE UNIVERSITY

October 23, 2009

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



Dear Senator Pearce:

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

**Interdisciplinary Science and Technology Building 4**

This project was reviewed and approved by the Board of Regents on September 24, 2009.

Enclosed is the required and supplemental information relating to this project, including documentation of the significant growth of ASU's research activities, which gives rise to the current need for this new research facility, and discussion of the facility's focus, which we expect to have a particularly positive impact for the State of Arizona.

The Interdisciplinary Science and Technology Building (ISTB) 4 project will support expansion of ASU's already significant contributions to the fields of alternative energy research, materials science, and earth and space exploration. The impacts from the research will be significant with long-term benefits to society, springing from an emphasis on innovative technologies that can be applied in the economy of today and tomorrow.

No tuition funds are planned to be used to fund this project. The debt service funding source will be indirect cost recovery funds on sponsored programs, including future growth generated by ASU's expanding sponsored research volume.

As indicated in the enclosed material, the project budget is \$185 million. Revised costs for the project scope are being negotiated and the project budget will be adjusted to current market conditions as the guaranteed maximum price is finalized. We are anticipating that total project cost savings of 10 to 15 percent may be realized, resulting in an estimated project cost of \$160 to \$170 million. Based on these potential cost savings, we have prepared the debt issuance assumptions based on a \$160 million project cost.

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

PO Box 877505, Tempe, AZ 85287-7505  
(480) 727-9920 Fax: (480) 727-9922

The Honorable Russell Pearce, Chair  
October 22, 2009  
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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 black ink, appearing to read "Morgan R. Olsen", with a stylized flourish at the end.

Morgan R. Olsen  
Executive Vice President, Treasurer and CFO

Enclosures

c: Richard Stavneak, Director, JCCR  
Joel Sideman, Executive Director, Arizona Board of Regents  
Sandra Woodley, CFO, Arizona Board of Regents  
Lorenzo Martinez, 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  
Steve Miller, Deputy Vice President, Public Affairs  
Lisa Frace, Associate Vice President for Budget and Planning  
James Sliwicki, Director, Budget Planning and Management  
Gerald Snyder, Senior Associate Vice President for Finance and Deputy Treasurer  
Leah Kritzer, Fiscal Analyst, JCCR

**JCCR Capital Financing Review  
Interdisciplinary Science and Technology Building 4  
Arizona State University**

**JCCR Meeting Date:** October/November 2009

**Project Name:** Interdisciplinary Science and Technology Building (ISTB) 4

**Financing Plan:** The funding source for this project is system revenue bonds. Debt service will be funded by indirect cost recovery funds on research grants.

**Debt Issuance:**

Estimated Project Cost	\$ 160,000,000
Estimated Capitalized Interest Fund	\$ 31,152,000
Less : Estimated Net Premium	<u>\$ (5,210,000)</u>
Estimated Capitalized Interest/Net Premium	\$ 25,942,000
Estimated Costs of Issuance <sup>1</sup>	\$ 1,503,000
Estimated Total Issuance Amount	\$ 187,445,000
Estimated Interest Rate	5.7%
Payment Term	30 years

Estimated Annual Debt Service 2013, funded solely from Indirect Cost Recovery:

\$ 8,700,000

Estimated Annual Debt Service 2014-2039, funded solely from Indirect Cost Recovery:

\$ 14,100,000

Estimated Total Debt Service, funded solely from Indirect Cost Recovery:

\$ 375,300,000

Anticipated Date of Issuance	Winter/Spring 2010
Anticipated Bond Rating <sup>2</sup>	AA/Aa3

**Gifts:** Not applicable; debt service will be solely funded from indirect cost recovery on research grants.

<sup>1</sup> The estimated not-to-exceed cost of the issuance for the ISTB 4 bonds is \$1.5 million, excluding potential credit enhancement costs, which would increase the bond rating and reduce the interest rate on the debt.

<sup>2</sup> S&P Rating Services /Moody's Investor Service.



**JCCR Capital Financing Review**  
**Interdisciplinary Science and Technology Building 4**  
**Arizona State University**

Fiscal Year	Debt Service Payments	Debt Service Schedule			
		Interest (Funded from Capitalized Interest Fund) <sup>3</sup>	Principal	Interest	Outstanding
					187,445,000
2010	0	5,393,000	0	5,393,000	187,445,000
2011	0	10,786,000	0	10,786,000	187,445,000
2012	0	10,786,000	0	10,786,000	187,445,000
2013	8,700,000	5,371,000	3,285,000	10,786,000	184,160,000
2014	14,100,000		3,420,000	10,680,000	180,740,000
2015	14,100,000		3,555,000	10,545,000	177,185,000
2016	14,100,000		3,695,000	10,405,000	173,490,000
2017	14,100,000		3,855,000	10,245,000	169,635,000
2018	14,100,000		4,020,000	10,080,000	165,615,000
2019	14,100,000		4,200,000	9,900,000	161,415,000
2020	14,100,000		4,390,000	9,710,000	157,025,000
2021	14,100,000		4,650,000	9,450,000	152,375,000
2022	14,100,000		4,930,000	9,170,000	147,445,000
2023	14,100,000		5,225,000	8,875,000	142,220,000
2024	14,100,000		5,540,000	8,560,000	136,680,000
2025	14,100,000		5,870,000	8,230,000	130,810,000
2026	14,100,000		6,225,000	7,875,000	124,585,000
2027	14,100,000		6,600,000	7,500,000	117,985,000
2028	14,100,000		6,995,000	7,105,000	110,990,000
2029	14,100,000		7,415,000	6,685,000	103,575,000
2030	14,100,000		7,860,000	6,240,000	95,715,000
2031	14,100,000		8,330,000	5,770,000	87,385,000
2032	14,100,000		8,830,000	5,270,000	78,555,000
2033	14,100,000		9,360,000	4,740,000	69,195,000
2034	14,100,000		9,920,000	4,180,000	59,275,000
2035	14,100,000		10,515,000	3,585,000	48,760,000
2036	14,100,000		11,145,000	2,955,000	37,615,000
2037	14,100,000		11,815,000	2,285,000	25,800,000
2038	14,100,000		12,525,000	1,575,000	13,275,000
2039	14,100,000		13,275,000	825,000	0
Total	375,300,000	32,336,000	187,445,000	220,191,000	

<sup>3</sup> The difference between the amount of capitalized interest proceeds included in the debt issuance and the amount of capitalized interest used to fund the interest payments represents estimated interest earnings on the capitalized interest and construction proceeds.

## Interdisciplinary Science and Technology Building (ISTB) 4



*Artist conception, ISTB 4*

**Purpose:** ISTB 4 will house research units well-positioned to compete for major funding agency initiatives such as:

- Renewable energy production and storage for DOE's Engineering Frontiers Research Centers
- Solar, bioenergy or fuel cells for NSF Research Centers
- Sustainability, environmental sciences or renewable energy for NSF's Science and Technology Centers.

**Project Cost:** \$185 million

**Project Scope:** 293,000 sq ft (88,185 sq ft lab space)

**Projected Construction Impact:**

- 1,480 jobs created, 6,120 additional jobs supported
- Total economic impact of \$563.3 million

**Projected Operations Impact:**

- 600 jobs onsite, 3,050 additional jobs supported
- Total economic impact of \$283 million annually

**Other Impacts:**

- Commercialization of innovations and technologies that can be licensed/spun-out to the private sector
- Innovative technologies related to the application of renewable energy sources
- Enhanced student learning and research opportunities

**Readiness to Proceed:** Conceptual design complete, detailed design 100% complete, awaiting authorization to proceed.

### ***Project Summary***

ASU has emerged since 1980 as the fastest growing research university in the country. In FY 2009, ASU achieved \$307 million in research expenditures from hundreds of sources, a level of research activity that only has been achieved by a handful of universities without medical schools, including MIT, Cal Tech, Carnegie Mellon, Georgia Tech, Texas and Princeton. In FY 2009, ASU faculty submitted \$1.3 billion in new research proposals, a 50% increase in the past 12 months. ASU's research volume has increased 13% annually for each of the past three years, among the top handful in the country.

ISTB 4 is needed to address ASU's immediate requirement for additional, specialized research space. The focus of this research will be new energy systems and earth and space exploration. The prospects for additional research funding in these areas are excellent, and the need for space to conduct the research is critical. ISTB 4 will house major initiatives in renewable energy research, as well as ASU's recently formed School of Earth and Space Exploration (SESE) within the College of Liberal Arts and Sciences, which unites earth and planetary scientists with astronomers. SESE has strong collaborative ties with several other academic units at ASU, particularly the Ira A. Fulton School of Engineering (FSE). The remainder of the facility will house FSE research programs in areas complementary to SESE, such as systems engineering and materials science.

ISTB 4 will house specific transdisciplinary programs with high impact potential:

- **Renewable and Alternative Energy/Power Systems** - Focus on electrochemistry aspects of renewable solar energy (fuel cells, hydrogen storage, electrochemical energy conversion, bioenergy, and photovoltaic energy)
- **Mission-oriented research programs** - SESE (astrobiology, geochemistry, etc.) and FSE (propulsion, low power electronics, communications, sensors, etc.) faculty supporting discovery mission research (Lunar, Mars and NEPTUNE programs)
- **Systems Integration** - Develop the capability for technology integration, with focus on nearer-term system prototyping and commercialization supporting the mission-oriented research above with strong potential commercial revenue generation.

**Office of the President**

## Arizona State University Research Growth and Success

ASU's research capacity has grown significantly in the past several years. In FY 2007, ASU ranked 19<sup>th</sup> in research volume among universities without a medical school, according to the annual *NSF Survey of Research and Development Expenditures at Universities and Colleges*. As reflected in the table below, ASU's research enterprise is growing faster than any of its peer institutions, and more than three times faster than the median of its peer institutions.

### Total Research Expenditure Growth

#### ABOR Peer Group Comparison

Institution	Med. Sch.	2003	2004	2005	2006	2007
<b>Arizona State University - Tempe</b>		<b>10.6%</b>	<b>8.8%</b>	<b>10.9%</b>	<b>11.7%</b>	<b>13.9%</b>
Ohio State University - Columbus	Yes	11.2%	10.0%	12.2%	9.7%	11.7%
University of Texas - Austin		8.0%	5.3%	8.9%	8.2%	9.3%
University of Minnesota - Twin Cities	Yes	7.4%	3.7%	3.6%	5.4%	6.6%
University of Iowa	Yes	7.3%	7.1%	5.0%	5.9%	5.1%
University of Connecticut - Storrs		-0.8%	2.2%	2.0%	6.8%	4.3%
Florida State University	Yes	13.2%	13.9%	8.9%	6.9%	4.1%
Michigan State University	Yes	10.5%	7.0%	4.9%	3.7%	3.5%
University of Maryland - College Park		8.8%	7.3%	1.4%	3.3%	3.4%
University of Wisconsin - Madison	Yes	9.2%	8.1%	6.4%	4.9%	3.3%
Rutgers the State University of NJ - New Brunswick		6.8%	7.8%	6.2%	4.8%	2.4%
University of California - Los Angeles	Yes	17.4%	4.1%	0.2%	-1.4%	2.1%
University of Washington - Seattle	Yes	9.0%	6.6%	4.2%	4.4%	2.1%
Pennsylvania State University - University Park		8.9%	9.4%	8.3%	5.9%	2.1%
University of Illinois - Urbana-Champaign		9.9%	9.1%	5.6%	-1.1%	-2.1%
Indiana University - Bloomington		14.0%	13.9%	2.2%	3.1%	-7.1%
Median (including ASU)		9.1%	7.5%	5.3%	5.1%	3.5%
Median (excluding ASU)		9.0%	7.2%	5.0%	4.9%	3.4%

*Note: FY 2007 is the last comparative data set available from NSF. Growth rates for ASU in FY 2008 and FY 2009 were 11% and 8%, respectively.*

In order to determine the space required to support this continued growth in the research enterprise, two separate analyses were completed. One was based on a comparison between historical research expenditures and research space at ASU. The other was based on a comparison of research expenditures and space at 190 research universities. These two analyses resulted in an almost identical relationship between research expenditures and net square feet of research space utilized. The resulting space requirements to meet both the conservative and aggressive goals for research expenditure growth can be seen in the table below.

### Net Square Feet of Wet/Dry Lab Space Required to Support Planned Research Growth

FY	Minimum Net Square Feet Required	Net Square Feet Shortfall
2010	904,601	54,601
2011	946,025	96,025
2012	977,334	127,334
2013	988,006	138,006
2014	1,011,976	161,976
2015	1,036,666	186,666

Planned wet/dry lab space in ISTB 4 (available in 2013) is 88,185 square feet, which is nearly 50,000 square feet less than required by space forecasts.

This past year alone, ASU's research expenditures have exceeded \$300 million for the first time in the University's history, using the National Science Foundation's FY 2010 methodology for reporting R&D expenditures.

- This level of investment speaks to the quality of ASU faculty and their reputation for using research to address society's grand challenges.
- It demonstrates ASU is successfully pursuing funding opportunities which will continue to allow us to "make a difference" in terms of pursuing research that provides solutions.
- There were 2,468 proposals submitted in the last year (\$1.3B value pursued; processed the receipt of nearly \$220M in externally sponsored funds).
- This equates to over a proposal per hour every work day.

To illustrate our growing leadership in research areas, just look to some of ASU's research achievements this past year:

- Received \$10M in funding for the Virginia G. Piper Center for Personalized Diagnostics, part of a 69% increase in awards from private foundations.
- Secured a \$14M grant from the Department of Energy to establish an Energy Frontier Research Center (EFRC) for Bio-Inspired Solar Fuel Production. The Center will accelerate the rate of scientific breakthroughs needed for advanced energy technologies in the 21st century.
- Earned a \$6M grant over 6 years from the U.S. Department of Defense's Multidisciplinary University Research Initiative (MURI). The grant will allow researchers to develop systems and techniques to better monitor the structural health and predict potential wear and tear in aerospace systems.
- The ASU algae-to-fuel project led by professors Qiang Hu and Milton Sommerfeld came in at No. 11 on TIME Magazine's "Top 50 Inventions for 2008" listing.
- Flexible Display Center, named to "Top 10 Technologies of 2008" by WIRED magazine, earned an additional 5 years of support from the U.S. Army. The five-year renewal is for \$50 million and follows initial funding of the center in 2004, representing a total investment of nearly \$100 million.
- ASU's School of Earth and Space Exploration (SESE) was one of 10 research teams from across the country to be awarded five-year grants, averaging \$7M each, from the NASA Astrobiology Institute to study how water is distributed in the universe and its relationship to life.
- ASU was one of seven U.S. universities selected from 211 applicants to receive a Minerva award from the Department of Defense for a research project titled "Finding Allies for the War of Words: Mapping the Diffusion and Influence of Counter-Radical Muslim Discourse."
- The Center for Research on Education in Science, Mathematics, Engineering and Technology (CRESMET) earned a \$12.5M, five-year research effort funded by the National Science Foundation to produce and test a new model for enhancing instruction of precalculus math and science in grades 9-12.
- The Walter Cronkite School of Journalism and Mass Communication received a \$7.5M grant to run the News21 Initiative, from the Carnegie Corporation of New York and the John S. and James L. Knight Foundation, to change the way journalism is taught in the United States. It is the largest grant in the history of the school.

**Arizona State University  
Interdisciplinary Science and Technology Building (ISTB) 4  
Financial Highlights**

- 293,000 gross square feet
- \$160 to \$170 million estimated project cost, based on current market conditions
- \$ 546 to \$580 per gsf, comparable to recent similar projects
- Financing through 30-year system revenue bonds
- Debt service funding source will be indirect cost recovery funds on sponsored research grants, including future growth generated by ASU's expanding research volume
- Project is included in the debt ratio calculation in ASU's 2010 Capital Development Plan
- ASU debt ratio is 5.6% of ASU's total expenditures (existing debt; maximum of 8%)
- Debt service for this project is 0.72% (72/100<sup>th</sup> of 1%) of ASU's total expenditures, estimated at \$14.1 annually upon full phase-in
- Projected operations and maintenance costs are \$4,029,000 annually, funded by indirect cost recovery funds on sponsored research grants and contracts, including future growth generated by ASU's expanding research volume

**ISTB 4**  
**Project Summary and Justification**  
**October 22, 2009**

**Project Description**

- ▶ The ISTB 4 facility will further enhance ASU's strategic investment in facilities for interdisciplinary research. ASU has been on an upward trajectory of research growth, and constructing this facility will allow the University to continue to meet its research objectives.
- ▶ The School of Earth and Space Exploration (SESE) unites earth and planetary scientists with astronomers, and has strong collaborative ties with several other academic units at ASU, specifically the Fulton School of Engineering. While maintaining core strengths and developing new transdisciplinary linkages among the sciences, SESE will broaden its scope to include engineering faculty with research interests in the development and deployment of scientific instrumentation on Earth and in space. A dedicated home for SESE will better define the School to the public and allow the faculty to pursue aggressively large scale funding projects that include climate science, energy systems and planetary exploration.
- ▶ An additional focal point for ISTB 4 is the continued advancement of engineering research at ASU, and the ongoing need to provide adequate and appropriate research space for areas such as materials science, bio-energy, and systems engineering. Research in these areas has been accelerated by the addition of new faculty members. All of these areas of research in SESE, Engineering and CLAS have strong thematic and scientific connections.
- ▶ ISTB 4 will allow ASU the best means of meeting the essential needs for quality interdisciplinary research space and core joint-user facilities in these fields. The new facility will enable ASU to:
  - Continue to recruit the best faculty, students and professional staff
  - Compete in the global marketplace of ideas for federal and other research funding
  - Implement advances in education and training for graduate and undergraduate students
  - Engage the outside community

**Project Scope**

- ▶ Research activity at ASU has grown dramatically over the last several years, rising from expenditures of \$121 million in FY 2002 to \$307 million in FY 2009. This 154 percent increase has been made possible by two major investments: new interdisciplinary research areas with novel approaches; and University and State investment in new research facilities to support growth. ASU's plans for some time have included the addition of another new, substantial research facility, and the trajectory of research funding indicates that ASU is ready for this next level of infrastructure investment.

- ▶ ISTB 4 is being proposed to meet the space needs for growth in targeted areas that generate a high level of research volume. The new building is planned to house the School of Earth and Space Exploration (SESE), Fulton School of Engineering research programs including Environmental Engineering and Energy Research Initiatives, as well as related research units from the College of Liberal Arts and Sciences (CLAS). These identified areas have been recognized as those most critical to the development of ASU as a major research university, and have the capacity to win funding for large scale, complex interdisciplinary projects in the areas of climate science, energy sources, and earth systems that require particular infrastructure needs not readily available on campus.
- ▶ The size of this facility is proposed to be 293,000 square feet.
- ▶ Review of the program included the best and most efficient balance between wet and dry lab space, as well as the balance between office and research space. The high-rise building has been designed to control construction costs by grouping office and lab functions to increase building efficiencies. Building efficiencies also were increased by collocation of wet labs on the lower floors, placing flexible office and dry lab space on the upper floors.
- ▶ Wet lab space will be based on highly flexible modules. Other lab needs will be less hood-intensive, and upper floors will be desk research space. Clean rooms and classroom space also are included. On the ground floor, the plan is to house a 250-seat auditorium and gallery area that will serve as University classrooms and outreach space for both K-12 educational programs and for-profit public events. ISTB 4 is proposed to house the research groups associated with approximately 60 faculty members in 73 dry lab modules (including mass spectrometer and assembly clean rooms and labs), 81 wet lab modules (including geochemistry labs), 15 general purpose lab modules, 60 faculty offices, 120 post-docs and 360 research assistants and graduate students.
- ▶ The planned building site is Lot 44 on the Tempe Campus, located south of Terrace Road, east of McAllister Avenue, north of the Combined Heat and Power Facility (CHP), and west of Parking Structure 4, as reflected on the map on page 7.

- ▶ The power required for ISTB 4 will be provided by the adjacent CHP plant. ISTB 4 will be able to open with the existing CHP configuration.
- ▶ To maximize the investment in this important core campus facility, this project will be built to last 50 to 75 years, designed in accordance with the ASU Design Guidelines, and constructed of high quality, durable, maintainable materials and building systems to maximize energy efficiency and minimize operational, repair and replacement costs.
- ▶ To demonstrate the ASU commitment to responsible, sustainable design, and in response to the Governor's mandate that facilities be designed in a sustainable manner, ISTB 4 is designed to receive at least LEED Silver certification.

#### **Project Delivery Method**

- ▶ ISTB 4 will be delivered through the Construction Manager (CM) at Risk method. This approach was selected because it can save time through fast-track project scheduling, provides contractor design input and coordination throughout the project, improves potentially adversarial project environments, and allows for the selection of the most qualified contractor team for each individual component. With the use of two independent estimates at each phase, and low bid subcontractor work for the actual construction, this method also provides a high level of cost and quality control.
- ▶ CM at Risk was selected through the capital project selection committee process prescribed by the ABOR Procurement Code. ASU received five responses to the project RFQ and three of the responding teams were short-listed for interview. A licensed contractor from the community was included on the selection committee as required by Board Policy. The Design team was selected through a similar ABOR process, and three teams were interviewed out of the eighteen RFQ responses received.



### **Project Cost**

- ▶ The project budget prepared in September 2008 is \$185 million, and is expected to decrease based on current market conditions. The budget represents a construction cost of \$457 per square foot and a total project cost of \$631 per square foot. Revised costs are being negotiated and will be adjusted to current market conditions. ASU anticipates a total project cost savings of 10 to 15 percent will be realized.
- ▶ The table below reflects comparable projects fused for developing the September 2008 project budget:

<b>Comparable Project</b>	<b>Location</b>	<b>Project Size</b>	<b>Escalated Const. Cost/SF</b>
Biodesign Building A	Tempe	177,000 gsf	\$ 524/sf
Biodesign Building B	Tempe	174,000 gsf	\$ 503/sf
ISTB 1	Tempe	188,000 gsf	\$ 466/sf
<b>Average Comparable Project</b>		<b>179,666 gsf</b>	<b>\$ 497/sf</b>

- ▶ A new GMP will be determined by the CMAR within 60 days.
- ▶ Once the GMP is agreed upon, the CMAR will provide the completed project within that price.
- ▶ General construction is scheduled to be complete in approximately 26 months.

## **Capital Project Information Summary**

**University:** Arizona State University

**Project Name:** Interdisciplinary Science  
and Technology  
Building 4

### **Project Description and Location:**

This project is planned to construct an approximately 293,000 gross square foot facility at Lot 44 of the Tempe campus of ASU. The building will house office and support spaces, circulation, meeting and research spaces, wet and dry labs, teaching laboratories and computer labs.

### **Project Schedule:**

Planning	September 2004
Design	February 2008
Construction	March 2010
Occupancy	May 2012

### **Project Budget:**

Facility Useful life	50-75 years
Total Project Cost	\$ 185,000,000
Total Project Construction Cost	\$ 134,000,000
Total Project Cost per GSF	\$ 631
Construction Cost per GSF	\$ 457

### **Change in Annual O&M Cost:**

Utilities	\$ 2,300,000
Personnel	781,000
All Other Operating	<u>948,000</u>
Total Annual O&M Cost	\$ 4,029,000

## Capital Project Cost Estimate

**University:** ASU at the Tempe campus

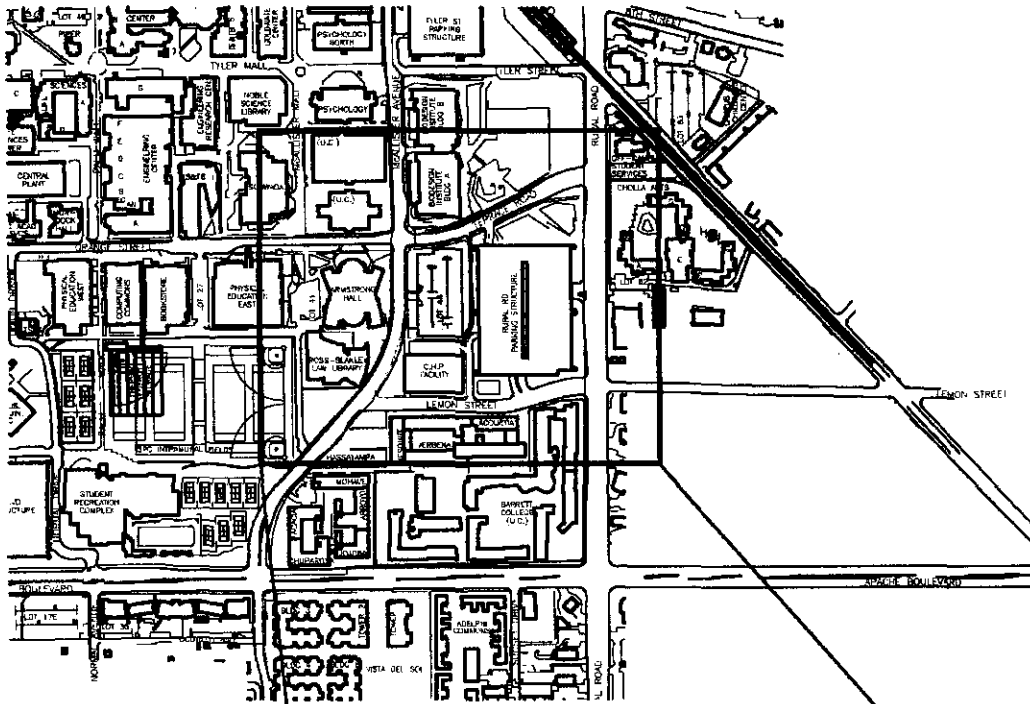
**Project:** Interdisciplinary Science & Technology  
Building 4

	<b>Project Implementation Approval</b>	<b>Project Approval</b>	<b>Updated Budget</b>
Capital Costs			
1. Land Acquisition	\$ -	\$ -	\$ -
2. Construction Cost	-	-	-
A. New Construction	134,000,000	134,000,000	111,000,000
B. Renovation	-	-	-
C. Special Fixed Equipment	-	-	-
D. Site Development (excl. 2.E.)	-	-	-
E. Parking and Landscaping	-	-	-
F. Utilities Extensions	-	-	-
G. Other*	-	-	-
Subtotal Construction Cost	<u>\$ 134,000,000</u>	<u>\$134,000,000</u>	<u>\$ 111,000,000</u>
3. Fees			
A. Construction Mgr	\$ 1,000,000	\$ 1,000,000	\$ 1,500,000
B. Architect/Engineer	16,400,000	16,400,000	16,000,000
C. Other	100,000	100,000	150,000
Subtotal Consultant Fees	<u>\$ 17,500,000</u>	<u>\$ 17,500,000</u>	<u>\$ 17,650,000</u>
4. FF&E Movable	\$ 8,000,000	\$ 8,000,000	\$ 8,000,000
5. Contingency, Design Phase	8,000,000	8,000,000	4,000,000
6. Contingency, Constr. Phase	8,000,000	8,000,000	8,000,000
7. Parking Reserve	1,500,000	1,500,000	2,000,000
8. Telecommunications Equipment	2,500,000	2,500,000	3,000,000
Subtotal Items 4-8	<u>\$ 28,000,000</u>	<u>\$ 28,000,000</u>	<u>\$ 25,000,000</u>
9. Additional University Costs			
A. Surveys, Tests, Tempe Develop. Fee	\$ 520,000	\$ 520,000	\$ 1,475,000
B. Move-in Costs	300,000	300,000	400,000
C. Printing Advertisement, Audit Support	18,809	18,809	517,098
D. Keying, signage, facilities support	400,000	400,000	280,000
E. Project Management Cost (2.09%)	3,746,091	3,746,091	3,233,692
F. State Risk Mgt. Ins. (.0034 **)	515,100	515,100	444,210
Subtotal Addl. Univ. Costs	<u>\$ 5,500,000</u>	<u>\$ 5,500,000</u>	<u>- \$ 6,350,000</u>
<b>TOTAL CAPITAL COST</b>	<u><u>\$ 185,000,000</u></u>	<u><u>\$185,000,000</u></u>	<u><u>\$ 160,000,000</u></u>

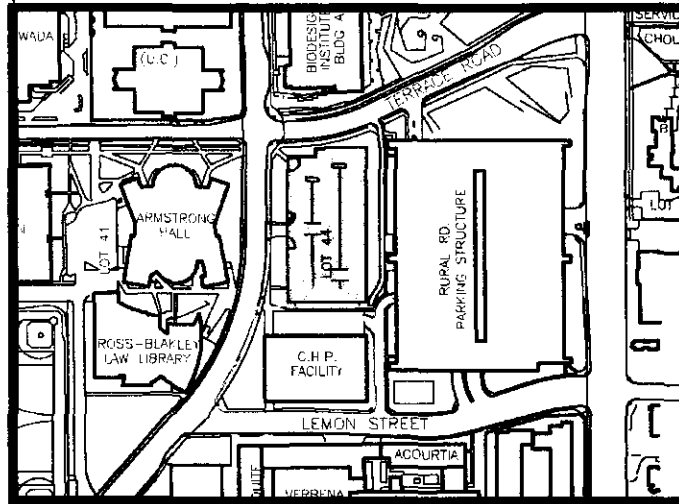
\* Universities shall identify items included in this category

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

# GENERAL LOCATION MAP



## IS & TB 4 PROJECT LOCATION



## AREA IN DETAIL