STATE OF ARIZONA

Joint Committee on Capital Review

1716 WEST ADAMS
PHOENIX, ARIZONA 85007

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JOINT COMMITTEE ON CAPITAL REVIEW
Thursday, November 13, 2008
1:30 P.M.
House Hearing Room 3

MEETING NOTICE

- Call to Order

- Approval of Minutes of October 2, 2008

- DIRECTOR'S REPORT (if necessary).

1. ARIZONA DEPARTMENT OF ADMINISTRATION - Review of $735,000 in FY 2009 Building Renewal Projects and Reallocation of $1.3 Million in FY 2008 Building Renewal Funds.

2. ARIZONA DEPARTMENT OF TRANSPORTATION - Review of $984,700 in FY 2009 Building Renewal Projects.

3. UNIVERSITY LOTTERY BOND PROJECTS
   A. Arizona State University - Review of $20.8 Million in University Lottery Bond Projects - Building Renewal.
   B. University of Arizona - Review of $17.5 Million in University Lottery Bond Projects - Building Renewal.
   C. Northern Arizona University - Review of $26.3 Million in University Lottery Bond Projects - Building Renewal.

The Chairman reserves the right to set the order of the agenda.
11/6/08
sls

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STATE OF ARIZONA

Joint Committee on Capital Review

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MINUTES OF THE MEETING
JOINT COMMITTEE ON CAPITAL REVIEW

Thursday October 2, 2008

The Chairman called the meeting to order at 1:40 pm, Thursday October 2, 2008 in House Hearing Room 1. The following were present:

Members:	Senator Burns, Vice-Chairman	Representative Pearce, Chairman
	Senator Aguirre	Representative Groe
	Senator Waring	Representative Kavanagh
	Senator Verschoor	Representative Lopes
		Representative Lujan
Absent:	Senator Aboud	Representative Boone
	Senator Arzberger	Representative Schapira
	Senator Johnson	

APPROVAL OF MINUTES

Hearing no objections from the members of the Committee, Chairman Russell Pearce stated the minutes of June 25, 2008 would stand approved.

Richard Stavneak, Director, JLBC gave a presentation on the Budget Update and a list of items on the agenda *(Attachment 1 and Attachment 2).*

ARIZONA STATE UNIVERSITY (ASU), UNIVERSITY OF ARIZONA (UA), AND NORTHERN ARIZONA UNIVERSITY (NAU) – University Lottery Bond Projects -- Agency Request (Information Only).

Ms. Leatta McLaughlin, JLBC Staff, said she would be discussing the University Lottery bonding package for all 3 universities *(Attachment 3).* These are information only items, at this time. She stated that there were 2 additional agenda items included even though they were submitted late, in order to give the Committee an overview of what all 3 universities are requesting.

The Committee requested from each of the universities, the following information on the building renewal Lottery bond projects:

- How much funding each university is going to put up and what the funding source is for that money.
- Which of these items are critical in nature?

(Continued)

- What is the increased cost of doing interest only payments for the first 5 years versus the original estimate of principal payments from the beginning?

Mr. Lorenzo Martinez, Arizona Board of Regents, Mr. Jim Florin, Budget Director, UA, Mr. Richard Stanley, Senior Vice President and University Planner, ASU, and Ms. Christy Farley, Director, Government Affairs, NAU, responded to member questions.

MOHAVE COMMUNITY COLLEGE DISTRICT – Review of General Obligation (GO) Bond Projects.

Ms. Marge Zylla, JLBC Staff, said this item is a review of Mohave Community College District's GO bond. Mohave is proposing a bond for $111.5 million that would be issued in 6 installments from FY 2010 to FY 2018. This would go before voters in November 2008 and, if approved, it would be paid for by an increase in property taxes. The bond would fund land acquisition, new construction and renovations.

Dr. Mike Kearns, Chancellor, Mohave Community College, responded to member questions.

Senator Burns moved that the Committee give a favorable review of the proposed $111.5 million GO bond issuance with the provision that the district return to the Committee for review prior to each actual bond issuance, which would allow the Committee to receive greater detail on the projects to be funded with each individual issuance. The motion carried.

PINAL COUNTY COMMUNITY COLLEGE DISTRICT - Review of General Obligation (GO) Bond Projects.

Ms. Marge Zylla, JLBC Staff, said this item is a review of the Pinal County Community College District's GO bond. Pinal Community College District, which is known as Central Arizona Community College, is proposing to issue a bond for $99.0 million in FY 2010. This would go before voters in November 2008 and, if approved, it would be paid for by an increase in property taxes. The bond would fund a variety of expansion efforts, renovations, and purchases.

Senator Burns moved that the Committee give a favorable review of the proposed $99.0 million GO bond issuance. The motion carried.

ARIZONA DEPARTMENT OF ADMINISTRATION (ADOA)

A. Review of the Arizona Department of Corrections (ADC) 4,000 Public Prison Beds and Yuma Water Treatment Plant.

Mr. Martin Lorenzo, JLBC Staff, said this is a review of ADOA's scope, purpose, and estimated cost of the construction of 4,000 new public prison beds and a Yuma water treatment plant.

Mr. Charles Goldsmith, Division Director, ADC, Mr. Paul Shannon, Assistant Director, ADOA, and Mr. Roger Berna, General Manager, ADOA responded to member questions.

Senator Burns moved that the Committee give a favorable review to the expenditure of $202 million for the 4,000-bed contract and Yuma water treatment plant with the following provisions:

1. *The final cost details and timeline for each of the 4 bid components.*
2. *Any increase in costs above the current estimate of $195.3 million. The Committee, however, would review any project expansion not already addressed in this memo.*
3. *The timing for opening the 4,000 beds.*

Senator Verschoor moved a substitute motion that the Committee hold off on approval of this item until progress on the private prisons is made. The substitute motion failed.

The original motion carried.

B. Review of Lewis and Tucson Prison Water and Wastewater Projects.

Mr. Martin Lorenzo, JLBC Staff, said this is a review of the scope, purpose, and estimated cost of 2 Arizona Department of Corrections (ADC) prison water and wastewater projects that include the renovation of the water treatment system at the Lewis prison and the connection of the southern most section of the Tucson prison's sewer system with the Pinal County sewer system. These projects totaling $4,602,800 will be funded from $6,800,000 in lease-purchase proceeds already received and approved by Committee.

Senator Burns moved that the Committee give a favorable review to ADOA's request of 2 ADC prison water and wastewater projects totaling $4,602,800. In addition, the Committee requested that ADOA report on the use of contingency funds exceeding $500,000. The motion carried.

ARIZONA DEPARTMENT OF CORRECTIONS (ADC) – Review *and* Approval of Energy Performance Contract.

Ms. Leatta McLaughlin, JLBC Staff, stated that this item was for review and approval of ADC's Energy Performance Contract before the agreement takes effect.

Senator Burns moved that the Committee give a favorable review and approval, with the provision that ADC retains all energy savings in excess of the debt service payments. This provision does not constitute endorsement of any level of General Fund appropriations for purchase of the energy equipment or the debt service payments. ADC will also report to the Committee when they annually report to the Speaker of the House of Representatives, President of the Senate, and the Governor concerning the expenditures, account balances, and energy and dollar savings for their energy conservation measures as required by A.R.S. § 34-456. The motion carried.

ARIZONA GAME AND FISH DEPARTMENT (AGFD) – Review of FY 2009 Building Renewal Allocation Plan and Report on Flood Warning System.

Ms. Caitlin Acker, JLBC Staff, said this item was a review of the FY 2009 Building Renewal Allocation Plan and report on the FY 2007 Flood Warning System.

The Chairman said these 2 items would be voted on separately.

Senator Burns moved that the Committee give a favorable review of the department's FY 2009 Building Renewal Allocation Plan. The $531,000 plan includes the following expenditures:

- *$52,200 for fish hatchery projects*
- *$45,300 for shooting range projects.*
- *$433,500 for office projects.*

The motion carried.

Senator Burns moved that the Committee require review of all FY 2009 AGFD capital projects appropriated by Laws 2008, Chapter 289 before expenditure of the appropriations. The motion carried.

SCHOOL FACILITIES BOARD (SFB) – Review of FY 2009 $585 Million Lease-to-Own Agreement and FY 2009 New School Construction Report.

Ms. Leatta McLaughlin, JLBC Staff, said that this item was a review of SFB's FY 2009 New School Construction report and $585 million lease-to-own agreement.

Mr. John Arnold, Executive Director, SFB, responded to member questions.

Senator Burns moved that the Committee give a favorable review of the FY 2009 New Construction Report and $585 million lease-to-own agreement, which excludes Full-Day Kindergarten (FDK) capital costs of $8 million. In addition, the Committee requests that SFB submit a final list of projects and debt service schedule associated with the lease-to-own agreement along with a list of FDK projects. The motion carried.

Representative Pearce said he chose to put the remaining items on the agenda for information only in light of the current budget constraints, until better information is available.

ARIZONA DEPARTMENT OF ADMINISTRATION – FY 2009 Building Renewal Allocation Plan and Reallocation of FY 2008 Building Renewal Funds -- Agency Request (Information Only).

Mr. Dan Hunting, JLBC Staff, said reallocation of FY 2008 Building Renewal Funds is an information only item. The agency is seeking review of the FY 2009 Building Renewal plan to allocate $6.1 million from the Capital Outlay Stabilization Fund.

ARIZONA STATE PARKS BOARD (SPB) – State Parks Enhancement Fund Project -- Agency Request (Information Only).

Mr. Art Smith, JLBC Staff, said this item is to consider funding for repairs to the Douglas Mansion at Jerome State Historical Park, which is an old adobe building.

Mr. Jay Ziemann, Assistant Director, SPB, provided a handout *(Attachment 4)*.

ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) – FY 2009 Building Renewal Allocation Plan -- Agency Request (Information Only).

Mr. Juan Beltran, JLBC Staff, said that ADOT is requesting review of their FY 2009 Building Renewal Allocation Plan. The plan's total is $4.2 million for various building renewal projects across the state.

UNIVERSITY OF ARIZONA (UA)

A. Residence Halls and Residence Life Building Renewal -- Agency Request (Information Only).

B. Enterprise Systems Replacement (Mosaic) Project -- Agency Request (Information Only).

C. Energy Bonds -- Agency Request (Information Only).

ARIZONA STATE UNIVERSITY (ASU) – Interdisciplinary Science and Technology Building 4 Bond Project -- Agency Request (Information Only).

Ms. Leah Kritzer, JLBC Staff, provided a brief description for items 10A through 11A. These are information only university bond projects which are not related to the university Lottery projects which were discussed earlier.

On item 10A, UA proposed to spend $159.3 million in system revenue bonds to construct 2 new residence halls and $37.3 million for residence life building renewal projects.

On item 10B, UA proposed to spend $33.3 million is system revenue bonds to replace its major computer systems, which support the university's personnel system, research administration, and financial reporting.

For item 10C, UA proposed to enter into a third party debt financing agreement for $2.3 million to purchase solar panels.

For item 11A, ASU proposed to spend $185 million in system revenue bonds to construct a new science building.

Mr. Greg Fahey, UA, Mr. Joel Valdez, UA, and Mr. Kurt Freund, RBC Dain Rauscher, responded to member questions.

Without objection, the meeting adjourned at 4:07 p.m.

Respectfully submitted:

Cheryl Kestner, Secretary

Leatta McLaughlin, Principal Fiscal Analyst

Representative 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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DATE: November 6, 2008

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

THRU: Richard Stavneak, Director

FROM: Dan Hunting, Fiscal Analyst

SUBJECT: Arizona Department of Administration - Review of $735,000 in FY 2009 Building Renewal Projects and Reallocation of $1.3 Million in FY 2008 Building Renewal Funds

Request

A.R.S. § 41-1252 requires Committee review of expenditure plans for building renewal monies. The Arizona Department of Administration (ADOA) requests the Committee review its FY 2009 Building Renewal Allocation Plan. Laws 2008, Chapter 289 appropriated $6,100,000 from the Capital Outlay Stabilization Fund (COSF) to ADOA to fund 20% of the building renewal formula in FY 2009.

In addition, ADOA requests review of $1,296,610 worth of reallocated FY 2008 Building Renewal monies to fund the Department of Revenue (DOR) Elevator Renovation Project. At the August 16, 2007 meeting, the Committee favorably reviewed the ADOA FY 2008 Building Renewal Allocation Plan with the provision that ADOA submit for Committee review any reallocation above $100,000 between the individual projects.

ADOA submitted these requests for review at the October 2, 2008 meeting, but no action was taken on the requests as the Chairman is seeking further information on the Governor's plan to resolve the FY 2009 budget shortfall and whether the funding associated with this particular agenda item could be part of that solution.

Since then, ADOA has identified $735,000 of the $6.1 million FY 2009 Building Renewal plan and the entire $1.3 million FY 2008 Building Renewal reallocation plan as critical in nature. The Chairman has placed these projects on the agenda for review.

Recommendation

The Committee has at least the following options for the following 2 items:

<u>FY 2009 Building Renewal Projects</u>

The Committee has at least the following 2 options:

1. A favorable review of the $735,000 in critical projects. This amount funds the 2 most critical projects identified by ADOA--$475,000 to replace the kitchen roof at the Arizona Department of Juvenile

(Continued)

Corrections (DJC) Catalina Mountain School and $260,000 for roof repairs at the Arizona Schools for the Deaf and Blind (ASDB). These projects are consistent with Building Renewal guidelines and appropriations.

2. An unfavorable review. These monies could be used to reduce the FY 2009 budget shortfall.

The JLBC Staff also recommends the provision that ADOA submit for Committee review any reallocation above $100,000 between the individual projects.

Reallocation of FY 2008 Building Renewal Funds
The Committee has at least the following 2 options:

1. A favorable review of the department's request to reallocate $1,296,610 of the FY 2008 Building Renewal appropriation to the elevator project at 1600 W. Monroe.

2. An unfavorable review. These monies could be used to reduce the FY 2009 budget shortfall.

Analysis

FY2009 Building Renewal Projects
The following table includes the projects and corresponding amounts requested by ADOA as part of their FY 2009 Building Renewal plan, along with the amounts considered critical in nature.

FY 2009 Building Renewal Projects

	Request	**Review**
Roofing Projects		
ADOA Statewide Roofing and Leak Abatement	$ 275,000	$ 0
DJC Catalina Mountain Facility Roof Replacement	225,000	475,000
Executive Tower Replace Roof Membrane	220,000	0
ASDB Roof Repair Apache Building	210,000	260,000
DPS Replace Roof Membrane at Phoenix Fleet Building	137,500	0
Subtotal	*$1,067,500*	*$735,000*
HVAC Projects		
Supreme Court Replace Thermal Storage System	$1,600,000	$ 0
Attorney General Replace Cooling Towers & Heat Pumps	350,000	0
Senate and House Replace Air Handlers	335,000	0
Subtotal	*$2,285,000*	*$ 0*
Water and Sewer Projects		
DES Sewage Lift Pump Station	$ 96,000	$ 0
DOC Well Renovation	80,000	0
DES Well Renovation	25,000	0
Subtotal	*$ 201,000*	*$ 0*
Infrastructure Projects		
Executive Tower Replace Electrical Service Entrance	$ 600,000	$ 0
Executive Tower Phase II Seal Exterior Expansion Joints	305,000	0
DPS Fire Alarm System	220,000	0
ADOA Building System Carpet & Flooring	200,000	0
DES Elevator Renovation	65,000	0
DOR Engineering Assessment	40,000	0
Senate Fire Alarm System	20,000	0
Subtotal	*$1,450,000*	*$ 0*
Other		
Emergency Projects/Contingencies	$ 820,000	$ 0
Construction Project Management	275,000	0
Risk Management Construction Insurance	1,000	0
Subtotal	*$1,096,000*	*$ 0*
TOTAL	**$6,099,500**	**$735,000**

(Continued)

The following provides an overview of the projects included in ADOA's request.

Roofing Projects
ADOA requested a total of $792,500 for 4 different projects to replace roofs that have reached the end of their useful lives and have ongoing leaking problems. Additionally, ADOA requested $275,000 for roofing and leak abatement at buildings statewide. These funds would be used to perform emergency repairs and partial repairs at sites where full repair or replacement of the roof can be deferred to a later date. Of this $1,067,500, ADOA has identified $735,000 worth of critical projects at ASDB and the Catalina Mountain School operated by DJC.

ADOA's original FY 2009 Building Renewal plan would have allocated $225,000 to reroof the kitchen at Catalina Mountain School. Since the October 2nd meeting, there has been a partial collapse of the roof, which has rendered the building unusable and caused DJC to rent portable kitchen facilities at a cost of $9,000 per month. ADOA Construction Services estimates that the updated cost to repair the roof and make structural changes recommended by a structural engineer will be $475,000. ADOA Risk Management is processing a claim due to the roof collapse, and it is expected that they will reimburse approximately half of the total expense, an amount sufficient to cover the damage caused by the roof collapse.

The Apache Dorm at ASDB has been examined by a structural engineer who found that the roof has water damage and that it has been overloaded by the addition of concrete deck panels. Full assessment of the condition of the roof cannot be made until the concrete panels have been removed; however, a preliminary estimate of the cost to repair the roof is $260,000.

The following FY 2009 Building Renewal projects were part of ADOA's request but are not included in the current review:

HVAC Projects
ADOA requested a total of $2,285,000 for 4 heating and air conditioning related projects. The monies would be used to replace air handlers, cooling towers, and a thermal storage system, which have all reached the end of their useful lives.

Water and Sewer Projects
ADOA requested a total of $201,000 for 3 projects relating to water and sewer systems. Monies would be used to replace a sewage lift pump and renovate water wells.

Infrastructure Projects
ADOA requested a total of $1,450,000 for 7 projects. These projects include fire alarms, elevator code related renovations, electrical upgrades, and building exterior corrections. Also included in the allocation is $200,000 to replace flooring and carpet at state facilities.

Other
In order to cover project management costs for FY 2009 building renewal projects, ADOA requested $275,000. A total of $820,000 would be allocated for unanticipated and emergency projects.

Reallocation of FY 2008 Building Renewal Funds
At the August 16, 2007 meeting, the Joint Committee on Capital Review favorably reviewed the ADOA FY 2008 Building Renewal Allocation Plan with the provision that ADOA submit for Committee review any reallocation above $100,000 between the individual projects. The original FY 2008 ADOA Building Renewal Allocation included $300,000 to design a 2-phase, 5-cab elevator system renovation and to rebuild the freight elevator at 1600 West Monroe, which houses the DOR.

Having completed the design portion of the project, ADOA now proposes to complete both Phases 1 and 2 renovations and repairs at a cost of $1,296,610 above the original $300,000 allocated for Phase 1 of the project. This cost is higher than expected due to code requirements and interconnected control systems for the passenger and freight elevators. The cost would be reallocated from other FY 2008 Building Renewal

(Continued)

projects. Of the proposed $1,296,610 reallocation, $506,794 would come from construction contingency funds, $343,035 from emergency funds, and the remaining $446,781 from various projects that were cancelled or did not expend their full FY 2008 allocation.

RS/DH:ss

Janet Napolitano
Governor

William Bell
Director

ARIZONA DEPARTMENT OF ADMINISTRATION

100 North 15th Avenue
PHOENIX, ARIZONA 85007

(602) 542-1500

September 11, 2008

The Honorable Russell Pearce, Chairman
Joint Committee on Capital Review
Arizona House of Representatives
1700 West Washington
Phoenix, Arizona 85007

Dear Representative Pearce:

The Arizona Department of Administration (ADOA) requests that the Joint Committee on Capital Review (JCCR) review the re-allocation of $1,296,610 of the FY 2008 Building Renewal appropriation. As a provision of the original review, JCCR requested that ADOA submit for Committee review any re-allocation above $100,000 between the individual FY 2008 projects. The following re-allocation provides funding for Phase 2 of the Arizona Department of Revenue (DOR) Elevator Renovation Project at 1600 West Monroe.

FY 2008 Building Renewal Re-Allocation Summary

To Elevator Renovation Project at 1600 W. Monroe (DOR)	
Original Allocation Phase 1	$300,000
Re-Allocation to Phase 1	$334,680
Re-Allocation Phase 2	$961,930
Total Re-Allocation	$1,296,610
Total Allocation to Project	$1,596,610

From Original Project Allocations	
Construction Contingency	$506,794
Emergency Funds	$343,035
1740 W. Adams Re-roof	$179,781
DHS Sewer Line, Dietary Bldg	$137,000
1510 Utility Building Re-roof	$15,000
1300-1400 Service Entrance	$80,000
Statewide Floor Covering	$35,000
Total Available to Re-Allocate	$1,296,610

The FY 2008 Building Renewal allocation plan included $300,000 to design a five-cab traction system renovation and to re-build the freight elevator at 1600 West Monroe as Phase 1 of a two-phase plan to renovate all five cabs. The design for the renovation of

the freight elevator and the passenger elevators is complete; however, the architect's recommended Phase 1 scope of work is significantly greater than was anticipated due to code requirements for fire alarms, increased fire-proofing needs, and interconnected freight and passenger elevator control systems.

ADOA received construction bids for Phase 1 and Phase 2 in July 2008 totaling approximately $1.6 million. Given the trends of increased overhead costs as a result of escalating fuel and construction materials costs, completion of this project as a single two-phase job will reduce the potential for increased construction costs. It will also eliminate a requirement for a second procurement process and facilitate well-timed project management to circumvent delays or business interruption at the Department of Revenue.

The re-allocation of monies is necessary because of the urgency of this project and the potential for significant and negative statewide impacts if deferred. Failure of DOR's elevator system during the State's peak revenue collection period would negatively impact business continuity, including the expeditious processing of revenues and refunds. Re-allocations from FY 2008 Building Renewal projects are available due to favorable bids that were less than original project estimates and reductions in scopes of work.

If you have any questions or need additional information, please contact me at (602) 542-1500.

Sincerely,

William Bell
Director

c: The Honorable Robert Burns, Vice-Chairman, JCCR
Richard Stavneak, Director, JLBC Staff
Leatta McLaughlin, Senior Analyst, JLBC Staff
James Apperson, Director, OSPB
Marcel Benberou, Assistant Director, OSPB
Matt Gottheiner, Senior Budget Analyst, OSPB
Scott Smith, Deputy Director, ADOA
Paul Shannon, Assistant Director, ADOA
Lynne Smith, Assistant Director, ADOA
Roger Berna, General Manager, ADOA
Nola Barnes, General Manager, ADOA

FY 2009 Building Renewal Allocation Plan
ADOA Building System
September 11, 2008

FY 2009 Appropriation $6.1 Million

Continuing Projects - Additional Allocations for Projects Started in FY 2008

Supreme Court	Replace Thermal Storage System		$1,600,000
ADOA - Executive Tower	Phase II Seal Exterior Expansion and Balcony Joints		$305,000
		Subtotal	**$1,905,000**

FY 2009 Building Renewal Project Allocations

Fire & Life Safety

DPS	Upgrade Fire Alarm System; Replace Halon Fire Suppression System - Compound Computer Building		$220,000
Senate	Repair Fire Alarm System		$20,000
		Subtotal	**$240,000**

Building Shell (Asset Preservation)

ADOA - Revenue	Engineering Assessment		$40,000
DPS	Replace "Built-Up" Roof Membrane – PHX Fleet Building		$137,500
ADJC	Catalina Mountain Facility Roofing		$225,000
Statewide Roofing	ADOA Building System-wide Roofing Repairs and Replacements		$275,000
ASDB	Roof Repair – Apache Building		$210,000
ADOA - Executive Tower	Replace Single-Ply Membrane Roof		$220,000
			$1,107,500

Building Services

ADOA - Executive Tower	Replace Electrical Service Entrance and Switch Gear		$600,000
House & Senate	Replace Two Roof Mounted Air Handlers		$335,500
ADOA - AG's Office	Replace Two Cooling Towers and Five Water Source Heat Pumps - 15 S. 15th Ave.		$350,000
ADES	Elevator Modernization – ADES Director's Office - 1717 W. Jefferson		$65,000
	Emergency and Imminent Failures		$820,000
		Subtotal	**$2,170,500**

Interior Finishes

Statewide Flooring	ADOA Building System-wide Carpet and Flooring Replacements	**$200,000**

	Infrastructure		
ADES	Sewage Lift-Pump Station – Coolidge Training Program		$96,000
ADES	Well No. One Renovation – Coolidge Training Program		$25,000
ADC	Well Renovation – Fort Grant, Safford		$80,000
		Subtotal	**$201,000**
	Project Management and Risk Management Construction Insurance Premium		
Project Management	Construction Services Project Management Costs (6/1/08-5/30/09)		$275,000
Risk Mgt Insurance	Risk Management Insurance Premium		$1,000
		Subtotal	**$276,000**
		Total Allocation	**$6,100,000**

DEPARTMENT OF ADMINISTRATION BUILDING SYSTEM
FY 2009 BUILDING RENEWAL ALLOCATION PLAN

CONTINUING PROJECTS

$1.6 M: Arizona Supreme Court – Replace Thermal Storage System

ADOA allocated $65,000 of the FY 2008 building renewal appropriation for an engineering design to replace the Arizona Supreme Court building's ice harvester cooling system with three new chillers. The FY 2009 allocation includes $1.6 million to complete the project. This includes the construction costs for three 210-ton conventional low temperature chillers, chilled water pumps, piping, electrical work, and a temporary chiller rental for a portion of the installation period. The procurement process will commence as soon as funding is reviewed.

The existing 18 year old ice harvester system is based on technology used in commercial ice cube making systems. It requires immediate replacement due to its obsolescence and susceptibility for catastrophic failure. The outmoded system is tremendously energy inefficient, utilizes R-22 refrigerant, and has surpassed its useful life, resulting in routine failure. Moreover, the system and its components are no longer manufactured, making repairs difficult, and the R-22 refrigerant is being phased out of use entirely. By January 1, 2010, chemical manufacturers may still produce R-22 to service existing equipment, but not for use in new equipment. By January 1, 2020, manufacturers will no longer be able to produce R-22 to service existing air conditioners and heat pumps.

A catastrophic failure would require the rental of a 500 ton low-temperature chiller and condensing unit to sustain the Supreme Court's business continuity. The closest rental chiller of this size is in Las Vegas, Nevada. Assuming such a contingency chiller was available for rent, delivery to Phoenix would be approximately five days, plus the time required for connection. The rental fee for the chiller would be approximately $1,000 per day. This project will facilitate conservation of energy.

$305,000: ADOA – Executive Tower – Phase II Seal Exterior Expansion and Balcony Joints

ADOA allocated $380,000 of the FY 2008 building renewal appropriation for an architectural design (Phase I) to seal the exterior of the Executive Tower, including the soffits, balcony expansion joints, and the cavities behind the large state seal on the west side of the building. ADOA has completed Phase I. The FY 2009 allocation includes $305,000 to complete the project. The projected total cost is $685,000, including design, construction, contingency, and construction administration.

The architect's design recommends the simultaneous demolition of the deteriorated sealant and backer rod, subsequent major maintenance/replacement of the building's vertical and horizontal panel control joints, entrance canopy joints, vertical and horizontal column joints, soffit joints, and window glazing seals. The project is anticipated to commence in the fall of 2008 when outside temperatures have cooled sufficiently so as not to negatively impact the integrity of the sealant being applied to the structure joints. Completion of the work will result in increased energy efficiency and a weather tight exterior. Moreover, the Mexican Free tail bats, which are seasonally roosting in the ceiling plenums of the building, will be forced to look for other living arrangements.

NEW PROJECTS

FIRE & LIFE SAFETY

$220,000: Arizona Department of Public Safety – Upgrade Fire Alarm System; Replace Halon Fire Suppression System

The fire alarm system in the 5,500 SQFT DPS Compound East Building is approximately 20 yeas old and has surpassed its expected useful life. The Halon fire suppression system is obsolete and the trouble and alarm reporting features do

not provide the precise information that DPS Security or building occupants require to determine specific problem locations, trouble and/or alarms. In the event of a Halon discharge, the fire suppression system would have to be retrofitted or replaced with a compatible and very expensive extinguishing agent, such as Inergen or FM200 as Halon is no longer available due to environmental concerns. .

These fire and life safety projects are DPS mission critical. Failure to pro-actively undertake these projects could have significant negative public safety impacts. Tragically, a fire, an alarm, or unanticipated power failure could result in the crash of DPS computers and related equipment in Arizona and in other states.

Construction costs, design fees, and general contractor costs are projected to be $2.25 per SQFT for up-grading the fire alarm system with a Class A fully addressable system and $4.73 a CUFT for replacing the Halon fire suppression system.

$20,000: ADOA – Arizona State Senate – Repair Fire Alarm System

The Thorn Auto-Call fire alarm system in the Senate building and other structures is obsolete. Thorn Auto-Call has been out of business for many years and the parts are not manufactured or supported by an alternative source. Unfortunately, sufficient funding is not available in the ADOA building renewal appropriation to address all critical issues at this time; however, Simplex, a firm that ADOA has utilized to complete past repairs to the system, has stated it can make a significant repair to the panel to eliminate the routine trouble calls for service and keep the system operational. The Senate fire alarm system is targeted for replacement FY 2011 in the ADOA Building System Capitol Improvement Plan, though the plan might be impacted by pending suggestions of new or renovated House and Senate buildings. As ADOA replaces Thorn Auto-Call fire alarm systems throughout the Capitol Mall, the department is retaining the salvageable parts for use in the remaining systems.

BUILDING SHELL (ASSET PRESERVATION)

$40,000: ADOA – Arizona Department of Revenue – Engineering Assessment

The front entrance steps and other foundation areas at 1600 West Monroe are separating from the building creating trip hazards and structural integrity concerns. ADOA will hire a structural engineer to assess the situation and provide recommendations for a design to remediate the problem.

$275,000: ADOA Building System – Statewide Roofing and Leak Abatement

The ADOA Building System is rife with leaking roofs and rotting exterior sealants totaling millions of dollars. Agencies consistently request funding to abate water intrusion caused by leaking roofs and sealants. The FY 2009 allocation will address only a fraction of those projects. Many structures have roofs that have reached or exceeded their useful lives or have building shells that no longer effectively seal the structure from rain and leaks. In addition to the specific roof replacements identified in the "BUILDING SHELL (ASSET PRESERVATION)" section, ADOA is allocating $275,000 for statewide roofing and leak abatement projects that will be prioritized as conditions become known and funds are available. Potential projects include, but are not limited to, the following projects identified as at risk of imminent failure:

Priority Projects	Cost
Repair roofs at 9535 and 9545 East Doubletree Ranch Road	$ 50,000
Reseal windows at 1535 West Jefferson	$ 175,000
Repair roofs at 2422 West Holly	$ 40,000
Repair roofs at House and Senate	$ 50,000
Total - projects identified as at risk of imminent failure	$ 315,000

DEPARTMENT OF ADMINISTRATION BUILDING SYSTEM

FY 2009 BUILDING RENEWAL ALLOCATION PLAN

Funds will be allocated to perform partial roof repairs for leaking buildings where the repair can defer the need for a new roof membrane, as well as for emergency roof repairs. Additional emergency projects will be generated by emergency reports from ADOA building system agencies, unanticipated storm damage, risk management evaluations, and pending building condition assessments (procured with FY 2008 building renewal funds).

Physical deterioration through the combination of wear and tear, the effects of the aging process, physical decay, the action of the elements, structural defects, and deferred maintenance have contributed to leaks, oxidized roof material, missing or split shingles and tiles, punctures, tears, shrinkage, splitting, blistering or embrittled coatings, missing flashing, stained interior ceilings, sagging or decaying roof structures, and more. Some types of deterioration may be very apparent, while others may require a more thorough examination by a qualified source. Roof replacements of ten to fifteen years ago have not held up as well as the original roofs because the quality of roofing materials has deteriorated with the increased cost of petroleum based products. Physical deterioration of roofs and building shells that are beyond their useful lives are subject to repeated leaking that can damage the building structure and its interior contents resulting in more significant and frequent Risk Management loss claims. The leaks can damage and render the roof insulation ineffective and can contribute to increased heating and cooling costs. Repeated leaks can lead to toxic mold growth that is often behind drywall systems, above the ceilings, and in the roof structures; particularly wood beams, joists, and decking. The potential costs of structure damage and mold abatement can often exceed the actual cost of the roof membrane. Comprehensive roof and sealant repairs and replacements will facilitate energy conservation.

$137,500: Department of Public Safety – Replace "Built-Up" Roof Membrane – PHX Fleet Building

DPS has requested the replacement of this roof for over three years. This allocation will allow DPS to design and replace the "built-up" roof membrane on the 15, 722 square foot Phoenix fleet building. Using current construction cost estimates, the cost for design and replacement is approximately $137,500; however, these costs have the potential to escalate given the increasing cost of asphalt (petroleum-based product). While previous year's building renewal funds have enabled partial repairs to the roof, it is not practical to continue to defer its replacement. This project will facilitate conservation of energy.

$225,000: Arizona Department of Juvenile Corrections – Catalina Mountain Facility Roofing

ADJC's primary roof repair priorities include repair of the Catalina Mountain facility kitchen dining and four South housing units. This is a continuance of funding to abate ADJC's approximate $1.4 million in deficient roofing systems. This project will facilitate conservation of energy.

ADOA allocated $275,000 for ADJC roofing projects in FY 2008 and will continue to work with ADJC to make the most of its funding for prioritized roof replacements. Funding will have to continue well into future years to correct the morass of roofing deficiencies in ADJC's mission critical structures.

$210,000: Arizona School for the Deaf and the Blind – Roof Repair – Apache Building

The flat roof in the building's equipment well is leaking and needs to be replaced. Because the roof has a limited slope, water accumulates in ponds at the south end. The roof is sagging at both ends of its well. The scope of this project includes the permanent removal of concrete paver roof ballasts, replacement of the "built-up" roof system, and any required repairs to the roof deck. Tapered roof insulation will be applied to the roof deck to create the slope necessary for facilitation of water drainage. This project will facilitate conservation of energy.

$220,000: ADOA – Executive Tower – Replace Single-Ply Membrane Roof

Several repairs to this roof have been funded from past year's building renewal funds but are becoming increasingly ineffective. This roof replacement cannot be deferred without significant risk of property damage and interruption of services that are mission critical to the state. The estimated cost includes design and replacement of the roof; however, roofing materials have the potential to escalate given the volatile cost of asphalt, which is a petroleum based product. This project will be completed after the Phase II sealant project is concluded to facilitate maximum success. This project will facilitate conservation of energy.

BUILDING SYSTEMS & SERVICES

$335,500: ADOA –Senate and House of Representatives – Replace Two Roof Mounted Air Handlers

Four of these large 50-year old roof mounted air handlers have been replaced in the past 5 years as the units have failed. These HVAC systems were original to the structures which are circa 1960's. In the most recent failure incident, water leaking during the night caused substantial damage to legislative offices and the main legislative chamber. The pro-active replacement of the remaining original aging air handlers will mitigate risk of another costly emergency incident and interruption of mission critical services. This project will result in energy conservation.

$600,000: ADOA – Executive Tower – Replace Electrical Service Entrance and Switch Gear

The Executive Tower has two connected electrical service entrances with a total of 4,166 amps. The antiquated service entrance, main breakers, and switchgear require replacement. Electrical panels have a life expectancy of 17 years and distribution and service entrance systems have an expected life of 20 years. This structure was constructed in 1974 and the main electrical panels, feeder conduit, and service entrances, which are now over 30 years old, are well beyond their expected service life. Old circuit breakers pose a potential fire hazard should they fail to interrupt a circuit in an overload or short circuit condition. Parts are very difficult to find for older electrical components and many are no longer manufactured.

Components in one of the service entrances have already failed resulting in ADOA maintenance staff having to "cannibalize" parts from a chiller electrical system until appropriate replacements for the obsolete parts could be located, delivered, and installed. Fortunately, this event took place in the cooler months so the chiller was not in use at the time. Had the failure occurred during the summer months, the electricity in the Executive Tower would have been reduced to one-half until the service entrance was repaired or replaced. New switchgear components will include a ground fault main circuit breaker, draw-out distribution breakers for ease of maintenance, digital metering for remote control and monitoring, and transient surge protection. The cost for a slightly larger capacity project divided between two service entrances is projected to cost approximately $600,000, including design costs.

$350,000: ADOA – Office of the Attorney General – 15 S. 15th Ave. – Replace Two Cooling Towers and Five Water Source Heat Pumps

The cooling system is original to the building that the State purchased from a private developer in 1985. This structure houses the AG's staff offices. ADOA has replaced individual heat pumps as failures occur. Those heat pumps that have not been recently replaced have surpassed their useful life and are in jeopardy of imminent failure. It can be reasonably predicted that these heat pumps will fail. The aging poorly performing cooling towers do not provide chilled water at the proper temperature for the water source heat pumps. As a result, the heat pumps cycle more frequently, often simultaneously, exacerbating the stress on the deteriorating cooling towers. The increased cycling facilitates failure of the heat pumps. As it can reasonably be expected that these will fail, proactive replacement of these units is prudent.

Moreover, pro-active replacement of the cooling system serves to mitigate the increased costs and business interruption associated with emergency repairs and replacements. These cooling towers will be replaced with energy efficient units.

$65,000: Arizona Department of Economic Security – Elevator Modernization – DES Director's Office

The three-floor DES facility at 1717 West Jefferson houses approximately 125 staff, including the DES Director's office and staff, and the DES Office of Personnel Management. The elevator has had only minor upgrades since it was installed. During the last year, the elevator has averaged two service calls per month (over and above regular monthly service and maintenance attention) as a result of various elevator malfunctions, several of which resulted in entrapments. The elevator is critical to DES operations. Clients, staff, community partners, and other stakeholders who require an ADA public accessibility accommodation use the elevator regularly. This allocation is anticipated to cover design and modernization costs to conclude the project.

INTERIOR FINISHES

$200,000: ADOA Building System – Statewide Floor Covering

ADOA will allocate funds to agencies to address buildings and areas with the most critical carpet and flooring needs. Some of the state's floor coverings are over 20 years old. A good portion of the buildings in the ADOA building system have floor coverings that are heavily worn, torn, rippling, and separating from the backing, creating a fine silt-type particulate that becomes airborne when vacuumed, creating frequent complaints about air quality in office spaces. Older vinyl flooring is cracking and tearing away from the floors, creating a potential hazard if the glue (mastic) holding the tiles in place contains asbestos. It is quite common for staff in state office buildings to "repair" carpet tears using duct tape. A number of Risk Management assessments have recommended the replacement of carpet and tile to mitigate air quality complaints and trip and fall claims. A statewide contract is in place for purchase and installation of carpet and tile, including removal and recycling of the old materials, and abatement of hazardous materials, if required.

The replacement of floor coverings in state owned office space is a common, yet deferred, building renewal request. The FY 2008 building renewal allocation included an allocation of $225,000 for the replacement of worn and damaged floor coverings. ADOA evaluated thousands of dollars in carpet replacement requests and completed several flooring replacement projects, including the abatement of hazardous materials such as asbestos and mold.

INFRASTRUCTURE

$96,000: Department of Economic Security – Sewage Lift-Pump Station – Coolidge Training Program

The sewer lift station has not been refurbished in over 20 years. The sewer lift station repeatedly malfunctions as a result of deferred major maintenance. An institutional facility requires a properly operating infrastructure to appropriately manage its waste effluent. The scope of work will include any associated design and construction costs.

$25,000: Department of Economic Security – Well Number One Renovation – Coolidge Training Program

The Arizona Training Program at Coolidge (ATPC) operates a complete water system using four of five water wells to meet its water usage needs. These wells meet the water requirements of approximately 155 residents and 400 staff living and working at the Coolidge facility. The wells, with the exception of one, which was renovated in FY 2003, have not been evaluated and renovated for over eight years. Well failure can result in an insufficient water pressure to meet institutional water requirements and proper operation of fire suppression and fire fighting equipment. A systematic program of providing preventative maintenance to each of the wells on a four year rotation is needed to ensure consistent water delivery for residential and fire fighting needs. Federal Title XIX regulations require a properly operating water system in order to maintain eligibility for funding.

$80,000: Arizona Department of Corrections – Well Renovation – Fort Grant, Safford

Well Number One is the primary water source for the Fort Grant unit. It failed in 1998 and was refurbished. The well system is operated by 250-HP electric motor and a deep water turbine pump set at approximately 600 feet. Best practices indicate that well systems of this type should be refurbished on a regular seven to ten year cycle. A failure of Well Number One would result in significant expense to the department.

$820,000: ADOA Building System – Emergency and Imminent Failures

In recent years, the amount of funds directed at emergency failures or imminent failures has been growing at an increasing pace. Years of inadequate building renewal funding and aging structures are contributing to an acceleration of costly crisis repairs and replacements that negatively impact state operational efficiencies and budgets. For example, in FY 2008, building emergencies at the Legislature required $200,000 to repair worn-out obsolete critical fire alarm panels, replace HVAC and related components, and to repair water leaks that caused inconvenience to members of the Legislature and damage to state and personal property. Emergency and crisis repairs and replacements of a variety of equipment also affected mission critical functions of DPS, Arizona State Schools for the Deaf and Blind, Juvenile Corrections, the Pioneer's Home, and others. ADOA is allocating $820,000 for HVAC, plumbing, electrical, and other infrastructure projects. ADOA's strategy is to pro-actively address repairs and replacements of building components on this list *before* equipment failure can result in costly crisis scenario repairs, property damage, and business interruption. Potential projects include, but are not limited to, the following projects identified as at risk of imminent failure:

Priority Projects	Cost
Fire & Life Safety	
Repair fire alarm system 1502 W. Washington, Mines and Minerals	$ 25,000
Building Services	
Replace air handler #1-1535 W Jefferson	$ 250,000
Replace 11 heat pumps, 9535& 9545 E Doubletree Ranch Rd.	$ 75,000
Replace 5 ton heat pumps & ductwork-1802 W. Jackson	$ 15,000
Replace 10 evaporative coolers-1919 W Jefferson	$ 20,000
Replace 2 5-ton gas-packs w/economizers-519 E Beale, Kingman office building	$ 45,000
Repair 60 ton a/c system, 9th floor, 1700T W. Washington, Executive tower	$ 20,000
Replace 14 ton two stage split a/c unit, 2nd floor protocol room, Executive tower	$ 20,000
Repair HVAC system -2422 W Holly	$ 20,000
Replace 150 ton cooling tower - 2422 W Holly	$ 140,000
Repair leaking chilled water valves, 1600 W. Monroe	$ 30,000
Replace compressor expansion valve, 1300/1400 W. Washington	$ 5,000
Replace condenser pump, 1300/1400 W. Washington	$ 10,000
Replace 30 ton 2 compressor unit, 1831 W. Jefferson	$ 45,000
Replace 2 boilers for heating House & Senate	$ 40,000
Rebuild air-handler blower shaft, 1700S W. Washington	$ 20,000
Replace 6 sewage ejector pumps, liners, controls, & piping- 1700 W. Washington	$ 120,000
Repair main electrical distribution (SES) 1700H, 1740 W. Adams	$ 100,000

DEPARTMENT OF ADMINISTRATION BUILDING SYSTEM
FY 2009 BUILDING RENEWAL ALLOCATION PLAN

Replace 5 sump pumps-15 S. 15th, 1616 W. Adams, 1624 W. Adams	$	40,000
Replace 19 backflow convertors- 1700T, Motor Pool, DES, 1300 W. Adams, 1400 W. Adams	$	40,000
Interior Finishes		
Replace carpet -1700T W Washington, Exec. Tower	$	35,000
Replace computer room Unit Plate Frame, 1600 W. Monroe	$	15,000
Renovate flooring in garage elevator, 15 S 15th Ave.	$	30,000
Infrastructure		
Slurry seal 2 parking lots- 1688 W. Adams, 1700H	$	100,000
Replace garage grill and gate systems- 4 Capitol Mall garages	$	50,000
Repair interior cast iron sewage piping-1616, 1624, 1688, & 1740 W. Adams office buildings	$	80,000
Total	**$**	**1,390,000**

Many of the projects on the list have been validated by building condition assessments. Project that include repairs and replacements of air handlers, exhaust fans, ductwork, pumps, piping, controls, and related electrical components are expected to reduce energy consumption.

The "Imminent Failures" list is not all inclusive because failures and imminent failures cannot always be predicted. ADOA institutional knowledge leads to reasonable expectations that certain building components are more prone to failure than others. Given the status of building components across the building system, there may be incidents of breakdown that occur before pro-active repair and major maintenance is procured. The list does not account for emergency funds that may be requested from agencies during the year; ADOA will prioritize those requests on a case by case basis.

In FY 2007, ADOA allocated approximately $710,800 of the building renewal appropriation for a variety of emergency and imminent equipment and system failures, including HVAC, electrical, plumbing, and exterior building shell repairs. In FY 2008, ADOA exhausted nearly $801,000 building renewal monies for a variety of emergency projects. Over half of this amount was amassed in May through July as aged and worn-out equipment failed to keep up with the increased cooling demands. A number of the failures that resulted in expensive emergency repairs were identified in the FY 2008 request for deferred maintenance funding, but were not funded. It is anticipated that the cumulative figure for FY 2009 emergency and critical repairs and replacements will meet or exceed the emergency expenditures of FY 2008.

PROJECT MANAGEMENT AND RISK MANAGEMENT CONSTRUCTION INSURANCE PREMIUM

$275,000: ADOA Construction Services Project Management Costs (6/1/08-5/30/09)

The FY 2008 Building Renewal appropriation included $275,000 for project management.

$1,000: FY 2008 Risk Management Construction Insurance Premium

All expenditures related to engineering and architectural services contracts include a 0.34% ADOA Risk Management construction insurance premium.

ARIZONA DEPARTMENT of ADMINISTRATION — CONSTRUCTION SERVICES

PROJECT: Catalina Mt School Kitchen Roof Structure
PROJECT NUMBER: 4230
PROJECT MANAGER: Jeff Pugh
SR. PROJECT MANAGER: Janet Collegio
GENERAL MANAGER: Roger Berna

DATE PREPARED: October 20, 2008
REVISED :

DESCRIPTION		AMOUNT
FUNDING SOURCES:	INDEX:	
Building Renewal	21400	$225,000
Anticipated Risk Management Claim		250,000
TOTAL FUNDING		**$475,000**

PROJECT COST:	ESTIMATE	PROJECTED COST AT COMPLETION
Land Acquisition Costs:		
Subtotal	$0	$0
Professional Services:		
Engineering	10,845	
Architect/Construction Administration	20,000	
Subtotal	$30,845	$0
Construction Services (GC):		
Catalina Mt. School - Kitchen Repairs	150,000	
Structural Improvements	100,000	
Roof Replacement	100,000	
Subtotal	$350,000	$0
Separate Contracts:		
Asbestos Testing	2,000	
Asbestos Remediation/Demolition	30,000	
Remove, store and replace kitchen equipment	22,000	
Subtotal	$54,000	$0
Project Support:		
2.		
Subtotal	$0	$0
Contingency Allowance:	$40,000	
Previous/Future Projects:		
Subtotal	$0	$0
TOTAL PROJECT COST	**$ 474,845**	**$ -**
Funds Remaining/ (Additional Funds Required)	**155**	**475,000**

NOTES:
All current estimates are only order of magnitude; more structural investigation is required for a more accurate estimate of cost.

ARIZONA DEPARTMENT of ADMINISTRATION CONSTRUCTION SERVICES

PROJECT: Phase 1 Design Five (5) Cab Traction Elevator System Renovation &Rebuild Freight Elevator 1600 W. Monroe
PROJECT NUMBER: 8623TI.6 DATE PREPARED: October 10, 2007
PROJECT MANAGER: Anthony Rivera **REVISED : November 19, 2007**
SENIOR PROJECT MANAGER: Janet Collegio
GENERAL MANAGER: Roger Berna

DESCRIPTION		AMOUNT
FUNDING SOURCES:	INDEX:	
BR08-007	21390	$1,593,123.87
BR 07-017	**21380**	**$52,520.00**
TOTAL FUNDING		**$1,645,643.87**

PROJECT COST:	Cost Code	ESTIMATE	PROJECTED COST AT COMPLETION
Land Acquisition Costs:			
Subtotal		$0.00	$0.00
Professional Services:			
A/E Fees - Basic Services	01364	$95,575.87	$95,275.87
Reimbursables	01365		
DCN #1	01366		
Subtotal		$95,575.87	$95,275.87
Construction Services (GC):			
Elevators	01700	$1,466,610.00	$1,466,610.00
CO #1			$83,308.00
Subtotal		$1,466,610.00	$1,466,610.00
Separate Contracts:			
Asbestos - oversight	01455	$0.00	$0.00
Asbestos Abatement	02100	$0.00	$0.00
Subtotal		$0.00	$0.00
Project Support:			
ADOA Project Management Fees			
ADOA Expenses			
Risk Management Fees .0034			
Ad fee	01050	$150.00	$228.59
Subtotal		$150.00	$228.59
Contingency Allowance:	00000	$0.00	$0.00
Subtotal		$0.00	$40,000.00
Previous/Future Projects:			
1.			
2.			
Subtotal		$0.00	$0.00
TOTAL PROJECT COST		**$1,562,335.87**	**$1,685,422.46**
Funds Remaining/ (Additional Funds Required)		**$83,308.00**	**($39,778.59)**

NOTES:

EXECUTIVE SUMMARY

ARIZONA DEPARTMENT of ADMINISTRATION
CONSTRUCTION SERVICES

PROJECT:	ASDB Tucson - Apache Bldg		
PROJECT NUMBER:	8948	PREPARED:	October 28, 2008
PROJECT MANAGER:	W F Anderson	REVISED :	
SENIOR PROJECT MANAGER:	Janet Collegio		
GENERAL MANAGER:	Roger Berna		

DESCRIPTION		AMOUNT
FUNDING SOURCES:	INDEX:	
BR 2007-22	21380	2,250.00
	21400	257,750.00
TOTAL FUNDING		260,000.00

PROJECT COST	COST CODE	ESTIMATE	PROJECTED COST AT COMPLETION
Professional Services:			
Arch Fee	01364	25,000.00	0.00
Arch Reimbursable	01365	2,000.00	0.00
Eng Fee	01369	2,200.00	0.00
Eng Reimbursables	01370	50.00	0.00
	Subtotal	29,250.00	0.00
Construction Services (GC):			
General Contractor	01700	150,000.00	0.00
Roof Repairs	01700	50,000.00	0.00
	01700	0.00	0.00
	Subtotal	200,000.00	0.00
Separate Contracts:			
Ad	01050	300.00	0.00
Asbestos	02105	2,000.00	0.00
Abatement	02100	8,000.00	0.00
Fire Alarm Panel	02200	0.00	0.00
	Subtotal	10,300.00	0.00
Project Support:			
ADOA Salaries		0.00	0.00
ADOA Expenses		0.00	0.00
Risk Mgmt Insur (.0034)	01005	0.00	0.00
	Subtotal	0.00	0.00
Contingency Allowance:		20,000.00	0.00
			0.00
	Subtotal	20,000.00	0.00
TOTAL PROJECT COST		259,550.00	0.00
Funds Remaining/ (Additional Funds Required)		450.00	0.00
			40,000.00

STATE OF ARIZONA

Joint Committee on Capital Review

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DATE: November 6, 2008

TO: Representative 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 $984,700 in FY 2009 Building Renewal Projects

Request

A.R.S. § 41-1252 requires JCCR review of the expenditure plan for Building Renewal monies. The Arizona Department of Transportation (ADOT) requests that the Committee review its $4,208,900 FY 2009 Building Renewal Allocation Plan, including $4,052,000 from the State Highway Fund and $156,900 from the State Aviation Fund.

ADOT submitted their FY 2009 Building Renewal Allocation Plan for review at the October 2, 2008 meeting, but no action was taken on the plan as the Chairman is seeking further information on the Governor's plans to resolve the FY 2009 budget shortfall and whether the funding associated with this particular agenda item could be part of the solution.

Since then, ADOT has identified 115 projects totaling $984,700 ($920,400 from the State Highway Fund and $64,300 from the State Aviation Fund), which are considered by ADOT as critical in nature. ADOT would allocate $895,400 from the State Highway Fund among 109 projects leaving $25,000 for project management support and $64,300 from the State Aviation Fund for 6 projects. The Chairman has placed these 115 projects on the agenda for review.

Recommendation

The Committee has at least the following 2 options:

1. A favorable review of the $984,700 in critical projects. These projects are consistent with Building Renewal guidelines and appropriations.

2. An unfavorable review. These monies could be used to reduce the FY 2009 budget shortfall.

(Continued)

Under either option, the JLBC Staff recommends that ADOT report any project reallocations above $100,000.

Analysis

The Capital Outlay Bill (Laws 2008, Chapter 289) appropriated a total of $4,208,900 to ADOT for building renewal in FY 2009, including $4,052,000 from the State Highway Fund and $156,900 from the State Aviation Fund. The FY 2009 Building Renewal appropriations represent 50% of the amount generated by the revised Building Renewal Formula for the ADOT Building System and 100% for the Grand Canyon Airport for FY 2009. The formula is based on the square footage and replacement cost of existing buildings.

As shown in the following table, ADOT had originally requested to allocate the $4.1 million in Building Renewal monies from the State Highway Fund for 286 projects. Of these 286 projects, 109 projects are considered by ADOT to be critical in nature and are, therefore, up for possible review of the Committee.

State Highway Fund Building Renewal Projects

Category	Requested Projects	Requested Amounts	Review Projects	Possible Review
Roofs Repair/Replacement	168	$1,450,500	77	$461,200
Building Systems (HVAC, Electrical, Plumbing)	59	1,354,100	6	174,600
Infrastructure (Sewers, Parking)	13	535,800	5	87,500
Americans with Disabilities Act	8	207,200		0
Fire/Life/Safety	21	172,100	21	172,100
Contingencies	N/A	100,000		0
Project Management Support	N/A	85,000	N/A	25,000
Exterior Preservation (Doors, Windows, Siding)	9	71,500		0
Major Renovation	5	49,800		0
Interior Finishes (Paint, Carpet, Tile)	3	26,000		0
Total	286	$4,052,000	109	$920,400

In addition, ADOT had originally requested to allocate the $156,900 of Building Renewal monies from the State Aviation Fund for 25 projects at the Grand Canyon Airport. Of these 25 projects, 6 projects totaling $64,300 are considered by ADOT to be critical in nature and are, therefore, up for possible review of the Committee. These 6 projects include replacing or repairing roofs as well as replacing 3 unserviceable vehicle gates in Grand Canyon Airport buildings.

The attached material submitted by ADOT lists each project and its estimated cost along with the projects and amounts they consider to be critical in nature. The projects are consistent with Building Renewal guidelines and appropriations.

RS/JB:sls

Arizona Department of Transportation

Office of the Director

206 South Seventeenth Avenue Phoenix, Arizona 85007-3213

Janet Napolitano
Governor

Victor M. Mendez
Director

Richard Travis
Deputy Director

September 3, 2008

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

Dear Representative Pearce:

We respectfully request that ADOT's planned FY2009 Building Renewal projects be placed on the next 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	$ 172,073
Category 2- Roof Repairs/Replacement	1,450,529
Category 3- Preservation of Asset	71,500
Category 4- Major Building Systems	1,354,127
Category 5-Interior Building Finishes	26,000
Category 6- Major Renovation	49,800
Category 7- ADA Compliance	207,200
Category 8- Infrastructure	535,771
Project Management Support	85,000
Contingency	100,000
Sub total	4,052,000
Aviation Fund Building Renewal Projects	
Category 2- Roof Repairs/Replacement	86,200
Category 3- Preservation of Asset	8,000
Category 4- Major Building Systems	7,000
Category 5-Interiour Building Finishes	38,000
Category 8- Infrastructure	17,700
Sub total	156,900
Total	$ 4,208,900

Your favorable review and approval of this request is appreciated.

Sincerely,

Victor M. Mendez

cc: Senator Robert Burns, Vice-Chairman, JLBC
Richard Stavneak, Director, JLBC
Bob Hull, Principle Research Analyst, JLBC
Juan Beltran, Analyst, JLBC
James Apperson, Director, OSPB
Marcel Benberou, Assistant Director, OSPB

STATE OF ARIZONA

FY 2009 CAPITAL IMPROVEMENT PLAN

DEPARTMENT OF TRANSPORTATION FY 2009 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY

STATE HIGHWAY FUND

Project Description	Estimated Cost
CATEGORY 1 - FIRE/LIFE SAFETY	
Flagstaff Regional Lab - Install heated gutters to prevent ice build up	$ 6,500
Flagstaff East Yard - Design drainage to address ponding and icing at bldgs that cause slip hazard	$ 30,000
Williams Maint Office Bldg 3109 - Replace unserviceable rear steps	$ 1,200
Seligman Maint Office Bldg 3081 - Replace failing steps for safety	$ 3,000
North Phoenix Maint Yard - Install two fire department access Knox boxes	$ 7,000
Tucson District Office - Replace unsafe walkways between main office & training center	$ 20,000
Tucson Grant Rd Maint Yard - Install gas detection equipment to ensure personnel safety	$ 11,000
Quartzsite Construction Office - Repair/replace failing stairs	$ 6,000
Globe Equipment Services Shop - Repair/replace unserviceable hoist	$ 6,000
Flagstaff Equipment Services Shop - Replace windows in overhead doors & man doors for safety	$ 12,000
AZ Highways Magazine Bldg - Install emergency exit hardware on storage area doors and fire exit	$ 15,000
ADOT Statewide - Install/replace emergency exit signs and lights	$ 5,000
ADOT Statewide - Asbestos and lead paint abatement	$ 10,000
HRDC Bldg - Replace unserviceable natural lighting panels; a fall through hazard	$ 9,448
Bullhead City MVD - Eliminate tripping hazard in parking lot	$ 3,000
Nogales Truck Inspection Building - Install sprinkler head per Fire Marshal	$ 5,000
Coolidge MVD - Correct unsafe exit situation on west side	$ 5,000
Tucson North MVD - Install emergency lighting in rest rooms	$ 3,000
Safford MVD - Install emergency lighting in rest rooms & replace exit signs	$ 4,000
New MVD Bldg - Repair parking lot for safe use by pedestrians	$ 5,000
Payson Equipment Services Shop - Add fire strobe lights and adjust insulation from sprinkler heads	$ 4,925
TOTAL	**$ 172,073**

CATEGORY 2 - ROOFS	
Fredonia Maintenance Storage Bldg 3217 - Replace failing roof	$ 1,790
Fredonia Maintenance Storage Bldg 3218 - Replace failing roof	$ 2,375
Fredonia Office Equipment/Storage Bldg 3219 - Repair failing roof	$ 39,500
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
East Flagstaff Storage Bldg 3456 - Replace failing roof	$ 1,295
East Flagstaff Fuel Station Bldg 3460 - Replace failing roof	$ 1,495
Flagstaff Lab Bldg 3155 - Replace failing roof	$ 49,665
Flagstaff Dist. Storage Bldg 3156 - Repair failing roof	$ 1,460
Little Antelope Storage Bldg 3142 - Replace failing roof	$ 10,830
Little Antelope Storage/Equipment Bldg 3140 - Replace failing roof	$ 82,595
Little Antelope Residence Bldg 3430 - Replace failing roof	$ 4,125
Little Antelope Residence Bldg 3132 - Replace failing roof	$ 396
Little Antelope Office/Mobile Bldg 3143 - Replace failing roof	$ 15,925
Williams Water System/Pump House Bldg 3107 - Replace failing roof	$ 1,300
Williams Storage Bldg 3111 - Replace failing roof	$ 1,881
Williams Storage/Equipment Bldg 3112 - Repair failing roof	$ 32,950
Williams Office/Crew Room Bldg 3114 - Replace failing roof	$ 3,546
Tuba City Storage Bldg 3236 - Replace Failing roof	$ 660
Littlefield Residence Bldg 3188 - Replace failing roof	$ 5,575

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DEPARTMENT OF TRANSPORTATION FY 2009 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY

Project Description	Estimated Cost
Littlefield Storage Bldg 3192 - Replace failing roof	$ 1,225
Page Office/DPS Bldg.3600 - Replace failing roof	$ 11,950
Page Water System/Pump House Bldg 3600 - Repair failing roof	$ 450
Page Storage/Tank/Asphalt Bldg.3182 - Replace failing roof	$ 590
Page Storage Bldg 3291 - Replace failing roof	$ 777
Page Fuel Station Bldg 3292 - Replace failing roof	$ 1,195
Oak Creek Equipment/Storage Bldg. 3128 - Repair failing roof	$ 23,050
Oak Creek Water System/Well House Bldg. 3129 - Replace failing roof	$ 1,007
Indian Pine Storage Bldg 3301 - Repair failing roof	$ 6,000
Indian Pine Deicer Storage Bldg 3303 - Repair failing roof	$ 1,400
Indian Pine Storage Bldg 3304 - Replace failing roof	$ 16,100
Indian Pine Storage Bldg 3395 - Replace failing roof	$ 1,400
Indian Pine Water System/Well House Bldg 3518 - Replace failing roof	$ 800
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
Holbrook District Office Bldg 3246 - Replace failing roof	$ 21,400
Holbrook Storage Bldg 3247 - Repair failing roof	$ 9,380
Holbrook Shop/Radio Bldg 3250 - Replace failing roof	$ 13,976
Holbrook Conference/Training Room Bldg 3253 - Replace failing roof	$ 9,960
Holbrook Storage Bldg 3423 - Replace failing roof	$ 675
Holbrook Storage Bldg 3422 - Replace failing roof	$ 1,250
Holbrook Storage Bldg 3591 - Replace failing roof	$ 1,275
Holbrook Office/Construction/Mobile Bldg 3421 - Replace failing roof	$ 12,425
Holbrook Office/Shop Bldg 3257 - Replace failing roof	$ 6,875
Holbrook Office/Maintenance Bldg 3263 - Replace failing roof	$ 13,950
Holbrook Lab Bldg 3245 - Repair failing roof	$ 1,680
Holbrook Storage Bldg 3461 - Replace failing roof	$ 750
Holbrook Storage Bldg 3467 - Replace failing roof	$ 750
Holbrook Signing & Striping Bldg 3264 - Replace unserviceable roof trusses	$ 15,000
Ganado Residence Bldg 3334 - Replace failing roof	$ 10,600
Ganado Equipment Storage Bldg 3335 - Repair failing roof	$ 480
Chambers Office/Equipment Storage Bldg 3329 - Replace failing roof	$ 13,101
Chambers Water System/Pump House Bldg 3330 - Repair failing roof	$ 360
Chambers Mobile/Residence Bldg 3333 - Replace failing roof	$ 12,288
Kayenta Storage Bldg 3342 - Repair failing roof	$ 3,025
Kayenta Office/Maintenance Bldg 3343 - Replace failing roof	$ 4,050
Many Farms Fuel Station Bldg 3728 - Replace failing roof	$ 690
Many Farms Storage Bldg 3376 - Replace failing roof	$ 1,275
Window Rock Office/Construction Bldg 3363 - Repair failing roof	$ 3,195
Keams Canyon Office/Mobile Bldg 3308 - Repair failing roof	$ 5,395
Keams Canyon Equipment Storage Office Bldg 3306 - Repair failing roof	$ 11,050
Keams Canyon Office/Crew Room Bldg 3475 - Replace failing roof	$ 2,725
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
Needle Mountain Storage Bldg 3528 - Repair failing roof	$ 575
Needle Mountain Storage Bldg 3011 - Repair failing roof	$ 500
Needle Mountain Storage Bldg 3009 - Replace failing roof	$ 888

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DEPARTMENT OF TRANSPORTATION FY 2009 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY

Project Description	Estimated Cost
Needle Mountain Storage Bldg 3004 - Replace failing roof	$ 2,075
Needle Mountain Fuel Station Bldg 3527 - Replace failing roof	$ 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
Ashfork Storage Bldg 3548 - Replace failing roof	$ 2,325
Ashfork Storage Bldg 3490 - Replace failing roof	$ 725
Lake Havasu Office/Traffic Signals/Mobile Bldg 3622 - Replace failing roof	$ 2,225
Mingus Mountain Storage/Equipment Bldg 3599 - Replace failing roof	$ 17,625
Seligman Storage/Sign Bldg 3080 - Replace failing roof	$ 10,612
Seligman Storage Bldg 3541 - Replace failing roof	$ 650
Seligman Storage Bldg 3542 - Replace failing roof	$ 650
Seligman Office/Crew Room Bldg 3078 - Replace failing roof	$ 1,350
Seligman Mobile Home Bldg 3545 - Replace failing roof	$ 7,850
Seligman Mobile Home Bldg 3546 - Replace failing roof	$ 8,200
Kingman Materials lab Bldg 3049 - Replace failing roof	$ 7,350
Kingman Conference/Training Bldg 3046 - Replace failing roof	$ 6,100
Kingman Office/Shop Bldg 3045 - Replace failing roof	$ 13,275
Kingman Office/Mobile Bldg 3042 - Replace failing roof	$ 8,014
Kingman Storage/Paint Bldg 3493 - Repair failing roof	$ 575
Kingman Storage Bldg 3038 - Replace failing roof	$ 1,895
Kingman Sign/Storage Bldg 3037 - Replace failing roof	$ 11,248
Kingman Maintenance Office Bldg 3033 - Replace failing roof	$ 10,043
Kingman Office/Crew Room Bldg 3035 - Repair failing roof	$ 500
Kingman Office Signing/Striping Bldg 3050 - Replace failing roof	$ 5,100
Kingman Office/Mobile Bldg 3052 - Replace failing roof	$ 4,086
Kingman Complex Storage Bldg 3038 - Replace failing roof	$ 6,200
Kingman Complex Fuel Station Bldg 3494 - Replace failing roof	$ 1,295
Prescott Pioneer Park Inspection Bay Bldg 3614 - Repair failing roof	$ 500
Prescott Office/District Bldg 3063 - Repair failing roof	$ 500
Prescott Office Bldg 3068 - Repair failing roof	$ 54,900
Payson Storage/Mobile Bldg 3648 - Replace failing roof	$ 9,870
Payson Storage Bldg 3650 - Replace failing roof	$ 2,810
Payson Storage Bldg 3640 - Replace failing roof	$ 650
Payson Fuel Station Bldg 3638 - Replace failing roof	$ 1,325
Payson Lab Bldg 3166 - Repair failing roof	$ 500
Payson Conference/Training/Mobile Bldg 3171 - Repair failing roof	$ 5,510
Payson Equipment Storage/Office Bldg 3169 - Repair failing roof	$ 17,275
Payson Sign/Storage Bldg 3168 - Repair failing roof	$ 500
Payson Office/Storage/Dock Bldg 3170 - Replace failing roof	$ 6,900
Colcord Office/Equipment Storage Bldg 3186 - Replace failing roof	$ 2,290
Colcord Storage Bldg 3682 - Replace failing roof	$ 12,550
Colcord Storage/Sign Bldg 3690 - Replace failing roof	$ 1,250
Colcord Storage Bldg 3691 - Replace failing roof	$ 1,000
Colcord Storage Bldg 3692 - Replace failing roof	$ 3,450
Colcord Storage Bldg 3693 - Replace failing roof	$ 2,925
Rye Water System/Well House Bldg 3685 - Replace failing roof	$ 1,695
Camp Verde Storage/Sign Bldg 3104 - Replace failing roof	$ 10,175
Camp Verde Deicer/Storage Bldg 3102 - Repair failing roof	$ 6,450
Camp Verde Office/Facilities Bldg 3101 - Replace failing roof	$ 3,448
Camp Verde Office/Facilities Bldg 3633 - Replace failing roof	$ 5,545
Camp Verde Office/Mobile Bldg 3099 - Repair failing roof	$ 18,591
Camp Verde Office/Mobile Bldg 3100 - Repair failing roof	$ 13,100

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Project Description	Estimated Cost
Camp Verde Office/DPS Bldg 3684 - Repair failing roof	$ 6,310
Ajo Maintenance Office - Replace roof	$ 5,000
Kingman Equipment Services Shop - Repair roof	$ 10,620
Kingman Equipment Services Office Modular - Replace failing roof	$ 6,750
St Johns Equipment Services Shop Bldg 3315 - Repair failing roof	$ 10,925
Prescott Valley Equipment Services Shop - Replace failing roof	$ 79,600
Safford Equipment Services Shop (2132) - Patch & recoat roof; replace failing gutters	$ 18,500
Tucson Equipment Services Shop - Patch, recoat roof, repair gutters	$ 20,000
ADOT Statewide - Roof inspection and reporting services	$ 100,000
East Mesa MVD - Replace unserviceable roof including asbestos abatement	$ 84,380
Mesa Regional MVD (South Office) - Replace roof and repair parapet walls	$ 95,000
Tempe Enforcement - Repair inspection bay roof	$ 3,000
Tucson Regional MVD Bldg & Inspection Bay - Replace/repair failed roofs	$ 10,000
Tucson East MVD - Assess roof for repair	$ 4,000
Flagstaff MVD Bldg 3150 - Replace failing roof	$ 33,513
Teec Nos Pos Office/MVD Bldg 3364 - Replace failing roof	$ 3,950
Teec Nos Pos Storage Bldg 3366 - Repair failing roof	$ 2,895
Kingman Office/MVD Bldg 3051 - Replace failing roof	$ 18,900
Kingman Office/Mobile/CDL Bldg 3052 - Replace failing roof	$ 3,895
Littlefield MVD Bldg 3193 - Replace failing roof	$ 5,385
Lake Havasu MVD Canopy/Inspection Bldg 3659 - Repair failing roof	$ 745
Lake Havasu MVD Bldg 3002 - Repair failing roof	$ 500
Topoc POE Storage Bldg 3772 - Repair failing roof	$ 500
Topoc POE Office Bldg 3013 - Replace failing roof	$ 6,950
Topoc POE Bldg 3014 - Replace failing roof	$ 2,950
Topoc POE Office/Mobile Bldg 3015 - Repair failing roof	$ 1,300
Bullhead City Office/MVD Bldg 3028 - Repair failing roof	$ 500
Bullhead City Inspection Bay/MVD Bldg 3029 - Repair failing roof	$ 500
Sanders POE Canopy/Inspection Bldg 3726 - Repair failing roof	$ 2,400
Sanders Office/MVD Bldg 3619 - Repair failing roof	$ 1,425
Sanders Office/POE Bldg 3348 - Replace failing roof	$ 2,175
Sanders Storage POE Bldg 3347 - Replace failing roof	$ 675
Sanders Office/POE Bldg 3346 - Replace failing roof	$ 16,187
Sanders Office/POE/Mobile Bldg 3349 - Replace failing roof	$ 1,685
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	$ 11,225
Springerville POE Storage Bldg 3403 - Replace failing roof	$ 675
Page Office/MVD/POE Bldg 3300 - Repair failing roof	$ 6,795
Fredonia POE Bldg 3215 - Repair failing roof	$ 400
Tuba City MVD Bldg 3237 - Replace failing roof	$ 7,895
TOTAL	**$ 1,450,529**

CATEGORY 3 - PRESERVATION OF ASSET	
Traffic Operations Warehouse - Repaint roll up doors and exterior trim	$ 14,000
Phoenix Maint District Permits Bldg - Replace deteriorated exterior surface on west side	$ 10,000
Phoenix Maint District Bldg - Repair/fill in hole in building south side of lab	$ 1,000
Phoenix Maint District Bldg - Secure exterior comm cables to prevent bees from entering building	$ 1,000
Phoenix Maint District Bldg - Replace electrical stabilizer blocks for roof top conduit	$ 2,000
St. David Maintenance Equipment Barn - Design & replace failing support posts	$ 35,000
ADOT Statewide - Repaint exterior building surfaces	$ 3,000

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Project Description	Estimated Cost
Administration Bldg - Repaint exterior canopy supports at Roadrunner	$ 3,500
Flagstaff MVD - Reseal tall windows to repair leaks	$ 2,000
TOTAL	**$ 71,500**

CATEGORY 4 - MAJOR BUILDING SYSTEMS	
Central Materials Lab - Replace failing heat pump in room 135	$ 7,000
Central Materials Lab - Design for chiller plant replacement	$ 35,000
Traffic Operations Center - Install cooling tower	$ 100,000
Engineering Bldg - Perform HVAC repairs	$ 20,000
Central Materials Lab - Perform HVAC repairs	$ 10,000
Globe District-wide - Replace pumps/motors on all deicing tanks	$ 71,000
Ganado Office/Equipment Storage Bldg 3338 - Replace 2 150,000 btu furnaces	$ 6,538
Ganado Office/Equipment Storage Bldg 3338 - Replace failing 5 ton split system	$ 8,904
Ganado Equipment Storage Bldg 3335 - Replace failing 250,000 btu furnace	$ 5,301
Kayenta Residence Bldg 3873 - Replace failing 4 ton gas pack	$ 10,384
Many Farms Equipment Storage Bldg 3354 - Replace failing 150,000 btu suspended furnace	$ 5,471
Teec Nos Pos Office/Equipment Storage Bldg 3372 - Install 2 ton mini split heat pump for office section	$ 9,483
Teec Nos Pos Office/Equipment Storage Bldg 3372 - Replace 2 failing 200,000 btu suspended heaters	$ 7,254
Keams Canyon Bldg 3308 - Replace failing 4 ton gas pack	$ 7,187
Many Farms Maintenance Bldg. 3356 - Replace failing wall htr and window AC with 2 ton split system	$ 8,610
Keams Canyon Equipment Storage - Replace failing furnace	$ 4,998
Keams Canyon Maintenance Bldg 3475 - Replace 2 failing 1.5 ton AC units	$ 5,837
Holbrook District-wide - Replace pumps and motors on all deicing tanks	$ 80,000
Holbrook District Office - Repair inefficient duct work in building	$ 1,992
East Area Lab Bldg - Convert HVAC from natural gas to propane	$ 9,000
Prescott District-wide - Replace Pumps/Motors on all deicing tanks	$ 71,000
Three Way Maintenance Office - Replace failing inefficient HVAC unit	$ 15,000
Safford District Office - Replace three failing inefficient HVAC units	$ 40,000
Tucson ITG Office - Replace failing inefficient HVAC system	$ 15,000
Tucson Utilities & Railroad Office - Repair failing plumbing	$ 8,000
Casa Grande Maintenance - Repair defective standpipe plumbing	$ 7,500
Quartzsite Construction Office - repair/replace failing plumbing	$ 7,000
Yuma District Office - replace failing, inefficient HVAC units	$ 30,000
Globe Equipment Services Shop - Replace/relocate existing unserviceable sump	$ 40,000
Safford Equipment Services Shop - Replace failing downdraft evap coolers	$ 35,000
Phoenix Equipment Services - Install bollards & manual HOA switches on motor control center panel boxes	$ 16,000
Phoenix Equipment Services - Replace HVAC water towers, pumps, and flat plate heat exchanger	$ 100,000
Phoenix Equipment Services Complex - Replace 5 drinking water fountains	$ 30,000
Phoenix Equipment Services Heavy Duty Shop - Replace 5 evaporative coolers	$ 25,000
Springerville Equipment Services Shop - Install floor drainage and oil separator	$ 40,000
AZ Highways Magazine Bldg - Repair a/c condensate drain line on roof	$ 2,263
ADOT Statewide - Repair HVAC systems	$ 40,000
ADOT Statewide - Repair plumbing systems	$ 15,000
ADOT Statewide - Repair electrical systems	$ 15,000
ADOT Statewide - Energy conservation lighting retrofits	$ 15,000
ADOT Statewide - Install "Energy Star" thermostats	$ 6,000
Administration Bldg - Design for SES and Motor Control Electrical System Replacement	$ 20,000
Facilities Management Bldg - Replace unserviceable heat pump unit	$ 8,605
FAST Warehouse - Convert T12 lamps to T8 for energy conservation	$ 4,500
Teec Nos Pos POE Bldg 3364 - Replace failing 3 ton electric heat pack	$ 7,972
Window Rock MVD - Replace failing 5 ton electric heat pack	$ 8,967

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DEPARTMENT OF TRANSPORTATION FY 2009 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY

Project Description	Estimated Cost
MVD Facilities - Repair HVAC systems	$ 10,000
MVD Forms Warehouse - Reroute evap cooler wastewater to sewer line	$ 9,000
New MVD Bldg - Energy reduction feasibility study	$ 53,820
New MVD Bldg - Replace unserviceable pneumatic shutoff chilled water valve	$ 1,341
West Phoenix MVD - Convert HVAC controls from pneumatic to digital	$ 90,000
West Phoenix MVD - Repair VAV box and ducting to special plates room	$ 40,000
West Phoenix MVD - Install small animal screen around west side mechanical area	$ 5,000
San Simon POE - Repair/replace failing plumbing	$ 10,000
Tucson CDL - Repair/replace failing electrical service	$ 75,000
Ehrenberg POE Pumphouse - Replace defective sight glass and 3" valve	$ 2,000
Ehrenberg POE - Replace failing HVAC with energy-efficient unit	$ 15,000
Duncan POE - Replace unserviceable water heater with point of use unit	$ 3,000
Yuma B-8 POE - convert soffit light fixtures from T-12 to T-8	$ 3,200
TOTAL	**$ 1,354,127**

CATEGORY 5 - INTERIOR BUILDING FINISHES	
Materials Group Tucson Regional Lab Bldg - Replace flooring, includes asbestos abatement	$ 20,000
ADOT Statewide - Repair/replace flooring	$ 3,000
ADOT Statewide - Repaint interior building surfaces	$ 3,000
TOTAL	**$ 26,000**

CATEGORY 6 - RECONFIGURE OR REMODEL	
Little Antelope Wash Rack Bldg 3140 - Realign and reinstall stairs and decking	$ 12,000
Williams Wash Rack Bldg 3108 - Realign and install stairs	$ 10,000
Seligman Wash rack Bldg 3077 - Realign and install stairs	$ 6,000
Wickenburg Maint Wash Rack - Install spreader attachments	$ 1,800
Ajo Maintenance Office - Remodel office, replace flooring include asbestos abatement	$ 20,000
TOTAL	**$ 49,800**

CATEGORY 7 - ADA	
MVD Statewide - Verify all MVD public facilities for ADA compliance	$ 80,000
Bullhead City MVD Bldg 3028 - Repair ADA ramp and entryway	$ 20,000
Springerville POE MVD - ADA corrections throughout bldg	$ 55,000
Show Low MVD - Reconfigure camera back drop area to accommodate ADA	$ 1,500
Tucson North MVD - Bring west side ramp into ADA compliance	$ 25,000
Tucson North MVD - Install ADA drinking fountains	$ 6,700
Casa Grande MVD - Install ADA ramp at rear of building	$ 10,000
Safford Constr Mat Storage - Make entry door ADA compliant, repair/replace struct members	$ 9,000
TOTAL	**$ 207,200**

CATEGORY 8 - INFRASTRUCTURE	
Little Antelope Housing Bldg 3430 & 3133 - Replace failing sewer line	$ 5,220
Springerville Maintenance Yard - Design and connect buildings to existing city sewer line	$ 99,226
Kayenta Maintenance Bldg 3343 - Replace failing sewer line	$ 6,775
Many Farms Maintenance Yard - Replace failing water line from meter to buildings	$ 5,550
Kingman District Site - Connect remaining buildings to city sewer	$ 120,000
West Area Lab - Replace unserviceable security fence and gate; relocate parking canopy to Georgia Yard	$ 50,000
Wickenburg Maint Yard - Connect buildings to city sewer system	$ 150,000

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DEPARTMENT OF TRANSPORTATION FY 2009 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY

Project Description	Estimated Cost
Safford Roadway Maintenance Yard - Repair electrical distribution system	$ 30,000
Safford Roadway Maintenance Yard - Design to connect bldgs to existing city sewer system	$ 28,000
ADOT Statewide - Repair/restripe vehicle parking pavement	$ 3,000
ADOT Statewide - Repair fencing and perimeter walls	$ 3,000
Duncan POE - Assess septic system for serviceability	$ 15,000
Casa Grande MVD - Repair failing sewer line	$ 20,000
TOTAL	$ 535,771

TOTAL OF ALL PROJECTS REQUESTED	**$ 3,867,000**
PROJECT MANAGEMENT SUPPORT	**$ 85,000**
CONTINGENCY	**$ 100,000**
TOTAL AUTHORIZED FUNDS	**$ 4,052,000**

RECAP	
CATEGORY 1 - FIRE/LIFE/SAFETY	**$ 172,073**
CATEGORY 2 - ROOFS	**$ 1,450,529**
CATEGORY 3 - PRESERVATION OF ASSET	**$ 71,500**
CATEGORY 4 - MAJOR BUILDING SYSTEMS	**$ 1,354,127**
CATEGORY 5 - INTERIOR BUILDING FINISHES	**$ 26,000**
CATEGORY 6 - RECONFIGURE OR REMODEL	**$ 49,800**
CATEGORY 7 - ADA COMPLIANCE	**$ 207,200**
CATEGORY 8 - INFRASTRUCTURE	**$ 535,771**
PROJECT MANAGEMENT SUPPORT	**$ 85,000**
CONTINGENCY	**$ 100,000**
TOTAL	$ 4,052,000

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DEPARTMENT OF TRANSPORTATION FY 2009 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY

STATE AVIATION FUND

Project Description	Estimated Cost
CATEGORY 2 - ROOFS	
Grand Canyon Airport School Bus Stop Bldg 3058 - Replace failing roof	$ 800
Grand Canyon Airport Fire Station Bldg 3552 - Repair failing roof	$ 800
Grand Canyon Airport Office/Shop Bldg 3578 - Repair failing roof	$ 5,135
Grand Canyon Airport Administration Bldg 3582 - Replace failing roof	$ 24,175
Grand Canyon Airport Residence/Modular Bldg 3587 - Replace failing roof	$ 9,320
Grand Canyon Airport Residence/Modular Bldg 3557 - Replace failing roof	$ 9,320
Grand Canyon Airport Residence/Modular Bldg 3558 - Replace failing roof	$ 9,320
Grand Canyon Airport Residence/Modular Bldg 3560 - Replace failing roof	$ 9,320
Grand Canyon Airport Residence/Modular Bldg 3564 - Replace failing roof	$ 9,320
GCA Residence/Storage Bldg 3555 - Replace failing roof	$ 800
GCA Residence/Storage Bldg 3559 - Replace failing roof	$ 800
GCA Residence/Storage Bldg 3561 - Replace failing roof	$ 800
GCA Residence/Storage Bldg 3565 - Replace failing roof	$ 800
GCA Residence/Storage Bldg 3563 - Replace failing roof	$ 800
GCA Residence/Storage Bldg 3568 - Replace failing roof	$ 800
GCA Residence/Storage Bldg 3569 - Replace failing roof	$ 800
GCA Residence/Storage Bldg 3572 - Replace failing roof	$ 800
GCA Residence/Storage Bldg 3586 - Replace failing roof	$ 800
Grand Canyon Airport Storage Bldg 3841 - Replace failing roof	$ 1,490
TOTAL	**86,200**
CATEGORY 3 - PRESERVATION OF ASSET	
Grand Canyon Airport - Repair facade on exterior walls and signs though out site	$ 8,000
TOTAL	**8,000**
CATEGORY 4 - MAJOR BUILDING SYSTEMS	
Grand Canyon Airport Bldg 3552 - Replace old lighting system with energy efficient lighting	$ 3,000
Grand Canyon Airport Bldg 3577 - Replace old lighting system with energy efficient lighting	$ 2,000
Grand Canyon Airport Bldg 3578 - Replace old lighting system with energy efficient lighting	$ 2,000
TOTAL	**$ 7,000**
CATEGORY 5 - INTERIOR BUILDING FINISHES	
Grand Canyon Airport Bldgs 3557,3558 ,3587,3564, 3560 - Replace kitchen & bath counters & cabinets	$ 38,000
TOTAL	**$ 38,000**
CATEGORY 8 - INFRASTRUCTURE	
Grand Canyon Airport - Replace 3 unserviceable vehicle gates	$ 17,700
TOTAL	**$ 17,700**
TOTAL OF ALL PROJECTS REQUESTED	**$ 156,900**
CONTINGENCY	**$ -**

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DEPARTMENT OF TRANSPORTATION FY 2009 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY

Project Description	Estimated Cost
TOTAL AUTHORIZED FUNDS	$ 156,900

RECAP	
CATEGORY 2 - ROOFS	$ 86,200
CATEGORY 3 - PRESERVATION OF ASSET	$ 8,000
CATEGORY 4 - MAJOR BUILDING SYSTEMS	$ 7,000
CATEGORY 5 - INTERIOR BUILDING FINISHES	$ 38,000
CATEGORY 8 - INFRASTRUCTURE	$ 17,700
TOTAL	$ 156,900

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DEPARTMENT OF TRANSPORTATION FY 2009 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY

STATE HIGHWAY FUND

Project Description	Estimated Cost	Critical Projects
CATEGORY 1 - FIRE/LIFE SAFETY		
Flagstaff Regional Lab - Install heated gutters to prevent ice build up	$ 6,500	$ 6,500
Flagstaff East Yard - Design drainage to address ponding and icing at bldgs that cause slip hazard	$ 30,000	$ 30,000
Williams Maint Office Bldg 3109 - Replace unserviceable rear steps	$ 1,200	$ 1,200
Seligman Maint Office Bldg 3081 - Replace failing steps for safety	$ 3,000	$ 3,000
North Phoenix Maint Yard - Install two fire department access Knox boxes	$ 7,000	$ 7,000
Tucson District Office - Replace unsafe walkways between main office & training center	$ 20,000	$ 20,000
Tucson Grant Rd Maint Yard - Install gas detection equipment to ensure personnel safety	$ 11,000	$ 11,000
Quartzsite Construction Office - Repair/replace failing stairs	$ 6,000	$ 6,000
Globe Equipment Services Shop - Repair/replace unserviceable hoist	$ 6,000	$ 6,000
Flagstaff Equipment Services Shop - Replace windows in overhead doors & man doors for safety	$ 12,000	$ 12,000
AZ Highways Magazine Bldg - Install emergency exit hardware on storage area doors and fire exit	$ 15,000	$ 15,000
ADOT Statewide - Install/replace emergency exit signs and lights	$ 5,000	$ 5,000
ADOT Statewide - Asbestos and lead paint abatement	$ 10,000	$ 10,000
HRDC Bldg - Replace unserviceable natural lighting panels; a fall through hazard	$ 9,448	$ 9,448
Bullhead City MVD - Eliminate tripping hazard in parking lot	$ 3,000	$ 3,000
Nogales Truck Inspection Building - Install sprinkler head per Fire Marshal	$ 5,000	$ 5,000
Coolidge MVD - Correct unsafe exit situation on west side	$ 5,000	$ 5,000
Tucson North MVD - Install emergency lighting in rest rooms	$ 3,000	$ 3,000
Safford MVD - Install emergency lighting in rest rooms & replace exit signs	$ 4,000	$ 4,000
New MVD Bldg - Repair parking lot for safe use by pedestrians	$ 5,000	$ 5,000
Payson Equipment Services Shop - Add fire strobe lights and adjust insulation from sprinkler heads	$ 4,925	$ 4,925
TOTAL	**$ 172,073**	**$ 172,073**

CATEGORY 2 - ROOFS		
Fredonia Maintenance Storage Bldg 3217 - Replace failing roof	$ 1,790	$ 1,790
Fredonia Maintenance Storage Bldg 3218 - Replace failing roof	$ 2,375	$ 2,375
Fredonia Office Equipment/Storage Bldg 3219 - Repair failing roof	$ 39,500	$ 39,500
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	
East Flagstaff Storage Bldg 3456 - Replace failing roof	$ 1,295	
East Flagstaff Fuel Station Bldg 3460 - Replace failing roof	$ 1,495	
Flagstaff Lab Bldg 3155 - Replace failing roof	$ 49,665	
Flagstaff Dist. Storage Bldg 3156 - Repair failing roof	$ 1,460	
Little Antelope Storage Bldg 3142 - Replace failing roof	$ 10,830	
Little Antelope Storage/Equipment Bldg 3140 - Replace failing roof	$ 82,595	
Little Antelope Residence Bldg 3430 - Replace failing roof	$ 4,125	
Little Antelope Residence Bldg 3132 - Replace failing roof	$ 396	
Little Antelope Office/Mobile Bldg 3143 - Replace failing roof	$ 15,925	
Williams Water System/Pump House Bldg 3107 - Replace failing roof	$ 1,300	
Williams Storage Bldg 3111 - Replace failing roof	$ 1,881	
Williams Storage/Equipment Bldg 3112 - Repair failing roof	$ 32,950	
Williams Office/Crew Room Bldg 3114 - Replace failing roof	$ 3,546	
Tuba City Storage Bldg 3236 - Replace failing roof	$ 660	
Littlefield Residence Bldg 3188 - Replace failing roof	$ 5,575	$ 5,575
Littlefield Storage Bldg 3192 - Replace failing roof	$ 1,225	$ 1,225
Page Office/DPS Bldg.3600 - Replace failing roof	$ 11,950	$ 11,950
Page Water System/Pump House Bldg 3600 - Repair failing roof	$ 450	$ 450
Page Storage/Tank/Asphalt Bldg.3182 - Replace failing roof	$ 590	$ 590
Page Storage Bldg 3291 - Replace failing roof	$ 777	$ 777
Page Fuel Station Bldg 3292 - Replace failing roof	$ 1,195	$ 1,195
Oak Creek Equipment/Storage Bldg. 3128 - Repair failing roof	$ 23,050	
Oak Creek Water System/Well House Bldg. 3129 - Replace failing roof	$ 1,007	
Indian Pine Storage Bldg 3301 - Repair failing roof	$ 6,000	

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FY 2009 CAPITAL IMPROVEMENT PLAN

DEPARTMENT OF TRANSPORTATION FY 2009 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY

Project Description	Estimated Cost	Critical Projects
Indian Pine Deicer Storage Bldg 3303 - Repair failing roof	$ 1,400	
Indian Pine Storage Bldg 3304 - Replace failing roof	$ 16,100	
Indian Pine Storage Bldg 3395 - Replace failing roof	$ 1,400	
Indian Pine Water System/Well House Bldg 3518 - Replace failing roof	$ 800	
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	
Holbrook District Office Bldg 3246 - Replace failing roof	$ 21,400	$ 21,400
Holbrook Storage Bldg 3247 - Repair failing roof	$ 9,380	$ 9,380
Holbrook Shop/Radio Bldg 3250 - Replace failing roof	$ 13,976	$ 13,976
Holbrook Conference/Training Room Bldg 3253 - Replace failing roof	$ 9,960	$ 9,960
Holbrook Storage Bldg 3423 - Replace failing roof	$ 675	$ 675
Holbrook Storage Bldg 3422 - Replace failing roof	$ 1,250	$ 1,250
Holbrook Storage Bldg 3591 - Replace failing roof	$ 1,275	$ 1,275
Holbrook Office/Construction/Mobile Bldg 3421 - Replace failing roof	$ 12,425	$ 12,425
Holbrook Office/Shop Bldg 3257 - Replace failing roof	$ 6,875	$ 6,875
Holbrook Office/Maintenance Bldg 3263 - Replace failing roof	$ 13,950	$ 13,950
Holbrook Lab Bldg 3245 - Repair failing roof	$ 1,680	$ 1,680
Holbrook Storage Bldg 3461 - Replace failing roof	$ 750	$ 750
Holbrook Storage Bldg 3467 - Replace failing roof	$ 750	$ 750
Holbrook Signing & Striping Bldg 3264 - Replace unserviceable roof trusses	$ 15,000	$ 15,000
Ganado Residence Bldg 3334 - Replace failing roof	$ 10,600	$ 10,600
Ganado Equipment Storage Bldg 3335 - Repair failing roof	$ 480	$ 480
Chambers Office/Equipment Storage Bldg 3329 - Replace failing roof	$ 13,101	$ 13,101
Chambers Water System/Pump House Bldg 3330 - Repair failing roof	$ 360	$ 360
Chambers Mobile/Residence Bldg 3333 - Replace failing roof	$ 12,288	$ 12,288
Kayenta Storage Bldg 3342 - Repair failing roof	$ 3,025	
Kayenta Office/Maintenance Bldg 3343 - Replace failing roof	$ 4,050	
Many Farms Fuel Station Bldg 3728 - Replace failing roof	$ 690	$ 690
Many Farms Storage Bldg 3376 - Replace failing roof	$ 1,275	$ 1,275
Window Rock Office/Construction Bldg 3363 - Repair failing roof	$ 3,195	
Keams Canyon Office/Mobile Bldg 3308 - Repair failing roof	$ 5,395	$ 5,395
Keams Canyon Equipment Storage Office Bldg 3306 - Repair failing roof	$ 11,050	$ 11,050
Keams Canyon Office/Crew Room Bldg 3475 - Replace failing roof	$ 2,725	$ 2,725
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	
Needle Mountain Storage Bldg 3528 - Repair failing roof	$ 575	$ 575
Needle Mountain Storage Bldg 3011 - Repair failing roof	$ 500	$ 500
Needle Mountain Storage Bldg 3009 - Replace failing roof	$ 888	$ 888
Needle Mountain Storage Bldg 3004 - Replace failing roof	$ 2,075	$ 2,075
Needle Mountain Fuel Station Bldg 3527 - Replace failing roof	$ 900	$ 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	
Ashfork Storage Bldg 3548 - Replace failing roof	$ 2,325	$ 2,325
Ashfork Storage Bldg 3490 - Replace failing roof	$ 725	$ 725
Lake Havasu Office/Traffic Signals/Mobile Bldg 3622 - Replace failing roof	$ 2,225	
Mingus Mountain Storage/Equipment Bldg 3599 - Replace failing roof	$ 17,625	
Seligman Storage/Sign Bldg 3080 - Replace failing roof	$ 10,612	$ 10,612
Seligman Storage Bldg 3541 - Replace failing roof	$ 650	$ 650
Seligman Storage Bldg 3542 - Replace failing roof	$ 650	$ 650
Seligman Office/Crew Room Bldg 3078 - Replace failing roof	$ 1,350	$ 1,350
Seligman Mobile Home Bldg 3545 - Replace failing roof	$ 7,850	$ 7,850
Seligman Mobile Home Bldg 3546 - Replace failing roof	$ 8,200	$ 8,200
Kingman Materials lab Bldg 3049 - Replace failing roof	$ 7,350	$ 7,350
Kingman Conference/Training Bldg 3046 - Replace failing roof	$ 6,100	$ 6,100
Kingman Office/Shop Bldg 3045 - Replace failing roof	$ 13,275	$ 13,275

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DEPARTMENT OF TRANSPORTATION FY 2009 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY

Project Description	Estimated Cost	Critical Projects
Kingman Office/Mobile Bldg 3042 - Replace failing roof	$ 8,014	$ 8,014
Kingman Storage/Paint Bldg 3493 - Repair failing roof	$ 575	$ 575
Kingman Storage Bldg 3038 - Replace failing roof	$ 1,895	$ 1,895
Kingman Sign/Storage Bldg 3037 - Replace failing roof	$ 11,248	$ 11,248
Kingman Maintenance Office Bldg 3033 - Replace failing roof	$ 10,043	$ 10,043
Kingman Office/Crew Room Bldg 3035 - Repair failing roof	$ 500	$ 500
Kingman Office Signing/Striping Bldg 3050 - Replace failing roof	$ 5,100	$ 5,100
Kingman Office/Mobile Bldg 3052 - Replace failing roof	$ 4,086	$ 4,086
Kingman Complex Storage Bldg 3038 - Replace failing roof	$ 6,200	$ 6,200
Kingman Complex Fuel Station Bldg 3494 - Replace failing roof	$ 1,295	$ 1,295
Prescott Pioneer Park Inspection Bay Bldg 3614 - Repair failing roof	$ 500	
Prescott Office/District Bldg 3063 - Repair failing roof	$ 500	
Prescott Office Bldg 3068 - Repair failing roof	$ 54,900	
Payson Storage/Mobile Bldg 3648 - Replace failing roof	$ 9,870	
Payson Storage Bldg 3650 - Replace failing roof	$ 2,810	
Payson Storage Bldg 3640 - Replace failing roof	$ 650	
Payson Fuel Station Bldg 3638 - Replace failing roof	$ 1,325	
Payson Lab Bldg 3166 - Repair failing roof	$ 500	
Payson Conference/Training/Mobile Bldg 3171 - Repair failing roof	$ 5,510	
Payson Equipment Storage/Office Bldg 3169 - Repair failing roof	$ 17,275	
Payson Sign/Storage Bldg 3168 - Repair failing roof	$ 500	
Payson Office/Storage/Dock Bldg 3170 - Replace failing roof	$ 6,900	
Colcord Office/Equipment Storage Bldg 3186 - Replace failing roof	$ 2,290	
Colcord Storage Bldg 3682 - Replace failing roof	$ 12,550	
Colcord Storage/Sign Bldg 3690 - Replace failing roof	$ 1,250	
Colcord Storage Bldg 3691 - Replace failing roof	$ 1,000	
Colcord Storage Bldg 3692 - Replace failing roof	$ 3,450	
Colcord Storage Bldg 3693 - Replace failing roof	$ 2,925	
Rye Water System/Well House Bldg 3685 - Replace failing roof	$ 1,695	$ 1,695
Camp Verde Storage/Sign Bldg 3104 - Replace failing roof	$ 10,175	
Camp Verde Deicer/Storage Bldg 3102 - Repair failing roof	$ 6,450	
Camp Verde Office/Facilities Bldg 3101 - Replace failing roof	$ 3,448	
Camp Verde Office/Facilities Bldg 3633 - Replace failing roof	$ 5,545	
Camp Verde Office/Mobile Bldg 3099 - Repair failing roof	$ 18,591	
Camp Verde Office/Mobile Bldg 3100 - Repair failing roof	$ 13,100	
Camp Verde Office/DPS Bldg 3684 - Repair failing roof	$ 6,310	
Ajo Maintenance Office - Replace roof	$ 5,000	
Kingman Equipment Services Shop - Repair roof	$ 10,620	$ 10,620
Kingman Equipment Services Office Modular - Replace failing roof	$ 6,750	$ 6,750
St Johns Equipment Services Shop Bldg 3315 - Repair failing roof	$ 10,925	
Prescott Valley Equipment Services Shop - Replace failing roof	$ 79,600	
Safford Equipment Services Shop (2132) - Patch & recoat roof; replace failing gutters	$ 18,500	
Tucson Equipment Services Shop - Patch, recoat roof, repair gutters	$ 20,000	
ADOT Statewide - Roof inspection and reporting services	$ 100,000	$ 32,000
East Mesa MVD - Replace unserviceable roof including asbestos abatement	$ 84,380	
Mesa Regional MVD (South Office) - Replace roof and repair parapet walls	$ 95,000	
Tempe Enforcement - Repair inspection bay roof	$ 3,000	
Tucson Regional MVD Bldg & Inspection Bay - Replace/repair failed roofs	$ 10,000	
Tucson East MVD - Assess roof for repair	$ 4,000	
Flagstaff MVD Bldg 3150 - Replace failing roof	$ 33,513	
Teec Nos Pos Office/MVD Bldg 3364 - Replace failing roof	$ 3,950	
Teec Nos Pos Storage Bldg 3366 - Repair failing roof	$ 2,895	
Kingman Office/MVD Bldg 3051 - Replace failing roof	$ 18,900	$ 18,900
Kingman Office/Mobile/CDL Bldg 3052 - Replace failing roof	$ 3,895	$ 3,895
Littlefield MVD Bldg 3193 - Replace failing roof	$ 5,385	$ 5,385
Lake Havasu MVD Canopy/Inspection Bldg 3659 - Repair failing roof	$ 745	
Lake Havasu MVD Bldg 3002 - Repair failing roof	$ 500	
Topoc POE Storage Bldg 3772 - Repair failing roof	$ 500	$ 500
Topoc POE Office Bldg 3013 - Replace failing roof	$ 6,950	$ 6,950
Topoc POE Bldg 3014 - Replace failing roof	$ 2,950	$ 2,950

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FY 2009 CAPITAL IMPROVEMENT PLAN

DEPARTMENT OF TRANSPORTATION FY 2009 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY

Project Description	Estimated Cost	Critical Projects
Topoc POE Office/Mobile Bldg 3015 - Repair failing roof	$ 1,300	$ 1,300
Bullhead City Office/MVD Bldg 3028 - Repair failing roof	$ 500	
Bullhead City Inspection Bay/MVD Bldg 3029 - Repair failing roof	$ 500	
Sanders POE Canopy/Inspection Bldg 3726 - Repair failing roof	$ 2,400	$ 2,400
Sanders Office/MVD Bldg 3619 - Repair failing roof	$ 1,425	$ 1,425
Sanders Office/POE Bldg 3348 - Replace failing roof	$ 2,175	$ 2,175
Sanders Storage POE Bldg 3347 - Replace failing roof	$ 675	$ 675
Sanders Office/POE Bldg 3346 - Replace failing roof	$ 16,187	$ 16,187
Sanders Office/POE/Mobile Bldg 3349 - Replace failing roof	$ 1,685	$ 1,685
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	$ 11,225	
Springerville POE Storage Bldg 3403 - Replace failing roof	$ 675	
Page Office/MVD/POE Bldg 3300 - Repair failing roof	$ 6,795	
Fredonia POE Bldg 3215 - Repair failing roof	$ 400	
Tuba City MVD Bldg 3237 - Replace failing roof	$ 7,895	
TOTAL	$ 1,450,529	$ 461,210

CATEGORY 3 - PRESERVATION OF ASSET		
Traffic Operations Warehouse - Repaint roll up doors and exterior trim	$ 14,000	
Phoenix Maint District Permits Bldg - Replace deteriorated exterior surface on west side	$ 10,000	
Phoenix Maint District Bldg - Repair/fill in hole in building south side of lab	$ 1,000	
Phoenix Maint District Bldg - Secure exterior comm cables to prevent bees from entering building	$ 1,000	
Phoenix Maint District Bldg - Replace electrical stabilizer blocks for roof top conduit	$ 2,000	
St. David Maintenance Equipment Barn - Design & replace failing support posts	$ 35,000	
ADOT Statewide - Repaint exterior building surfaces	$ 3,000	
Administration Bldg - Repaint exterior canopy supports at Roadrunner	$ 3,500	
Flagstaff MVD - Reseal tall windows to repair leaks	$ 2,000	
TOTAL	$ 71,500	$ -

CATEGORY 4 - MAJOR BUILDING SYSTEMS		
Central Materials Lab - Replace failing heat pump in room 135	$ 7,000	
Central Materials Lab - Design for chiller plant replacement	$ 35,000	
Traffic Operations Center - Install cooling tower	$ 100,000	
Engineering Bldg - Perform HVAC repairs	$ 20,000	
Central Materials Lab - Perform HVAC repairs	$ 10,000	
Globe District-wide - Replace pumps/motors on all deicing tanks	$ 71,000	
Ganado Office/Equipment Storage Bldg 3338 - Replace 2 150,000 btu furnaces	$ 6,538	
Ganado Office/Equipment Storage Bldg 3338 - Replace failing 5 ton split system	$ 8,904	
Ganado Equipment Storage Bldg 3335 - Replace failing 250,000 btu furnace	$ 5,301	
Kayenta Residence Bldg 3873 - Replace failing 4 ton gas pack	$ 10,384	
Many Farms Equipment Storage Bldg 3354 - Replace failing 150,000 btu suspended furnace	$ 5,471	
Teec Nos Pos Office/Equipment Storage Bldg 3372 - Install 2 ton mini split heat pump for office section	$ 9,483	
Teec Nos Pos Office/Equipment Storage Bldg 3372 - Replace 2 failing 200,000 btu suspended heaters	$ 7,254	
Keams Canyon Bldg 3308 - Replace failing 4 ton gas pack	$ 7,187	
Many Farms Maintenance Bldg. 3356 - Replace failing wall htr and window AC with 2 ton split system	$ 8,610	
Keams Canyon Equipment Storage - Replace failing furnace	$ 4,998	
Keams Canyon Maintenance Bldg 3475 - Replace 2 failing 1.5 ton AC units	$ 5,837	
Holbrook District-wide - Replace pumps and motors on all deicing tanks	$ 80,000	
Holbrook District Office - Repair inefficient duct work in building	$ 1,992	
East Area Lab Bldg - Convert HVAC from natural gas to propane	$ 9,000	
Prescott District-wide - Replace Pumps/Motors on all deicing tanks	$ 71,000	
Three Way Maintenance Office - Replace failing inefficient HVAC unit	$ 15,000	
Safford District Office - Replace three failing inefficient HVAC units	$ 40,000	
Tucson ITG Office - Replace failing inefficient HVAC system	$ 15,000	
Tucson Utilities & Railroad Office - Repair failing plumbing	$ 8,000	
Casa Grande Maintenance - Repair defective standpipe plumbing	$ 7,500	
Quartzsite Construction Office - repair/replace failing plumbing	$ 7,000	
Yuma District Office - replace failing, inefficient HVAC units	$ 30,000	

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DEPARTMENT OF TRANSPORTATION FY 2009 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY

Project Description	Estimated Cost	Critical Projects
Globe Equipment Services Shop - Replace/relocate existing unserviceable sump	$ 40,000	
Safford Equipment Services Shop - Replace failing downdraft evap coolers	$ 35,000	
Phoenix Equipment Services - Install bollards & manual HOA switches on motor control center panel boxes	$ 16,000	$ 16,000
Phoenix Equipment Services - Replace HVAC water towers, pumps, and flat plate heat exchanger	$ 100,000	$ 100,000
Phoenix Equipment Services Complex - Replace 5 drinking water fountains	$ 30,000	
Phoenix Equipment Services Heavy Duty Shop - Replace 5 evaporative coolers	$ 25,000	
Springerville Equipment Services Shop - Install floor drainage and oil separator	$ 40,000	
AZ Highways Magazine Bldg - Repair a/c condensate drain line on roof	$ 2,263	$ 2,263
ADOT Statewide - Repair HVAC systems	$ 40,000	$ 40,000
ADOT Statewide - Repair plumbing systems	$ 15,000	
ADOT Statewide - Repair electrical systems	$ 15,000	$ 15,000
ADOT Statewide - Energy conservation lighting retrofits	$ 15,000	
ADOT Statewide - Install "Energy Star" thermostats	$ 6,000	
Administration Bldg - Design for SES and Motor Control Electrical System Replacement	$ 20,000	
Facilities Management Bldg - Replace unserviceable heat pump unit	$ 8,605	
FAST Warehouse - Convert T12 lamps to T8 for energy conservation	$ 4,500	
Teec Nos Pos POE Bldg 3364 - Replace failing 3 ton electric heat pack	$ 7,972	
Window Rock MVD - Replace failing 5 ton electric heat pack	$ 8,967	
MVD Facilities - Repair HVAC systems	$ 10,000	
MVD Forms Warehouse - Reroute evap cooler wastewater to sewer line	$ 9,000	
New MVD Bldg - Energy reduction feasibility study	$ 53,820	
New MVD Bldg - Replace unserviceable pneumatic shutoff chilled water valve	$ 1,341	$ 1,341
West Phoenix MVD - Convert HVAC controls from pneumatic to digital	$ 90,000	
West Phoenix MVD - Repair VAV box and ducting to special plates room	$ 40,000	
West Phoenix MVD - Install small animal screen around west side mechanical area	$ 5,000	
San Simon POE - Repair/replace failing plumbing	$ 10,000	
Tucson CDL - Repair/replace failing electrical service	$ 75,000	
Ehrenberg POE Pumphouse - Replace defective sight glass and 3" valve	$ 2,000	
Ehrenberg POE - Replace failing HVAC with energy-efficient unit	$ 15,000	
Duncan POE - Replace unserviceable water heater with point of use unit	$ 3,000	
Yuma B-8 POE - convert soffit light fixtures from T-12 to T-8	$ 3,200	
TOTAL	**$ 1,354,127**	**$ 174,604**

CATEGORY 5 - INTERIOR BUILDING FINISHES		
Materials Group Tucson Regional Lab Bldg - Replace flooring, includes asbestos abatement	$ 20,000	
ADOT Statewide - Repair/replace flooring	$ 3,000	
ADOT Statewide - Repaint interior building surfaces	$ 3,000	
TOTAL	**$ 26,000**	**$ -**

CATEGORY 6 - RECONFIGURE OR REMODEL		
Little Antelope Wash Rack Bldg 3140 - Realign and reinstall stairs and decking	$ 12,000	
Williams Wash Rack Bldg 3108 - Realign and install stairs	$ 10,000	
Seligman Wash rack Bldg 3077 - Realign and install stairs	$ 6,000	
Wickenburg Maint Wash Rack - Install spreader attachments	$ 1,800	
Ajo Maintenance Office - Remodel office, replace flooring include asbestos abatement	$ 20,000	
TOTAL	**$ 49,800**	**$ -**

CATEGORY 7 - ADA		
MVD Statewide - Verify all MVD public facilities for ADA compliance	$ 80,000	
Bullhead City MVD Bldg 3028 - Repair ADA ramp and entryway	$ 20,000	
Springerville POE MVD - ADA corrections throughout bldg	$ 55,000	
Show Low MVD - Reconfigure camera back drop area to accommodate ADA	$ 1,500	
Tucson North MVD - Bring west side ramp into ADA compliance	$ 25,000	
Tucson North MVD - Install ADA drinking fountains	$ 6,700	
Casa Grande MVD - Install ADA ramp at rear of building	$ 10,000	
Safford Constr Mat Storage - Make entry door ADA compliant, repair/replace struct members	$ 9,000	
TOTAL	**$ 207,200**	**$ -**

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FY 2009 CAPITAL IMPROVEMENT PLAN

DEPARTMENT OF TRANSPORTATION FY 2009 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY

Project Description	Estimated Cost	Critical Projects
CATEGORY 8 - INFRASTRUCTURE		
Little Antelope Housing Bldg 3430 & 3133 - Replace failing sewer line	$ 5,220	$ 5,220
Springerville Maintenance Yard - Design and connect buildings to existing city sewer line	$ 99,226	
Kayenta Maintenance Bldg 3343 - Replace failing sewer line	$ 6,775	$ 6,775
Many Farms Maintenance Yard - Replace failing water line from meter to buildings	$ 5,550	$ 5,550
Kingman District Site - Connect remaining buildings to city sewer	$ 120,000	
West Area Lab - Replace unserviceable security fence and gate; relocate parking canopy to Georgia Yard	$ 50,000	$ 50,000
Wickenburg Maint Yard - Connect buildings to city sewer system	$ 150,000	
Safford Roadway Maintenance Yard - Repair electrical distribution system	$ 30,000	
Safford Roadway Maintenance Yard - Design to connect bldgs to existing city sewer system	$ 28,000	
ADOT Statewide - Repair/restripe vehicle parking pavement	$ 3,000	
ADOT Statewide - Repair fencing and perimeter walls	$ 3,000	
Duncan POE - Assess septic system for serviceability	$ 15,000	
Casa Grande MVD - Repair failing sewer line	$ 20,000	$ 20,000
TOTAL	$ 535,771	$ 87,545

TOTAL OF ALL PROJECTS REQUESTED	$ 3,867,000	$ 895,432
PROJECT MANAGEMENT SUPPORT	$ 85,000	$ 25,000
CONTINGENCY	$ 100,000	
TOTAL AUTHORIZED FUNDS	$ 4,052,000	$ 920,432

RECAP		
CATEGORY 1 - FIRE/LIFE/SAFETY	$ 172,073	$ 172,073
CATEGORY 2 - ROOFS	$ 1,450,529	$ 461,210
CATEGORY 3 - PRESERVATION OF ASSET	$ 71,500	$ -
CATEGORY 4 - MAJOR BUILDING SYSTEMS	$ 1,354,127	$ 174,604
CATEGORY 5 - INTERIOR BUILDING FINISHES	$ 26,000	$ -
CATEGORY 6 - RECONFIGURE OR REMODEL	$ 49,800	$ -
CATEGORY 7 - ADA COMPLIANCE	$ 207,200	$ -
CATEGORY 8 - INFRASTRUCTURE	$ 535,771	$ 87,545
PROJECT MANAGEMENT SUPPORT	$ 85,000	$ 25,000
CONTINGENCY	$ 100,000	$ -
TOTAL	$ 4,052,000	$ 920,432

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FY 2009 CAPITAL IMPROVEMENT PLAN
DEPARTMENT OF TRANSPORTATION FY 2009 FINAL BUILDING RENEWAL PROJECT LIST - BY CATEGORY

STATE AVIATION FUND

Project Description	Estimated Cost	Critical Projects
CATEGORY 2 - ROOFS		
Grand Canyon Airport School Bus Stop Bldg 3058 - Replace failing roof	$ 800	
Grand Canyon Airport Fire Station Bldg 3552 - Repair failing roof	$ 800	
Grand Canyon Airport Office/Shop Bldg 3578 - Repair failing roof	$ 5,135	
Grand Canyon Airport Administration Bldg 3582 - Replace failing roof	$ 24,175	
Grand Canyon Airport Residence/Modular Bldg 3587 - Replace failing roof	$ 9,320	$ 9,320
Grand Canyon Airport Residence/Modular Bldg 3557 - Replace failing roof	$ 9,320	$ 9,320
Grand Canyon Airport Residence/Modular Bldg 3558 - Replace failing roof	$ 9,320	$ 9,320
Grand Canyon Airport Residence/Modular Bldg 3560 - Replace failing roof	$ 9,320	$ 9,320
Grand Canyon Airport Residence/Modular Bldg 3564 - Replace failing roof	$ 9,320	$ 9,320
GCA Residence/Storage Bldg 3555 - Replace failing roof	$ 800	
GCA Residence/Storage Bldg 3559 - Replace failing roof	$ 800	
GCA Residence/Storage Bldg 3561 - Replace failing roof	$ 800	
GCA Residence/Storage Bldg 3565 - Replace failing roof	$ 800	
GCA Residence/Storage Bldg 3563 - Replace failing roof	$ 800	
GCA Residence/Storage Bldg 3568 - Replace failing roof	$ 800	
GCA Residence/Storage Bldg 3569 - Replace failing roof	$ 800	
GCA Residence/Storage Bldg 3572 - Replace failing roof	$ 800	
GCA Residence/Storage Bldg 3586 - Replace failing roof	$ 800	
Grand Canyon Airport Storage Bldg 3841 - Replace failing roof	$ 1,490	
TOTAL	**86,200**	**46,600**
CATEGORY 3 - PRESERVATION OF ASSET		
Grand Canyon Airport - Repair facade on exterior walls and signs though out site	$ 8,000	
TOTAL	**8,000**	**-**
CATEGORY 4 - MAJOR BUILDING SYSTEMS		
Grand Canyon Airport Bldg 3552 - Replace old lighting system with energy efficient lighting	$ 3,000	
Grand Canyon Airport Bldg 3577 - Replace old lighting system with energy efficient lighting	$ 2,000	
Grand Canyon Airport Bldg 3578 - Replace old lighting system with energy efficient lighting	$ 2,000	
TOTAL	**$ 7,000**	**$ -**
CATEGORY 5 - INTERIOR BUILDING FINISHES		
Grand Canyon Airport Bldgs 3557,3558 ,3587,3564, 3560 - Replace kitchen & bath counters & cabinets	$ 38,000	
TOTAL	**$ 38,000**	**$ -**
CATEGORY 8 - INFRASTRUCTURE		
Grand Canyon Airport - Replace 3 unserviceable vehicle gates	$ 17,700	$ 17,700
TOTAL	**$ 17,700**	**$ 17,700**
TOTAL OF ALL PROJECTS REQUESTED	**$ 156,900**	**$ 64,300**
CONTINGENCY	**$ -**	**$ -**
TOTAL AUTHORIZED FUNDS	**$ 156,900**	**$ 64,300**

RECAP		
CATEGORY 2 - ROOFS	**$ 86,200**	**$ 46,600**
CATEGORY 3 - PRESERVATION OF ASSET	**$ 8,000**	**$ -**
CATEGORY 4 - MAJOR BUILDING SYSTEMS	**$ 7,000**	**$ -**
CATEGORY 5 - INTERIOR BUILDING FINISHES	**$ 38,000**	
CATEGORY 8 - INFRASTRUCTURE	**$ 17,700**	**$ 17,700**
TOTAL	**$ 156,900**	**$ 64,300**

STATE OF ARIZONA

Joint Committee on Capital Review

1716 WEST ADAMS
PHOENIX, ARIZONA 85007

PHONE (602) 926-5491

FAX (602) 926-5416

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

DATE: November 6, 2008

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

THRU: Richard Stavneak, Director

FROM: Leah Kritzer, Fiscal Analyst

SUBJECT: Arizona State University - Review of $20.8 Million in University Lottery Bond Projects - Building Renewal

Request

A.R.S. § 15-1683 requires Committee review of any university projects financed with revenue bonds. Arizona State University (ASU) requests Committee review of $34.4 million in Building Renewal projects. This issuance represents a portion of the University Lottery Bonding package as authorized by the FY 2009 Education Budget Reconciliation Bill (BRB) (Laws 2008, Chapter 287).

The $34.4 million ASU request was presented for information only at the October 2, 2008 meeting. This memo now addresses the review of $20.8 million for fire alarm and sprinkler system installations, electrical code upgrades, elevator upgrades, and roof repairs.

Recommendation

The Committee has at least the following 2 options:

1. A favorable review, with the standard university financing provisions (listed below).

2. An unfavorable review.

Under either option, the JLBC Staff recommends the provision that ASU submit a final debt service schedule and a list of projects.

Standard University Financing Provisions

- 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.

(Continued)

- ASU shall submit to JLBC Staff any reallocation above $500,000 between the individual projects. The Committee may review these items depending on the substantive nature of the reallocation.

Analysis

This agenda item is comprised of 3 types of building renewal projects, at an estimated total cost of $20.3 million. Building renewal appropriations provide for the major maintenance and repair of state-owned buildings. The universities, however, have received about 12% of their building renewal formula over the last 10 years. ASU's FY 2009 Building Renewal formula would have been approximately $28.2 million.

The $20.3 million in projects consists of: roof replacements, electrical entrance system replacement work, and elevator refurbishment. The 27 roof replacements will incorporate replacement of mechanical systems located on roofs and asbestos abatement, with 1 additional project consisting of a mechanical equipment replacement only. ASU is proposing 14 main electrical system replacements, which include removing significant electrical components and replacing them with code compliant equipment. There are also 7 elevator refurbishment projects planned, some of which will include fire protection upgrades. The elevator projects are considered stand alone projects, which are not related to the roof replacement and electrical replacement projects discussed above.

Projects that are part of the requested $33.6 million, but are not part of the new $20.3 million review, include the renovation of 3 additional buildings. The Stauffer Building A and B renovations include deferred maintenance and minor classroom upgrades. ASU also proposes to renovate its 476-seat Araviapa auditorium on its Polytechnic campus.

ASU's projected costs contain no contingency monies. ASU intends to shift monies among projects once the final building or project assessment is developed, which they note will not exceed the total project cost. The standard university financing provisions listed above include a requirement for ASU to submit for Committee review any reallocation above $500,000 between the individual projects depending on the substantive nature of the of the reallocation.

Financing

The FY 2009 Education BRB authorized the Arizona Board of Regents (ABOR) to enter into lease-to-own and bond transactions up to a maximum of $1.0 billion to pay for building renewal projects and new facilities. Of that amount, ABOR cannot issue more than $285.0 million in FY 2009 and not more than $500.0 million in FY 2010. The annual debt service payments will be paid from the newly-created University Capital Improvement Lease-to-Own and Bond (UCI) Fund and will be comprised of 80% Lottery revenues and 20% state university system revenues, as required by the FY 2009 Education BRB.

Under the Lottery financing proposal, the prior caps on Lottery advertising have been removed. As a result, advertising expenditures are projected to increase from $11.0 million to $20.2 million. Along with other modifications, the Arizona State Lottery Commission estimates that these changes will increase Lottery proceeds by $103.2 million, or 22%, in FY 2009. After accounting for prizes, this would result in $12.7 million more for Lottery beneficiaries.

All current Lottery beneficiaries will continue to receive their current funding allocations with 1 exception. Local mass transit projects will receive $9.5 million instead of $18.0 million in FY 2009. Most of the growth will be deposited in the UCI Fund. It is uncertain whether these proposed changes will generate the percent increase in proceeds as forecast by the Commission. Given this uncertainty, more than 20% of the debt service may need to be paid by university sources.

Of the $1.0 billion amount, the FY 2009 Education BRB requires ABOR to allocate $470.0 million for construction of the University of Arizona Phoenix Biomedical Campus. The legislation permits ABOR to determine the distribution of the remaining funds. Of the remaining $530.0 million, ABOR plans on

(Continued)

allocating $20.0 million to ASU's School of Construction and $170.0 million to each of the 3 universities for building renewal and new construction projects. This project up for review represents a single ASU issuance, which is $20.8 million of ASU's $170.0 million allocation.

The original project cost totaled $34.4 million, with $0.8 million for issuance costs and $33.6 million for project costs. The new cost totals $20.8 million, with $0.5 million for issuance costs (which assumes costs are proportionate to the original issuance), and $20.3 million in project costs. ASU plans on issuing A1/AA- rated revenue bonds with an estimated 5.85% annual interest rate and a term of 20 years. The actual interest rate may change when the bond goes to market in January 2009.

Based on a request of $34.4 million, ASU originally estimated an average annual debt service cost of $2.9 million with a 20-year total cost of $58.4 million. It is assumed that the new total cost of $20.8 million will result in a proportionate average annual debt service cost to the original estimates. The new average annual debt service is estimated to cost $1.8 million, with a 20-year total cost of $35.0 million.

The debt service is designed to be funded with 2 separate revenue streams as prescribed by the FY 2009 Education BRB. Approximately $1.4 million, or 80%, will come from state Lottery proceeds, while $0.4 million will come from local university funds. Given the uncertainty with Lottery proceeds, as described above, local funds will likely need to provide more than their 20% share. ASU had originally planned to begin construction in October 2008. The bond issuance is planned for January 2009. ASU indicates they will use their current cash flow to cover immediate costs of approximately $5.0 million necessary to begin operation of its plan. When the bonds are issued, it is intended that ASU will be repaid with its Lottery bond proceeds.

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. The FY 2009 Education BRB provided that the University Lottery building projects will be exempt from university debt limit calculations. If the debt service for the requested $34.4 million was included in the calculation, however, the debt ratio would increase by 0.15% from the current 5.7% rate to a new debt ratio of 5.85%.

Construction Costs

Total project costs up for review are estimated at $20.3 million, which typically include direct construction costs, architect fees, furniture and equipment costs, and contingency fees. As noted earlier, ASU's cost estimates are still preliminary and do not include contingency or direct construction costs. *Table 1* lists estimated capital costs and renovation scopes for the all 5 projects requested for review by ASU and also provides a comparison of ASU's requested projects to those which will be reviewed by the Committee.

ASU notes that some of their cost estimates have been developed using information from RS Means, a supplier of construction cost information, and historically comparable ASU projects. They also stated that once project design is complete, more cost information will be available. Many of the proposed projects have a large range of project specifications and comparable projects were not applicable to assess cost reasonableness.

(Continued)

Table 1

ASU Building Renewal Costs and Scopes

Project	Description	ASU Request	Review
Roof Replacement and Roof Mechanical Equipment	Replace roofs and mechanical equipment located on roofs. Includes roof and mechanical replacements for 28 different buildings.	$11,300,000	$11,300,000
Stauffer Buildings A and B	Renovate for use as swing space, life/safety upgrades, and new classroom space.	10,000,000	0
Main Electrical System Replacements	Replace service entrance portions of the electrical systems. Includes replacements for 14 buildings.	5,800,000	5,800,000
Araviapa Auditorium	Renovate auditorium on Polytechnic campus.	3,300,000	0
Elevator Refurbishment	Includes replacement of flooring, doors, and wall panels for elevators in 7 buildings.	3,200,000	3,200,000
Total		**$33,600,000**	**$20,300,000**

The Araviapa Auditorium and the Stauffer A and B buildings, which are not up for review by the Committee, have comparable costs which were used to determine reasonableness. The Araviapa Auditorium 476-seat renovation project is estimated to cost $3.3 million, for a per seat cost of $6,900. ASU's 80-seat Pima Room renovation project, as part of the Memorial Union renovations, cost approximately $600,000 (or $7,500 per seat). When compared to the Pima Room renovations, the Araviapa Auditorium costs appear reasonable. The Stauffer A and B building projects would cost approximately $10.0 million, with $6.5 million of these costs dedicated to deferred maintenance projects. This project would consist of approximately 82,500 square feet, for a total cost per square foot of $121. In comparison, ASU completed similar renovations on its Polytechnic campus in 2003, for a cost per square foot of $101. Given increased cost of construction over 5 years, these costs appear reasonable.

Procurement Method

ASU is considering 3 different procurement methods for its proposed projects. For its larger deferred maintenance projects, ASU plans on using the Construction Manager at Risk (CMAR) method. 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, 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 also plans to use Job Ordering Contracting (JOC) and design/bid/build procurement methods for its other projects depending on the size and nature of the project. The JOC approach pre-qualifies contractors through a competitive selection process and bid estimates are prepared. According to ABOR policy, JOC-procured construction projects can only be used for projects with a maximum total cost of $2.0 million. Under the design/bid/build method, the design and construction phases are separately contracted and done in sequence. After design is complete, the construction phase requires a competitive bid process that awards the contract to the lowest responsible and responsive bidder.

RS/LK:ss

ASU
ARIZONA STATE UNIVERSITY

September 11, 2008

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

Dear Representative Pearce:

In accordance with ARS 15-1683 and pursuant to HB 2211, the Arizona Board of Regents requests that the following University Capital Improvement Lease-to-Own and Bond Fund, (primarily lottery proceeds) bond financed project for ASU be placed on the next (October 2, 2008) Joint Committee on Capital Review Agenda for review:

SPEED (Stimulus Plan for Economic and Educational Development)
Deferred Maintenance and Building Renewal Projects, Phase 1a

Enclosed is pertinent information relating to this project.

This project is scheduled for review and approval by the Board of Regents on September 26, 2008. The Regents' Capital Committee recommended that the Board grant project approval at its September 3, 2008 meeting. If this project should not be approved by the Regents on September 26th, the request for JCCR review will be withdrawn until Regents' approval has been received.

If you have any questions or desire any clarification on the enclosed material, please contact me at (480) 727-8307.

Sincerely,

Richard Stanley
Senior Vice President and University Planner

Enclosures

c: Richard Stavneak, Director, JCCR
James Apperson, OSPB
Joel Sideman, Executive Director, Arizona Board of Regents
Sandra Woodley, CFO, Arizona Board of Regents
Lorenzo Martinez, Assist. Exec. Dir. for Capital Resources, Arizona Board of Regents
Carol Campbell, Executive Vice President and CFO
Morgan Olsen, Executive Vice President, Treasurer, and CFO (Designate)
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
Karla Phillips, Director, State Relations
Leah Kritzer, Fiscal Analyst, JCCR

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EXECUTIVE SUMMARY

ITEM NAME: Combined Project Implementation and Project Approval for SPEED Deferred Maintenance and Building Renewal Projects Phase 1a (ASU)

☒ Action Item ☐ Discussion Item ☐ Information Item

Issue: Arizona State University requests combined Project Implementation Approval and Project Approval for the SPEED Deferred Maintenance and Building Renewal Bundle Phase 1a and requests approval to shift monies among the projects once the final building or project assessment is developed, provided that the bottom line budget will not be exceeded.

Previous Board Actions:

FY 2009 Capital Development Plan	June 2008
SPEED Projects Allocations Plan	July 2008

Project Justification/Strategic Implications:

- Arizona's public university campuses are in a serious state of disrepair because critical maintenance needs have been deferred due to lack of state funding. ASU currently faces a maintenance backlog in excess of $294 million. Since 1987, the university has submitted building renewal requests exceeding $250 million while funding over the same time period has been less than 25% of what was needed. There were five consecutive years in which no funding was provided. An ad hoc approach to maintenance can no longer deal with this growing problem. The SPEED program is a significant response to this issue.

Project Description and Scope:

- At the July 2008 Capital Committee meeting, ASU outlined its plan for a multi-phased submission of bundled projects plus some individual projects. This approach was created to meet the Legislature's expectations and the SPEED proposal's intent for expediency. ASU's plan for the FY 09' bundled projects will be broken into two submissions, with Phase 1b planned to be submitted for Board approval in December 2008. Phase 1a represents the first bundle of projects, identified below. Projects in this phase were selected because the pre-programming is already complete or they can begin construction immediately with little to no impact on students and staff.

CONTACT: Richard H. Stanley, Senior Vice President and University Planner, (480) 727-8307; richard.h.stanley@asu.edu
Carol Campbell, Executive Vice President and Chief Financial Officer, (480) 727-9920;carol.n.campbell@asu.edu

EXECUTIVE SUMMARY

- Roof Replacements/Mechanical Equipment - This project will replace roofs and mechanical equipment located on the roof (see Table A for buildings). Most of the roof replacement projects will require asbestos abatement prior to replacement of the roof. Older mechanical equipment and its associated electrical components which are at the end of their useful life will also be replaced. The estimated project budget is $11,300,000.

- Main Electrical System Replacement – This project would replace the service entrance portions of the electrical systems in several buildings (see Table A for buildings). Due to the age of the electrical systems ASU can no longer obtain replacement parts and the systems need to be replaced with newer and more reliable systems. The estimated project budget is $5,800,000.

- Elevator Refurbishment –The refurbishments will include replacement of flooring, doors and wall panels (see Table A for buildings). If necessary the refurbishment will include retrofitting inefficient leveling equipment, upgrading mechanical systems to prevent entrapments, and/or replacing obsolete or unserviceable parts. In addition, recent codes are mandating the addition of sprinklers as well as automatic recall features. The estimated project budget is $3,200,000.

- Aravaipa Auditorium – This project is planned to renovate the interior of the existing 10,000 gross square foot auditorium at the Polytechnic campus. Renovations will include: seating areas, walls projection room, restrooms, stage area, and ADA access; and upgrade building infrastructure including electrical, HVAC, and plumbing. The estimated project budget is $3,300,000.

- Stauffer A and B – Stauffer A has been vacated due to Cronkite School of Journalism moving to the downtown campus making it an optimal time to do upgrades in the building. As ASU finalizes its plans for SPEED implementation, Stauffer A will be used as swing space or be backfilled by academic programs that will allow for swing space in other parts of the campus. University classrooms will also be upgraded and added to Stauffer A. Stauffer B becomes vacant in early 2009 with the move of KAET to the downtown campus and ASU intends to do life/safety upgrades while the building is vacant before backfilling with the best use academic program. The estimated project budget is $10,000,000.

EXECUTIVE SUMMARY

Table A

BUILDING NAME	ROOF REPLACEMENT	ROOF MECHANICAL REPLACEMENT	MAIN ELECTRICAL SYSTEM REPLACEMENT	ELEVATOR REFURBISHMENT
Anthropology	X	X	X	X
Art Building		X		
Bateman Phys. Sciences Center A/ Wexler Hall	X	X	X	X
Bateman Physical Sciences Center F	X	X		
Bateman Physical Sciences Center H	X	X		
Business Administration	X	X		X
Business Administration C Wing	X	X		X
Center for Family Studies	X	X	X	
College of Design South	X	X	X	X
Cowden Family Resources Bldg	X	X	X	
Durham Language & Literature Bldg	X	X	X	
Education Lecture Hall	X	X		
Engineering Center G	X	X		
Farmer Education Building	X	X	X	
Hayden Library	X	X		X
Life Science Center A	X	X	X	
Matthews Hall	X	X	X	
Murdock Lecture Hall	X	X		
Neeb Hall	X	X		
Payne Hall	X	X	X	
Physical Education Bldg. East	X	X	X	
Physical Education Bldg. West	X	X	X	
Psychology Building	X	X		X
Psychology North	X	X	X	
Schwada Classroom Office Bldg.	X	X		
Stauffer Communication Arts A	X	X		
Stauffer Communication Arts B	X	X		
Undergraduate Academic Services	X	X	X	

Statutory / Policy Requirements

- Board Policy 7-109 requires Capital Committee review and Board approval of projects with a total project cost over $20 million.

Additional Project Considerations:

- ASU renovation projects will include responsible, sustainable options where feasible.

EXECUTIVE SUMMARY

Project Delivery Method and Process:

- Larger projects in the deferred maintenance bundle are planned to be delivered through the Construction Manager at Risk (CMAR) method. Other methods such as Job Order Contracting (JOC) or Design/Bid/Build may be used depending on the size and nature of the project.

- The Construction Manager (CM) at Risk approach can save time through fast-track project scheduling. It provides contractor design input and coordination throughout the project, it improves potentially adversarial project environments, and it allows for the selection of the most qualified contractor team for each individual project. 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.

- Contracts for CMAR's will include Board approved requirements for Veteran's preference hiring programs. A final report on project control procedures such as change orders and contingency use will be provided at project completion.

- The JOC approach can reduce the overall project schedule since the advertising and selection part of the procurement process has already been completed. ASU currently has two contractors under a five year contract, renewable each year. These contractors have been pre-qualified through a competitive selection process as defined in Board Policy 3-804B. This approach can only be utilized for projects with a maximum total cost of $1,999,999.

- The Design/Bid/Build approach will be utilized for single trade work projects such as roofs or elevators. With this approach the lowest qualified bidder will be selected.

- Selections of the Design Professional and the contractor will be through the capital project selection process prescribed by the ABOR Procurement Code. For each CMAR selection, a licensed contractor and a design professional will be included on the selection committee as required by Board Policy.

Project Costs:

- The total project budget for Phase 1a is $33,000,000.

- The individual project budgets have been based upon preliminary cost estimates. Depending on the nature of the project the cost estimates have been developed on a cost per square foot method using either RS Means, normalized to the local area, or historical costs from recent comparable ASU projects.

- Once the design of these projects is completed cost information will be included in regular updates to the Board. Relevant comparable projects will also be included in

the updates.

- For CMAR, two cost estimates for each project will be prepared independently by the Construction Manager at Risk and the Architect's estimating consultant. These estimates will be reconciled together to confirm accurate, competitive scope quantities and unit prices to form the GMP for the entire scope of work. ASU will identify what percentage of the CMAR's current estimate is made up of subcontractor bid commitments, price projections from subcontractors, and estimates prepared by the CMAR team.

- For JOC, two cost estimates will be prepared for the job based upon pre-established standard unit prices for individual tasks and pricing based on the number of units (RS Means, localized to the area) and the in-house ASU cost database. These estimates will be reconciled together to confirm accurate, competitive scope quantities and unit prices to form the job cost for the entire scope of work

- For Design/Bid/Build, ASU will seek a confirming estimate from an independent 3rd party prior to bidding. These estimates will be reconciled together to confirm accurate, competitive scope quantities and unit prices to form the construction budget for the entire scope of work.

Fiscal Impact and Financing Plan:

- Lottery Revenue Bonds will be issued to finance the project. The bonds will be repaid over a 20 year period. The annual debt service of approximately $2.6 million will be funded from state lottery allocation proceeds (80%) and University local funds (20%).

- Debt Ratio Impact: Per the SPEED legislation (House Bill 2211), the debt service for this project is exempt from the debt service ratio calculation. If the debt service was included the incremental debt ratio for this project would be .14%.

Project Status & Schedule:

- ASU is continuing to evaluate program and define scope on all Phase 1a projects in preparation to solicit for Design Professionals (DP), Construction Managers at Risk (CMAR) and contractors by late August and early September.

- ASU intends to start construction on the Roof/Mechanical Replacement, Electrical System Replacements and Elevator Refurbishments projects in October, contingent upon all project reviews and approvals being in place. Construction completion dates will be identified in the regular update to the Board.

- The construction schedules for the Aravaipa Auditorium and Stauffer will be established once programming is finalized. These dates will be included in the regular update to the Board.

EXECUTIVE SUMMARY

Recommendation:

That the Board grant combined Project Implementation and Project Approval for SPEED Deferred Maintenance and Building Renewal Projects Phase 1a, including approval to shift monies among the projects once the final building or project assessment is developed, provided that the bottom line budget will not be exceeded.

JCCR Capital Review
SPEED Deferred Maintenance and Building Renewal Projects Phase 1a
Arizona State University

JCCR Meeting Date: October 2, 2008

The following is information not found in the ABOR Executive Summary

Project Name: SPEED Deferred Maintenance and Building Renewal Phase 1a

Project Scope

1. **Roof Replacements/Mechanical Equipment** - This project will replace roofs and mechanical equipment located on roofs. Most of the roof replacement projects will require asbestos abatement prior to replacement of the roof. Older mechanical equipment and its associated electrical components which are at the end of their useful life will also be replaced or repaired, depending on the condition of the components. The estimated project budget is $11,300,000.

   Roof designs for all ASU facilities are vastly different. Building use, age, number of previous replacements or repair, and differences in building design make it difficult to produce accurate cost comparisons. Costs for recent roof projects at ASU varied widely (see chart on pg. 2), depending on the type and complexity of the roof, the mechanical system replacements required, the number of roof penetrations, asbestos abatement and many other factors. In some cases, the entire roof will not be replaced if it is not necessary.

   For the SPEED Roof Replacement / Mechanical Equipment projects, preliminary costs are based on deferred maintenance inspections. ASU gathers deferred maintenance costs by inspecting its buildings on a four-year cycle, inspecting one-quarter of its buildings yearly. The costs for the roofs in this project are expected to change once the projects are bid and design is complete.

Comparable Project & Project Description	Location	Gross Square Feet	Total Cost/ SF	Total Proj. Cost
GIOS / Ceramics Buildings Roof Replacement Project	Tempe	11,678	$24.96	$418,161
Memorial Union Loading Dock Roof Replacement Project	Tempe	968	$181.62	$175,806

2. **Main Electrical System Replacement** – This project would replace the service entrance portions of the electrical systems in several buildings (see Table A in ABOR item for buildings). Due to the age of the electrical systems ASU can no longer obtain replacement parts and the systems need to be replaced with newer and more reliable systems. The estimated project budget is $5,800,000.

JCCR Capital Review
SPEED Deferred Maintenance and Building Renewal Projects Phase 1a
Arizona State University

The most recent electrical service replacement project was the $517,000 Armstrong Great Hall Electrical Upgrades project. However, this is not a comparable project to which the SPEED project can be compared. Each electrical system is different and costs will vary due to the following factors:

- Existing infrastructure: infrastructure connecting the electrical system to the building may or may not be able to be adapted to new electrical service requirements
- Physical location of equipment: some equipment is in tunnels, other equipment is two stories down or in the basement. Difficulty in accessing the equipment can dramatically affect the project cost.
- Ages and types of equipment: Electrical equipment varies in age and type and will affect the cost of retrofitting or replacing.

3. **Elevator Refurbishment** –The refurbishments will include, as necessary, retrofitting inefficient leveling equipment, upgrading mechanical systems to prevent entrapments, replacing motors, winches, cables, controllers, optics, and/or replacing any obsolete or unserviceable parts, and replacing flooring, doors and wall panels (see Table A for buildings). In addition, recent codes are mandating the addition of sprinklers as well as automatic recall features. The project may also include sump pumps in some hydraulic elevators, as well as oil/water separators. Should sprinklers need to be installed in hydraulic elevators, a sewer line connection will need to be established. Exhaust air in the shaft will also be evaluated. The estimated project budget is $3,200,000.

   There have been no known projects of this type at ASU Tempe campus. This project will completely renew and bring to code selected obsolete elevators at the Tempe campus. It will also install sprinklers, sump pumps and other code-related activity.

4. **Araviapa Auditorium** – This project is planned to renovate the interior of the existing 10,000 gross square foot auditorium at the Polytechnic campus to provide needed large classroom and event space. The auditorium is not currently usable. Renovations will include: seating areas, walls projection room, restrooms, stage area, and ADA access; and upgrade building infrastructure including electrical, HVAC, and plumbing. The estimated project budget is $3,300,000.

   ASU is not aware of any similar projects to the Araviapa Auditorium Renovation Project. ASU has contacted construction management companies to determine comparable projects; however, those companies were not aware of projects similar to the Araviapa Auditorium Renovation Project. The cost is based on estimates from a construction manager at risk and is corroborated by a third-party estimate.

5. **Stauffer A and B** – Stauffer A (45,000 GSF) and B (37,000 GSF) are being vacated as a result of the move of programs to the Downtown Phoenix campus and the space will be repurposed to handle growing enrollment in programs in the College of Liberal Arts and Science and the Herberger College of Art and to add University classroom space. Before this final use, some of the space will be used as swing space to allow SPEED projects to advance efficiently. ASU intends to do life/safety upgrades, deferred maintenance, and classroom and other functional upgrades before the planned backfilling. The estimated project budget is $10,000,000.

Debt Issuance

Project Costs	$	33,600,000
Costs of Issuance (1)	$	750,000
Total Issuance Amount	$	34,350,000
Interest rate		5%
Payment term		20 years
Annual debt service (by fund source):		
State Lottery Allocation Proceeds	$	2,205,100
Tuition and Other Local Funds	$	551,200
Total Annual debt service	$	2,756,300
Total debt service (by fund source)		
State Lottery Allocation Proceeds	$	44,102,000
Tuition and Other Local Funds	$	11,024,000
Total Debt Service	$	55,126,000
Date of Issuance		Fall 2008/Winter 2009
Anticipated Bond Rating (2)		A1/AA-

Gifts (not applicable)

Total Gift Amount	NA
Current Pledged Gift Amount	NA
Current Gift In-Hand Amount	NA

(1) The estimated not-to-exceed cost of the financing for Deferred Maintenance and Building Renewal Phase 1a is $750,000 excluding potential costs for credit enhancements which would increase the debt rating and reduce the interest rate on the debt.

(2) Moody's Investor Service/S&P Rating Services

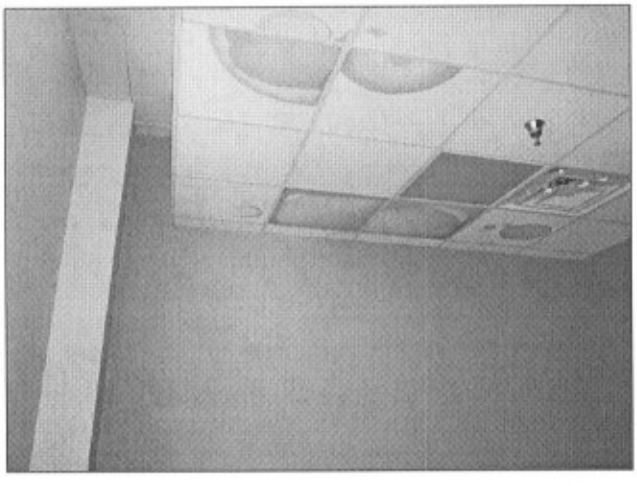
Arizona State University - Debt Service Schedule
JCCR Capital Review October 2, 2008
SPEED-Deferred Maintenance and Building Renewal Phase Ia

Fiscal Year	Payment	Principal	Interest	Outstanding Principal
				34,350,000
2009	143,125		143,125	34,350,000
2010	1,717,500		1,717,500	34,350,000
2011	1,717,500		1,717,500	34,350,000
2012	1,717,500		1,717,500	34,350,000
2013	1,717,500		1,717,500	34,350,000
2014	1,717,500		1,717,500	34,350,000
2015	3,309,300	1,591,800	1,717,500	32,758,200
2016	3,309,300	1,671,390	1,637,910	31,086,810
2017	3,309,300	1,754,959	1,554,341	29,331,851
2018	3,309,300	1,842,707	1,466,593	27,489,143
2019	3,309,300	1,934,843	1,374,457	25,554,300
2020	3,309,300	2,031,585	1,277,715	23,522,715
2021	3,309,300	2,133,164	1,176,136	21,389,551
2022	3,309,300	2,239,822	1,069,478	19,149,728
2023	3,309,300	2,351,814	957,486	16,797,915
2024	3,309,300	2,469,404	839,896	14,328,511
2025	3,309,300	2,592,874	716,426	11,735,636
2026	3,309,300	2,722,518	586,782	9,013,118
2027	3,309,300	2,858,644	450,656	6,154,474
2028	3,309,300	3,002,220	307,080	3,152,254
2029	3,309,300	3,152,253	157,047	0
Total	58,370,125	34,350,000	24,020,125	

SPEED 1a – Further information for the Joint Committee on Capital Review
November 13, 2008 Meeting
Arizona State University

State statute ARS 41-793 requires ASU to inspect its buildings every four years and data from those inspections is submitted to the Arizona Legislature through the yearly Capital Improvement Plan. The ASU deferred maintenance inspection team completes on-site building system examinations for one-fourth of the existing facilities each year. These ongoing inspections result in the identification of the overall building condition, and documents specific deferred maintenance issues and the associated cost of repairs. From those inspection reports, ASU identified the buildings listed in the proposed Construction Stimulus Program submitted to the legislature in March 2008, as the top priorities for building renewal and deferred maintenance funding. All the projects identified in Phase 1a, were based upon buildings identified in the Construction Stimulus Program. The Phase 1a projects have been placed in the following order of priority: 1) Roof Repairs and Replacements, 2) Electrical System Repair and Replacement, 3) Polytechnic Auditorium Renovation, 4) Elevator Upgrades, 5) Stauffer. Locations for some of these projects are listed in Table A on page 3.

Roofs
ASU has identified 27 buildings with roofs that are significantly past the age at which they should have been replaced. All the roofs indentified have been patched repeatedly to deal with leaking and all are in danger of leakage at any time. The replacement of the roofs is ASU's highest priority because of the danger of roof failure that would lead to water damage to buildings and building contents that would be significant in both degree and cost. Disruption to the occupants of the building can be considerable due to water migrating into the building. Several storms this year caused rainwater to leak into buildings. Water penetrated the roof in Discovery Hall in August, causing damage and disruption (see photo).



Leaking roofs have: destroyed experiments and damaged research equipment; halted student instruction; damaged furniture, teaching materials, walls, carpet, personal items, media equipment, and ceilings.

Disruptions can affect several floors of a building if water infiltrations impact electrical or environmental systems, and can shut down large areas in the building that are impacted by those systems. Leaking roofs quickly become a costly facility issue; however, the greatest risk is the potential for life/safety problems for students, faculty and staff. Leaking roofs can create dangerous conditions in the buildings, including falling ceilings, slippery floors, growth of mold and mildew, and potential injury from electrical shock. Over time, water penetrating into the building envelope can result in major structural damage to the building as well. Ultimately, it is far less expensive to maintain or replace a roof than it is to deal the effects and risks of leaks.

As the table shows, buildings in this project have roofs that are an average of 22 years old. Several buildings on the list are in dire need of replacement, such as the 38-year-old roof on Neeb Hall and the 27-year-old roof on the Schwada Building. As roofs wear beyond their useful age, the elastomeric material of which they are constructed has continued to contract and shrink, causing large fissures to open near the edges of the roof. These fissures are difficult if not impossible to patch. The condition of the Schwada roof is especially complex because of multiple penetrations: as the roofing material shrinks, the areas around the penetrations are exposed to the elements.

Electrical entrance system replacement work: ASU has identified 14 buildings with immediate needs for the replacement of the electrical entrance systems. These building range in age from 38 to 94 years old and all have entire systems or system components that were part of the original installation. These projects are a high priority due to the increasingly likely occurrence of electrical failure, and the subsequent impact to the university teaching and research capability. Most

of the electrical systems in this project are original to the buildings listed, and the age of the equipment means that replacement parts are neither available nor practical. Should a failure occur, replacement parts in several buildings would be not available, and the building will have to be vacated until either temporary power can be restored or new systems are installed. An electrical failure in an ASU building would mean an interruption of use from one week to several months. ASU has no alternative teaching options due to space constraints.

Systems in buildings such as the Bateman Physical Sciences Center A/Wexler Hall (built in 1960) and the Physical Education Building West built in 1927, have open high voltage bussing and secondary bussing. This means that the 12,470V electrical systems are open and exposed and could cause major injury or death to an individual accessing the area accidentally. At least one major injury has resulted on campus because of an individual breaking into one of these spaces.

Polytechnic Auditorium: This project will perform deferred maintenance and renovations in a currently vacant, unusable auditorium on the Polytechnic campus. The auditorium is an Air Force facility that was part of the campus at its acquisition, but has never been usable because of its condition at the time of acquisition. The project is our third priority since its availability will allow ASU Polytechnic to teach more efficiently in larger classes (an element of ASU cost savings planning). The auditorium does not meet current codes and building systems have aged to the point where the building infrastructure has to be replaced in order to allow its being opened for use and to maintain an acceptable operational environment and to provide safe and reliable power. This renovation will allow this building to become an asset instead of a liability, and provide a venue that is not easily accommodated by other facilities.

Elevator work: Projects have been identified in 7 buildings to bring aged systems up to date and to meet current fire codes as emergency recall features and sprinklers where appropriate. Many of the elevators are original to the building and range in age from 17 to 43 years. Older elevator controls are not able to be adapted to meet the new criteria and thus have to be replaced; this upgrade also increases the elevators' operational reliability.

Stauffer – The project will perform comprehensive repairs in a building complex in Tempe that was freed by the opening of the downtown campus. The project will provide needed facilities to support continued expansion of enrollment without the high cost of new construction. Work in the Stauffer project will address problems such as:

1. The existing rooftop penthouse stucco wall system is badly cracked, having been repaired several times. The wall system continues to deteriorate in spite of repairs.
2. The wall system of floors 2 and 3 consist of precast concrete wall panels. The sealant joints for this wall system are badly deteriorated and will allow rain to penetrate into the building.
3. Existing glazing in the windows has neoprene gaskets that are falling out of the window systems, allowing rainwater to penetrate the building.
4. Cement plaster soffits over entry patios are cracked and have water damage.
5. Exterior entry steps up to the entry patio are badly cracked, creating a serious safety hazard to pedestrians.
6. Exterior stucco walls around the building perimeter first floor are cracked and water damaged.
7. Precast concrete panels on levels 2 and 3 has paint that is flaking off, allowing moisture to penetrate the concrete panels.
8. Ceiling tiles, carpet, some walls, and baseboards are damaged, asbestos containing, stained and/or worn out.
9. The building air handling units are 35 years old and are at the end of their useful life.
10. The plumbing system has many components at the end of their useful life, including valves, toilets, faucets, traps, angle stops, sinks, drinking fountains.
11. Only the basement and stairwells have fire protection sprinklers. Fire sprinklers will be installed throughout the building.
12. The electrical distribution system is original to the building. Distribution components exceed the design life of the equipment. Existing distribution is missing the equipment ground. The entire distribution system needs to be upgraded, including feeders and branch wiring to devices.

Table A

BUILDING NAME	Age of building	ROOF REPLACEMENT	Approx. age of roof in years	ROOF MECH	MAIN ELECTRICAL SYSTEM REPLACEMENT	Age of electrical systems	ELEVATOR REFURBISHMENT	Approx. age of elevator in years
Anthropology	1914	X	22	X	X	94	X	37
Art Building	1970	no	new coating	X				
Bateman Phys. Sciences Center A/ Wexler Hall	1960	X	20	X	X	48	X	36
Bateman Physical Sciences Center F	1976	X	27	X				
Bateman Physical Sciences Center H	1991	X	18	X				
Business Administration	1968	X	19	X			X	41
Business Administration C Wing	1983	X	25	X			X	17
Center for Family Studies	1940	X	18	X	X	68		
College of Design South	1970	X	22	X	X	38	X	31
Cowden Family Resources Bldg	1951	X	18	X	X	57		
Durham Language & Literature Bldg	1964	X	19	X	X	44		
Education Lecture Hall	1969	X	19	X				
Engineering Center G	1964	X	21	X				
Farmer Education Building	1961	X	27	X	X	47		
Hayden Library	1966	X	24	X			X	43
Life Science Center A	1959	X	28	X	X	49		
Matthews Hall	1918	X	18	X	X	90		
Murdock Lecture Hall	1970	X	20	X				
Neeb Hall	1970	X	38	X				
Payne Hall	1969	X	21	X	X	39		
Physical Education Bldg. East	1966	X	21	X	X	42		
Physical Education Bldg. West	1927	X	27	X	X	82		
Psychology Building	1972	X	22	X			X	36
Psychology North	1964	X	16	X	X	44		
Schwada Classroom Office Bldg.	1979	X	27	X				
Stauffer Communication Arts A	1973	X	19	X				
Stauffer Communication Arts B	1973	X	19	X				
Undergraduate Academic Services	1951	X	20	X	X	57		

STATE OF ARIZONA

Joint Committee on Capital Review

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DATE: November 6, 2008

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

THRU: Richard Stavneak, Director

FROM: Leah Kritzer, Fiscal Analyst

SUBJECT: University of Arizona - Review of $17.5 Million in University Lottery Bond Projects - Building Renewal

Request

A.R.S. § 15-1683 requires Committee review of any university projects financed with revenue bonds. The University of Arizona (UA) requests Committee review of $68.5 million in Building Renewal projects. This issuance represents a portion of the University Lottery Bonding package as authorized by the FY 2009 Education Budget Reconciliation Bill (BRB) (Laws 2008, Chapter 287).

The $68.5 million UA request was presented for information only at the October 2, 2008 meeting. This memo now addresses the review of $17.5 million for fire alarm and sprinkler system installations, electrical code upgrades, elevator upgrades, and roof repairs.

Recommendation

The Committee has at least the following 2 options:

1. A favorable review, with the standard university financing provisions (listed below).

2. An unfavorable review.

Under either option, the JLBC Staff recommends the provision that ASU submit a final debt service schedule and a list of projects.

Standard University Financing Provisions

- 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.

(Continued)

- UA shall submit to JLBC Staff any reallocation above $500,000 between the individual projects. The Committee may review these items depending on the substantive nature of the reallocation.

Analysis

This agenda item is comprised of 4 types of building renewal projects, at an estimated total cost of $17.4 million. Building renewal appropriations provide for the major maintenance and repair of state-owned buildings. The universities, however, have received about 12% of their building renewal formula over the last 10 years. UA's FY 2009 Building Renewal formula would have been approximately $44.2 million.

The $17.4 million projects consist of $16.4 million on the UA Main Campus and $1.0 million for the UA Health Sciences Campus. These projects include fire alarm and sprinkler system installations, electrical code upgrades, elevator upgrades, and roof repairs. The 17 fire alarm and fire sprinkler system projects include new or replacement systems. UA plans on a total of 24 code upgrades for approximately 9 electrical systems and 15 elevators. Roofing repairs and upgrades are planned for 38 buildings.

Projects that were part of the requested $68.0 million, but are not part of the new $17.4 million review, include 5 types of renovation projects. These requested projects include interior and exterior components, heating, ventilation, and air conditioning (HVAC), mechanical system repairs and replacements, building structural repairs, and football stadium repairs. This request includes 1 project for various transformer replacements across the main campus. UA also requested 16 HVAC replacement and duct work projects. There are 43 buildings they requested for mechanical and plumbing system repairs and replacements. UA identified a total of 75 buildings that are in need of structural repairs. Lastly, UA requested structural repairs for its football stadium.

UA's projected costs contain no contingency monies. UA intends to shift monies among projects once the final building or project assessment is developed, which they note will not exceed the total project cost. The standard university financing provisions listed above include a requirement for UA to submit for Committee review any reallocation above $500,000 between the individual projects depending on the substantive nature of the of the reallocation.

Financing

The FY 2009 Education BRB authorized the Arizona Board of Regents (ABOR) to enter into lease-to-own and bond transactions up to a maximum of $1.0 billion to pay for building renewal projects and new facilities. Of that amount, ABOR cannot issue more than $285.0 million in FY 2009 and not more than $500.0 million in FY 2010. The annual debt service payments will be paid from the newly-created University Capital Improvement Lease-to-Own and Bond (UCI) Fund and will be comprised of 80% Lottery revenues and 20% state university system revenues, as required by the FY 2009 Education BRB.

Under the Lottery financing proposal, the prior caps on Lottery advertising have been removed. As a result, advertising expenditures are projected to increase from $11.0 million to $20.2 million. Along with other modifications, the Arizona State Lottery Commission estimates that these changes will increase Lottery proceeds by $103.2 million, or 22%, in FY 2009. After accounting for prizes, this would result in $12.7 million more for Lottery beneficiaries.

All current Lottery beneficiaries will continue to receive their current funding allocations with 1 exception. Local mass transit projects will receive $9.5 million instead of $18.0 million in FY 2009. Most of the growth will be deposited in the UCI Fund. It is uncertain whether these proposed changes will generate the percent increase in proceeds as forecast by the Commission. Given this uncertainty, more than 20% of the debt service may need to be paid by university sources.

Of the $1.0 billion amount, the FY 2009 Education BRB requires ABOR to allocate $470.0 million for construction of the University of Arizona Phoenix Biomedical Campus. The legislation permits ABOR to

(Continued)

determine the distribution of the remaining funds. Of the remaining $530.0 million, ABOR plans on allocating $20.0 million to ASU's School of Construction and $170.0 million to each of the 3 universities for building renewal and new construction projects. This project up for review represents a single UA issuance, which is $17.5 million of UA's $170.0 million allocation.

The original project cost totaled $68.5 million, with $0.5 million for issuance costs and $68.0 million for project costs. The new cost totals $17.5 million, with $0.1 million for issuance costs (which assumes costs are proportionate to the original issuance), and $17.4 million in project costs. UA plans on issuing A1/AA- rated revenue bonds with an estimated 5.85% annual interest rate and a term of 20 years. The actual interest rate may change when the bond goes to market in January 2009.

Based on a request of $68.5 million, UA originally estimated an average annual debt service cost of $5.8 million with a 20-year total cost of $116.1 million. It is assumed that the new total cost of $17.5 million will result in a proportionate average annual debt service cost to the original estimates. The new average annual debt service is estimated to cost $1.5 million, with a 20-year total cost of $29.7 million.

The debt service is designed to be funded with 2 separate revenue streams as prescribed by the FY 2009 Education BRB. Approximately $1.2 million, or 80%, will come from state Lottery proceeds, while $0.3 million will come from local university funds. Given the uncertainty with Lottery proceeds, as described above, local funds will likely need to provide more than their 20% share. UA had originally planned to begin construction in the fall of 2008. The bond issuance is planned for January 2009. UA indicates they will use their current cash flow to cover immediate costs of approximately $6.2 million necessary to begin operation of its plan. When the bonds are issued, it is intended that UA will be repaid with its Lottery bond proceeds.

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. The FY 2009 Education BRB provided that the University Lottery building projects will be exempt from university debt limit calculations. If the debt service for the requested $68.5 million was included in the calculation, however, the debt ratio would increase by 0.22% from the current 6.05% rate to a new debt ratio of 6.27%.

Construction Costs

Total project costs up for review are estimated at $17.4 million, which typically include direct construction costs, architect fees, furniture and equipment costs, and contingency fees. As noted earlier, UA's cost estimates are still preliminary and do not include contingency costs. *Table 1* lists estimated capital costs and renovation scopes for the all 9 projects requested for review by UA and also provides a comparison of UA's requested projects to those which will be reviewed by the Committee.

UA notes that costs for large, complex projects were developed using independent cost estimates from specialty consultants and contractors, which considered square footage and regional cost data. Costs for smaller and less complex projects were based on recent UA projects. Lastly, equipment costs were estimated from available manufacturer price lists. The proposed projects have a large range of project specifications, and comparable projects were not applicable to assess cost reasonableness.

(Continued)

Table 1

UA Building Renewal Costs and Scopes

Project	Description	UA Request	Review
Interior and Exterior Building Components	Various utility hook-ups and transformer installations on the main campus.	$19,600,000	$ 0
Heating, Ventilation, and Air Conditioning	HVAC equipment replacements and duct work in 16 buildings.	17,820,000	0
Fire Alarm and Fire Sprinklers Systems	New, replaced, and repaired systems in 17 buildings.	7,180,000	7,180,000
Mechanical System Repairs and Replacements	Mechanical and plumbing improvements in 43 buildings.	7,127,800	0
Roofing Repairs	Roofing repairs and replacements on 38 buildings.	5,560,000	5,560,000
Building Structural Repairs	The structural repairs are planned for 75 buildings.	3,650,000	0
Electrical Code Upgrades	Replacement and upgrades of switchboards, switches, battery systems and emergency generator systems. Includes work on 9 buildings.	2,634,200	2,634,200
Football Stadium Structural Repairs	Structural repairs.	2,400,000	0
Elevator Code Compliance Upgrades	Repair and replacements of shafts, hydraulics, fire alarms, and controls systems. Includes work on 15 elevators.	2,028,000	2,028,000
Total		**$68,000,000**	**$17,402,200**

Procurement Method

UA is considering 3 different procurement methods for its 9 projects. Most of the projects will be procured using Job Ordering Contracting (JOC). The JOC method pre-qualifies contractors through a competitive selection process where bid estimates are prepared. According to ABOR policy, JOC-procured construction projects can only be used for projects with a maximum total cost of $2.0 million. The remaining projects will be procured using the Construction Manager at Risk (CMAR) and design/bid/build methods.

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, 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. Under the design/bid/build method, the design and construction phases are separately contracted and done in sequence. After design is complete, the construction phase requires a competitive bid process that awards the contract to the lowest responsible and responsive bidder.

RS/LK:ss

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September 23, 2008

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

Subject: University of Arizona: Economic and Education Development (SPEED)

Dear Chairman Pearce:

On behalf of the Arizona Board of Regents (ABOR), I respectfully request that the above referenced project for the University of Arizona be placed on the next available agenda for the Joint Committee on Capital Review.

This request consists of projects approved by the Board in June 19-20, 2008 and September 3, 2008. It consists of four projects: Environmental and Natural Resources Building; Centennial Hall; Phoenix Biomedical facilities, in partnership with Arizona State University; and the Deferred Maintenance/Building Renewal projects Phase I.

The project submittals, debt service schedules and funding plan are attached and should provide the required information for your review.

Should you require additional information, please don't hesitate to call me at (520) 621-5977 or email me at jdvaldez@u.arizona.edu. Thank you for your assistance.

Sincerely,

Joel D. Valdez
Senior Vice President for Business Affairs

JDV/fng

Attachments

cc: President Robert Shelton
Joel Sideman
Greg Fahey
Lorenzo Martinez
Bob Smith
Charles Ingram
Leatta McLaughlin
Leah Kritzer

EXECUTIVE SUMMARY

ITEM NAME: Combined Project Implementation Approval and Project Approval for SPEED Deferred Maintenance and Building Renewal Projects (UA)

☒ Action Item ☐ Discussion Item ☐ Information Item

Issue: The University of Arizona requests combined Project Implementation Approval and Project Approval for the SPEED Deferred Maintenance and Building Renewal Projects, including approval to shift funding among projects as project assessments are further developed and provided the bottom line budget is not exceeded.

Previous Board Actions: Capital Development Plan: June 2008
SPEED Projects Allocation: July 2008

Project Justification/Strategic Implications:

- The Stimulus Plan for Economic and Education Development (SPEED) initiative will provide an important economic stimulus to our State economy in a time of great need, while also providing urgently needed facilities improvements at each of the State's Universities that will help to meet the education needs of the future. The University of Arizona developed a plan to best utilize the approved SPEED funds allocated for its use to best address its greatest facilities-related priorities. This plan was then adjusted to reflect the reduced amount of SPEED funding approved.

- The Board allocated $470 million of the SPEED project funding to the Phoenix Biomedical Campus projects, and an additional $20 million to the Del Webb School of Construction at ASU. The remaining funding amount was divided equally to provide $170 million to each of the three Universities to address their highest priority facilities development/improvement needs.

Project Description and Scope:

- The initial proposed list of requested SPEED projects reflected the great demand for critical new University facilities, as well as the urgent need for Deferred Maintenance and Building Renewal improvements to existing facilities. Considering the unmet demand for both new and existing facilities improvement projects, the University's current SPEED proposal is comprised of a similar project mix.

Contact Information:

Joel D. Valdez, Senior Vice President for Business Affairs, (520) 621-5977, jdvaldez@u.arizona.edu

EXECUTIVE SUMMARY

- In consideration of the numerous critical new construction and renovation needs identified, The University of Arizona SPEED projects include the two most critical New Construction projects, along with the critical Deferred Maintenance and Building Renewal renovation projects located throughout the campus:

1) Environment and Natural Resources Building – Phase II	$ 90 Million
2) Centennial Hall Renovations (new const. & renovations)	$ 12 Million
3) Deferred Maintenance and Building Renewal Projects	$ 68 Million
	$170 Million

- Of these SPEED projects, the Deferred Maintenance and Building Renewal projects are the most urgently needed, since these include fire and life safety improvements across the entire campus. These projects are also relatively small and can be constructed relatively quickly, providing the immediate economic stimulus intended from SPEED project funding.

Project Costs:

- With the lack of State funding for Deferred Maintenance and Building Renewal improvements over recent years, many of the University's existing facilities have fallen into a serious state of disrepair, reducing their safety and effectiveness, and risking the considerable investments made in these facilities. The University has identified the critical Deferred Maintenance and Building Renewal projects that are needed at this time. These improvements, which total $68 million in cost, will address the majority of the University's serious repair and renovation needs across the entire campus.

- The University of Arizona renovation projects involve various building system improvements throughout many buildings across the campus. It has been determined that it is most efficient in most cases for this work to be organized and contracted by the type of work, rather than by building. For example, a single contract for fire alarm work can accommodate fire alarm improvements in several buildings in the most efficient and consistent manner. Therefore, these renovation projects are listed in categories related to types of improvements rather than by building. This approach also allows for efficient use of specialty contractors when appropriate through The University of Arizona Job Order Contracting process.

- Following is a breakdown of ten categories containing the many individual renovation projects throughout the campus, and their respective budgets. These renovation projects have been analyzed and estimated for each of the building locations where they will occur, to arrive at the specific cost breakdowns shown for each of the ten categories. However, due to uncertain existing conditions in these buildings that will not be confirmed until the work actually starts, the actual costs of the various renovation projects may vary, and some funds may need to be shifted from one project to another to assure that all of the required work is appropriately

EXECUTIVE SUMMARY

completed. The overall budget of the Deferred Maintenance & Building Renewal projects, however, will not be exceeded.

	SPEED DEFERRED MAINTENANCE & BUILDING RENEWAL PROJECTS	
1	Fire Alarm and Fire Sprinkler Systems	$ 6,980,000
	New, replaced & repaired systems in twelve or more buildings across campus	
2.	Electrical Code Upgrades	$ 2,534,248
	Replacements and upgrades of critical switchboards, switches, battery systems & emergency generator systems throughout the campus	
3.	Elevator/Code Compliance Upgrades	$ 1,928,000
	Repair & replacements of shafts, hydraulics, fire alarms & control systems of elevators throughout campus	
4.	Interior & Exterior Building Components	$ 19,600,000
	Utility hook-ups & transformer installations	
5.	Heating, Ventilation & Air Conditioning (HVAC)	$ 14,820,000
	HVAC equipment replacements and critical duct work repairs around the campus	
6.	Mechanical System Repairs & Replacements	$ 5,510,000
	Mechanical & plumbing improvements in various locations, including public restrooms	
7.	Critical Roofing Repairs	$ 4,959,460
	Critical roofing repairs and replacements on numerous buildings around the campus	
8.	Building Structural Components	$ 3,150,000
	Critical structural repairs to existing buildings across the campus	
9.	Football Stadium Structural Repairs	$ 2,400,000
	Structural repairs as needed to preserve the Stadium's structural integrity	
10.	Arizona Health Sciences Critical Improvements	$ 6,118,292
	Fire alarms/sprinklers, elevators, electrical, mechanical/ HVAC, roofing and structural components critical to AHSC facilities	
TOTAL DEFERRED MAINTENANCE & BUILDING RENEWAL PROJECTS		**$ 68,000,000**

- It should be noted that over half of the SPEED funded $12 million Centennial Hall project is also renovation work that includes fire and life safety improvements. Also, an additional $13 million of fire and life safety improvements related to the Chemistry Building was included in the initial SPEED funding request but cannot be accomplished until all building occupants can be relocated to other as yet unavailable facilities for construction to occur at a future date.

EXECUTIVE SUMMARY

- The table at the end of the document provides a more detailed breakout of projects and categories of work to be done.

Additional Project Considerations:

- To maximize the long-term investment in these important core campus facilities, these projects will be renovated to extend the useful lives of these existing facilities by 20 to 50 years. The UA Design & Specifications Standards will be utilized, and new construction will be of high quality, durable, maintainable materials and building systems to maximize energy efficiency and minimize operational, repair and replacement costs.

- These Deferred Maintenance and Building Renewal projects will not seek a LEED certification.

Project Delivery Method and Process:

- The sizes and types of projects included in this Deferred Maintenance & Building Renewal package vary considerably, and require the use of specific project delivery methods that best fit each individual project. Most of the projects will be completed with the use of the University's very successful Job Order Contracting process, which utilizes contractors from the local community to complete small projects quickly and efficiently. These contractors will be supported by the University's in-house maintenance forces as needed to maintain an efficient flow of work that meets the needs of the facility users.

Fiscal Impact and Financing Plan:

- System Revenue Bonds (SRBs) will be issued to finance the project. The bonds will be repaid over a period of approximately 20 years and would mature not later than June 2030. This Building Renewal Project is part of the SPEED program authorized by HB-2211 to stimulate the State economy through State University construction projects. Annual debt payments on SPEED projects will be funded 80% by state lottery revenue allocations, and the universities are responsible for 20% of the debt service. Based on projections of the Lottery Revenue Fund, the UA anticipates structuring interest payments only in the early years of the debt. Assuming a 5% average interest rate, the debt service is estimated to be $3.4 million. The cost of issuance for the SRBs is estimated to be $566,000. While this estimate is designed to be conservative and the expectation is that the actual amount of the debt service and issuance cost will be less than the estimate, it is possible that they could be higher given recent market volatility.

- Debt Ratio Impact. The incremental debt ratio from annual debt service for this project is 0.2%. The projected highest debt ratio including this project is 6.3%. The

maximum debt ratio established by ABOR policy and state statute is 8%. The UA's current total lease payments associated with capital leases as a percentage of total university expenses is .006%.

Project Status & Schedule:

- The Deferred Maintenance and Building Renewal projects will be expedited to improve campus facilities and provide an economic stimulus as quickly as reasonably possible. Although project schedules are still in review, it is anticipated that some construction work will start in Fall of 2008, and that most of the construction work will be completed within the next two years.

- Each of the various renovation projects have been analyzed and estimated, and many are ready for work to begin upon authorization. Some of the more complex renovation work will require some additional design work before construction can begin, and some projects must wait for breaks in the academic schedule for construction work to occur in vacated spaces.

- With detailed information still in preparation for many of the individual projects in various stages of development, the Project Information Summary and Capital Project Budget Summary have not been included in this submittal. This information will, however, be provided as a part of the regular reporting process as it becomes available. This regular reporting process is anticipated to be accommodated in conjunction with the quarterly reports provided to the Board.

Committee Review and Recommendation:

The Capital Committee reviewed this item at its September 3, 2008 meeting and recommended Board approval with the provision that the addition or removal of any projects from the list be submitted for Committee review and Board approval.

Recommendation:

That the Board grant combined Project Implementation and Project Approval for SPEED Deferred Maintenance and Building Renewal Projects, including approval to shift funding among projects as project assessments are further developed, provided the bottom line budget is not exceeded, and that the addition or removal of any projects be submitted for Committee review and Board approval.

EXECUTIVE SUMMARY

The University of Arizona
SPEED Deferred Maintenance/BR Project Summary
September 9, 2008

	PROJECTS							
	Proj. 1	Proj. 2	Proj. 3	Proj. 4	Proj. 5	Proj. 6	Proj. 7	Proj. 8
Building Locations (& Building Numbers)	**Fire Alarm Upgrades**	**Electrical Upgrades**	**Elevator Upgrades**	**Misc. Bldg. Components**	**HVAC Upgrades**	**Mechanical Upgrades**	**Roofing Upgrades**	**Structural Upgrades**
Comstock (559)	X				X			X
Radiology Research (211)	X					X		
Maroney (3)	X							
Administration (66)	X					X		X
Education (69)	X							X
Modern Language (67)	X					X		X
Psychology (68)	X						X	X
Marvel (37)	X		X				X	X
CHRP (46)	X	X					X	
CCIT (73)	X							
Old Engineering (20)	X		X				X	X
McClelland (108)	X							
Harvill (76)	X					X	X	X
McKale (96)	X		X					X
Various Switchboards across campus		X						
Various Transformer Meters across campus		X						
Various Emergency Generator replacement		X						
Various PAD Mount Switches across campus		X						
Various Transformers replacements		X		X				
PAS (81)			X					X
Bio West (88)			X			X		X
Family Consumer Resources (33)			X					X
Old Chemistry (41)			X					
Bio-East (43)			X		X	X		X
Mines (12)					X			X
Main Library (55)					X	X	X	X
Douglas (28)					X			
Harshbarger (11)					X			X
Forbes (36)					X		X	

EXECUTIVE SUMMARY

	PROJECTS							
	Proj. 1	Proj. 2	Proj. 3	Proj. 4	Proj. 5	Proj. 6	Proj. 7	Proj. 8
Building Locations (& Building Numbers)	Fire Alarm Upgrades	Electrical Upgrades	Elevator Upgrades	Misc. Bldg. Components	HVAC Upgrades	Mechanical Upgrades	Roofing Upgrades	Structural Upgrades
Gould Simpson (77)					X	X	X	X
Civil Engineering (72)					X	X		X
McClelland Hall (108)					X			X
Vet Science (90)						X		
Optical Sciences (94)						X		
Ina Gittings (93)						X		X
Anthropology (30A)						X		
Steward Observatory (65)						X		X
Central Animal Facility (101)						X	X	
Life Science South (106)						X	X	X
Marley (107)						X		
Student Recreation (117)						X		X
Campus Sewer System Master Plan for expansion						X		
Campus Sewer System Evaluation						X		
Economics (23)						X		X
Centennial Hall (29)						X	X	
Gittings Tennis Court (93A)						X		
Native American Studies						X		
Facilities Management (460)						X		
ARL/Judaic Studies (471)						X		
Center for English as a Second Language (24)						X		X
Math Annex (45A)						X		
Speech and Hearing (71)						X		X
Cesar Chavez (23)							X	
Hillenbrand (96)							X	
Computer Center (73)							X	
Old Main (21)							X	X
AHSC							X	
Alumni (109)							X	
Sunnyside (3301-3315)							X	
Drama & Theater (3)							X	X
Slonaker (6)							X	X
South Hall (32)							X	

EXECUTIVE SUMMARY

	PROJECTS							
	Proj. 1	Proj. 2	Proj. 3	Proj. 4	Proj. 5	Proj. 6	Proj. 7	Proj. 8
Building Locations (& Building Numbers)	**Fire Alarm Upgrades**	**Electrical Upgrades**	**Elevator Upgrades**	**Misc. Bldg. Components**	**HVAC Upgrades**	**Mechanical Upgrades**	**Roofing Upgrades**	**Structural Upgrades**
Nugent (40)							X	
Schaefer Center for Creative Photography (103)							X	X
1025 N. Mountain							X	
Communication (25)								X
Henry Koffler (113)								X
Art (2)								X
Arizona State Museum (north) (26)								X
Shantz (38)								X
Architecture (75)								X
Arizona Materials Lab (490)								X
House Energy Doctor (415.03)								X
Center for Desert Architecture (415.01)								X
Scholarship Suites (58.02)								X
Social Sciences (27)								X
Music (4)								X
Kuiper Space Sciences (92)								X
Electric & Computer Engineering (104)								X
Life and Work Connections								X
USB (157)								X
Art Annex (470)								X
Bear Down Gym (56)								X
Science – Engineering Library (54)								X
1203 N. Mountain								X
Esquire Apartments (420)								X
James E. Rogers Law Center (77)								X
Project Number 9								
Football Stadium Structural Repairs								X
Project Number 10								
Arizona Health Sciences Center Improvements								
Basic Science (201)					X	X		

EXECUTIVE SUMMARY

	PROJECTS							
	Proj. 1	Proj. 2	Proj. 3	Proj. 4	Proj. 5	Proj. 6	Proj. 7	Proj. 8
Building Locations (& Building Numbers)	**Fire Alarm Upgrades**	**Electrical Upgrades**	**Elevator Upgrades**	**Misc. Bldg. Components**	**HVAC Upgrades**	**Mechanical Upgrades**	**Roofing Upgrades**	**Structural Upgrades**
Babcock (151)					X			
Police (100)					X			
South Tunnel						X		
Leon Levy Cancer Center(222)						X		X
Faculty Office (220)						X		
Life Science North (221)						X	X	
Steele Memorial Children's Research (201B)						X		X
Biomedical Research Lab (209G)						X		X
Surgery (219A)						X		X
Emergency Medicine (219B)						X		X
Center On Aging (219C&D)						X		X
Various Minor AHSC Improvements			X			X	X	X
AHSC Central Plant							X	
AHSC Elevator #9		X						
AHSC Elevator #14		X						
AHSC Penthouse					X	X		
Health Related Professions (468)								X
Radiology Medical Research Lab (211)								X
Central Heat & Refrig Bldg. (205)								X
Public Health (202)								X
College of Pharmacy (207)		X			X	X		X
AHSC Faculty Offices (220)								X
Facilities Management Warehouse (215)								X
Continuing Medical Education								X
Radiology Trailer (226)								X
College of Medicine Administration								X
Facilities Management Shops (206)								X
Herbert K. Abrams Bldg. (204)								X
Facilities Management Warehouse Addition (215)								X
Sydney E. Salmon Building (222)								X
College of Nursing (203)					X	X		X

University of Arizona
Business Affairs - Financial Services Office
Summary of Project Debt Financing and Debt Service Information

9/17/2008

Debt Issuance:	Building Renewal Projects	Phoenix Biomedical Campus (PBC) Phase I	Environmental Natural Resource II Phase I	Centennial Hall Renovation	Total
Anticipated Financing Method	SPEED Revenue Bonds	SPEED Revenue Bonds	SPEED Revenue Bonds	SPEED Revenue Bonds	SPEED Revenue Bonds
Project Cost	68,000,000	19,525,000	2,594,340	12,000,000	102,119,340
Estimated Costs of Issuance *	506,200	159,604	38,550	105,800	810,154
Estimated Issuance Amount	$68,506,200	$19,684,604	$2,632,890	$12,105,800	$102,929,494
Estimated Interest Rate	5.00%	6.00%	6.00%	5.45%	
Payment term	20	35	35	25	
Asset Useful life (Years)	23	50	50	25	
Fund sources for debt payment:	State Lottery Allocation Retain Fees and Local Funds **	State Lottery Allocation Retain Fees and Local Funds **	State Lottery Allocation Retain Fees and Local Funds **	State Lottery Allocation Retain Fees and Local Funds **	State Lottery Allocation Retain Fees and Local Funds **
Annual Debt Service For	FY2010-FY2014	FY2010-FY2014	FY2010-FY2014	FY2010-FY2014	FY2010-FY2014
Lottery Allocation(80%)	$2,740,248	$944,861	$126,378	$527,813	$4,339,300
Retain Fee & Local Funds(20%)	$685,062	$236,215	$31,595	$131,953	$1,084,825
Total Annual Debt Servie	$3,425,310	$1,181,076	$157,973	$659,766	$5,424,125
Annual Debt Service For	FY2015-FY2029	FY2015-FY2044	FY2015-FY2044	FY2015-FY2034	FY2015-FY2044
Lottery Allocation(80%)	$5,280,035	$1,144,052	$153,022	$807,046	$7,384,154
Retain Fee & Local Funds(20%)	$1,320,009	$286,013	$38,255	$201,761	$1,846,039
Total Annual Debt Servie	$6,600,044	$1,430,065	$191,277	$1,008,807	$9,230,193
Total debt service (by fund source)	FY2009-FY2029	FY2009-FY2044	FY2009-FY2044	FY2009-FY2034	
Lottery Allocation(80%)	$92,901,768	$39,045,866	$5,222,532	$18,779,978	$155,950,145
Retain Fee & Local Funds(20%)	$23,225,442	$9,761,467	$1,305,633	$4,694,995	$38,987,536
Expected Date of Issuance	December-08	December 08 ***	December 08 ***	December-08	December-08

University of Arizona
Business Affairs - Financial Services Office
Summary of Project Debt Financing and Debt Service Information

9/17/2008

	Building Renewal Projects	Phoenix Biomedical Campus (PBC) Phase I	Environmental Natural Resource II Phase I	Centennial Hall Renovation	Total
Anticipated Bond Rating:					
Moody's	A1	A1	A1	A1	A1
S & P	AA -	AA -	AA -	AA -	AA -

Debt Ratio:

Pursuant to HB2211 Section 67 monies distributed from the university capital improvement lease-to -own and bond fund, established in Section 15-1682.03 Arizona Revised Statutes, shall not be included in the debt calculation limit. If included, the debt ratio impact would be as followed:

Current Debt Ratio (Beginning)	6.05%			
Ratio After Project (incremental)	0.22%	0.08%	0.02%	0.04%
Total Debt Ratio	6.27%	6.35%	6.37%	6.41%
Other Information:				
Pre design/design date	N/A	Jan 2008	Jan 2008	Jan 2008
Expected construction start date	Sept. 2008	Summer 2009	Fall 2009	May 2009
Expected completion date	Sept 2011	Spring 2013 ****	Fall 2011	Summer 2011

* The estimated costs of issuance do not include bond insurance under the current market condition. Bond insurance would only be used if it's cost effective.

** Local funds include indirect cost recovery, investment income, administrative service charge, and other funds. Annual distribution from each source for debt service will be dependent on annual revenue realized.

*** Phase II bond sale is expected to occur in the summer of 2009, and Phase III bond sale is expected to occur in Fall 2010.

**** PBC Project includes two buildings the Health Science Education (HSE) building and the ABC II building. Estimated completion date for HSE is Spring 2012, and estimated completion for ABC II building is Spring 2013.

University of Arizona
Business Affairs - Financial Services Office
Debt Service Schedule

				9/18/2008
Building Renewal Projects	$ 68,000,000	Total Project Cost	$	68,000,000
		Cost of Issuance		506,200
TOTAL	68,000,000	Gross Debt Funded Project Cost =	$	68,506,200

SRB Maturity 20

Year		Total Payment	Interest payment @ 5.00%	Principal payment	Principal Outstanding
					$ 68,506,200
					68,506,200
0		-			68,506,200
6/1/2009	0	-	-		68,506,200
1		1,712,655	1,712,655		68,506,200
6/1/2010	1	1,712,655	1,712,655		68,506,200
Annual int payment		3,425,310			
2		1,712,655	1,712,655		68,506,200
6/2/2011	2	1,712,655	1,712,655		68,506,200
3		1,712,655	1,712,655		68,506,200
6/1/2012	3	1,712,655	1,712,655		68,506,200
4		1,712,655	1,712,655		68,506,200
6/1/2013	4	1,712,655	1,712,655		68,506,200
5		1,712,655	1,712,655		68,506,200
6/1/2014	5	1,712,655	1,712,655	-	68,506,200
6		1,712,655	1,712,655		68,506,200
6/1/2015	6	4,887,389	1,712,655	3,174,734	65,331,466
Annual P&I payment		6,600,044			
7		1,633,287	1,633,287		65,331,466
6/1/2016	7	4,966,757	1,633,287	3,333,471	61,997,995
8		1,549,950	1,549,950		61,997,995
6/1/2017	8	5,050,094	1,549,950	3,500,144	58,497,851
9		1,462,446	1,462,446		58,497,851
6/1/2018	9	5,137,598	1,462,446	3,675,151	54,822,700
10		1,370,567	1,370,567		54,822,700
6/1/2019	10	5,229,477	1,370,567	3,858,909	50,963,790
11		1,274,095	1,274,095		50,963,790
6/1/2020	11	5,325,949	1,274,095	4,051,854	46,911,936
12		1,172,798	1,172,798		46,911,936
6/1/2021	12	5,427,246	1,172,798	4,254,447	42,657,489
13		1,066,437	1,066,437		42,657,489
6/1/2022	13	5,533,607	1,066,437	4,467,170	38,190,319
14		954,758	954,758		38,190,319
6/1/2023	14	5,645,286	954,758	4,690,528	33,499,791
15		837,495	837,495		33,499,791
6/1/2024	15	5,762,549	837,495	4,925,054	28,574,737
16		714,368	714,368		28,574,737
6/1/2025	16	5,885,676	714,368	5,171,307	23,403,429
17		585,086	585,086		23,403,429
6/1/2026	17	6,014,958	585,086	5,429,873	17,973,557
18		449,339	449,339		17,973,557
6/1/2027	18	6,150,705	449,339	5,701,366	12,272,191
19		306,805	306,805		12,272,191
6/1/2028	19	6,293,239	306,805	5,986,434	6,285,756
20		157,144	157,144		6,285,756
6/1/2029	20	6,442,900	157,144	6,285,756	0
		116,127,210	47,621,010	68,506,200	

DEFERRED MAINTENANCE AND BUILDING RENEWAL						
MAIN CAMPUS						
		Year Built	FY 09'	FY 10'	FY 11'	Total
1	**Fire Alarms/Panels**					
	Furnish and install UL listing fire alarm panel replacement per OSHA		$ 440,000			
1	Art #2	1957				
2	Maroney #3	1956				
3	Mines/Geo #11/12	1958/1939				
4	Social Science #27	1950				
5	Douglas #28	1904				
6	Forbes #36	1915				
7	Marvel #37	1973				
8	Shantz #38	1962				
9	Old Chemistry #41	1936				
10	Bio East #43	1957				
11	Science Library #54	1963				
12	Bear Down Gym #56	1926				
13	Speech #71	1952				
14	Harville #76	1979				
15	ECE #104	1986				
16	Radiology Research #211	1987				
17	Faculty Office #220	1983				
18	22nd Street Warehouse #458	1968				
19	Comstock #559	1961				
20	Fleishman Lab #3054					
	Fire Alarms					
1	Comstock #559 Phase I	1961	$ 75,410			
2	Radiology Research #211 - Phase I	1987	$ 72,005			
3	Maloney #3	1956	$ 218,107			
4	Admin #66	1966	$ 366,486			
5	Education #69	1964	$ 609,930			
6	Modern Language #67	1966	$ 658,062			
7	Psychology #68	1968		$ 424,350		
8	Marvel #37	1973		$ 315,540		
9	CHRP #46	1951		$ 208,104		
10	CCIT #73	1967		$ 601,705		
11	Old Engineering #20	1919		$ 450,301		
12	McClelland #108	1990			$ 1,084,149	
13	Harvill #76	1979			$ 615,851	
14	McKale #96	1970			$ 840,000	
	Fire Alarm/Sprinkler System		**$ 2,440,000**	**$ 2,000,000**	**$ 2,540,000**	**$ 6,980,000**
2	**Electrical Code Upgrade**					
	Replace S.W. 5KV switchboard- $235,434 & 7.5 MVA $233,814 Bldg. 46	1951	$ 469,248			
	F&I transformer meters - various buildings		$ 180,000			
	Battery room at MC CHRP Building #46	1951	$ 250,000			
	Furnish and install 250kw emergency generator at USA, Building 300A	1966	$ 35,000			
	Install surplus emergency generator at MC CHRP Building #46	1951	$ 50,000			
	Install surplus emergency generator at Pharmacy/Micro and new bldg		$ 150,000			
	Reconfigure PAD mount switches			$ 180,000		
	Space Science bldg. 92	1991				
	Mines bldg. 11	1958				
	Speech/Hearing bldg. 71	1952				
	Harvill bldg. 76	1979				
	Install 3 pre-purchased transformers Building #s 54, 66, 67			$ 520,000		
	54-1963; 66-1966; 67-1966					
	Install 4 pre-purchased transformers Blogs 68, 69, 92, 93				$ 700,000	
	68-1968; 69-1964; 92-1966; 93-1964					
	Electrical Code Upgrades		**$ 1,134,248**	**$ 700,000**	**$ 700,000**	**$ 2,534,248**
3	**Elevator Upgrades/Code Compliance**					
	For concrete removal		$ 435,000			
	Mines 12	1939				
	Old Chemistry #41	1936				
	Civil Eng. # 72	1965				
	Shantz #38	1962				
	Education #69	1964				
	Building code hydraulic replacement		$ 294,000			
	Mines #12	1939				
	Art #2	1957				
	Student Health #63	1936				
	Ina Gittings #93	1964				
	Old Chemistry #41	1936				
	Civil Eng. # 72 (2 elevators)	1965				
	Shantz #38	1962				
	Education #69	1964				
	PAS #81	1960				

		Year Built	FY 09'	FY 10'	FY 11'	Total
	AHSC #201 Elevator No. 9	1968				
	Kit Peak #951					
	AHSC #201 Elevator No. 17	1968				
	Science Library #54 (three elevators)	1963				
	AHSC FM #206	1966				
	FCR #33	1959				
	Forbes #36	1915				
	Pharmacy Micro #90	1966				
	Park Student Union #87 Elevator No. 1	1964				
	Replace control systems (PAS#2, Marvel and Bio West#2) Bldg 81 & 88	1960/1967	$ 330,000			
	Balance of funds support fire alarm where needed - elevator code requirement to initiate floor recall to send the elevator to a save floor when a fire is detected.		$ 176,000			
	Wheelchair lift upgrade for ADA PAS Building 81	1960	$ 25,000			
	Replace elevator controls					
	FCR Building 33 Elevator No. 1	1959		$ 85,000		
	Old Chemistry Building 41	1936		$ 85,000		
	Old Engineering 20 Elevator No.1	1919		$ 85,000		
	AHSC Building 201 Elevator 9 (includes fire alarm upgrades)	1968		$ 115,000		
	Balance of funds support fire alarm where needed - elevator code requirement to initiate floor recall to send the elevator to a save floor when a fire is detected.			$ 68,000		
	Replace control Bio East Building #43	1957			$ 90,000	
	McKale building 96 (includes fire alarm upgrades) Elevator 1	1970			$ 125,000	
	Balance of funds support fire alarm where needed - elevator code requirement to initiate floor recall to send the elevator to a save floor when a fire is detected.				$ 15,000	
	Elevator Upgrades/Code Compliance		**$ 1,260,000**	**$ 438,000**	**$ 230,000**	**$ 1,928,000**
4	**Building Components Interior and Exterior**					
	Replace existing transformers with larger units and related equipment including engineering and the reconfiguration of the transformer yard at AHSC. The purpose of this project is to meet the UA's electrical load for its existing facilities to sustain the capacities in light of dated capacity through out the campus.					
	Engineering Bldg 205	1967	$ 500,000			
	Pre-purchase equipment Bldg 205	1967	$ 4,357,500			
	Site preparation Bldg 205	1967	$ 110,000			
	Install 16 building transformers (previously purchased)		$ 2,600,000			
	Apache/Santa Cruz #50 and 50A	1957				
	West Stadium #58	1929				
	Skyboxes #58B	1989				
	Scoreboard #58D	1990				
	Pinal #59	1949				
	Navajo #60	1949				
	Mirror Casting #61D	1949				
	Art #2	1957				
	Drama #3	1956				
	Coconino #5	1954				
	Gila #8	1937				
	Maricopa #9	1921				
	Yuma #10	1937				
	Econ #23	1952				
	CESL/Speech #24 and 25	1936/1909				
	AZ State Museum #26	1934				
	Duct bank to be installed at strategic location to service buildings		$ 1,432,500			

	Year Built	FY 09'	FY 10'	FY 11'	Total
Continue the installation of the pre-purchased equipment and integrated with local utility incoming power including related engineering.			$ 8,400,000		
Install 5 pre-purchased transformers			$ 1,000,000		
Social Sciences #27	1950				
Anthropology #30	1936				
Cochise #31	1921				
South Hall #32	1912				
Yavapai #34	1942				
The Commissioning and completion of the project				$ 200,000	
Install 5 pre-purchased transformers				$ 1,000,000	
Herring Hall #35	1903				
Agriculture #36	1915				
Shantz #38	1962				
Huachuca /Kaibab #79 and 79A	1956/1958				
Huachuca Well #79	1956				
Building Components Interior and Exterior		**$ 9,000,000**	**$ 9,400,000**	**$ 1,200,000**	**$ 19,600,000**
5 Heating, Ventilation and Air Conditioning					
Pre-Purchase 7 A/H's, Includes Engineering - Bldg 12 - Mines	1939	$ 318,826			
Pre-Purchase 12 A/H's, Includes Engineering -- Bldg 55 - Main Library	1976	$ 1,538,770			
Pre-Purchase 2 A/H's, Includes Engineering - Bldg 28 - Douglas	1904	$ 114,763			
Pre-Purchase 3 A/H's, Includes Engineering - Bldg 11 - Harshbarger	1958	$ 490,000			
Pre-Purchase 8 A/H's, Includes Engineering - Bldg 36 - Forbes	1915	$ 608,909			
Pre-Purchase 2 A/H's, Includes Engineering - Bldg 77 - Gould Simpson	1985	$ 168,340			
Replace 1 Cold Room - Bldg 43 - Bio Sciences East	1957	$ 19,600			
HVAC Renovations, Includes Engineering - Bldg 72 Civil Eng.	1965	$ 905,898			
To eliminate building deterioration due to condensation from evap. cooling system.					
HVAC Control Systems Retrofit - Pneumatic - Direct Digital Control					
McClelland Hall - Bldg. 108	1990	$ 597,803			
Convert deducted air handler systems in 24 lecture halls		$ 37,091			
Installation Phase to Install 7 A/H's, Includes 2nd Phase Engineering, Terminal Units, DDC Controls and Complete Air Balance - Bldg 12 - Mines	1939		$806,006	$300,000	
Installation Phase to Install 12 A/H's, Includes 2nd Phase Engineering, Terminal Units, DDC Controls and Complete Air Balance - Bldg 55 - Main Library	1976		$3,733,870	$350,000	
Installation Phase to Install 2 A/H's, Includes 2nd Phase Engineering, Terminal Units, DDC Controls and Complete Air Balance - Bldg 28 - Douglas	1904		$316,255	$100,000	
Installation Phase to Install 3 A/H's, Includes 2nd Phase Engineering, Terminal Units, DDC Controls and Complete Air Balance - Bldg 11 - Harshbarger	1958		$1,216,824	$600,000	
Installation Phase to Install 8 A/H's, Includes 2nd Phase Engineering, Terminal Units, DDC Controls and Complete Air Balance - Bldg 36 - Forbes	1915		$1,502,205	$250,000	
Installation Phase to Install 2 A/H's, Includes 2nd Phase Engineering, Terminal Units, DDC Controls and Complete Air Balance - Bldg 77 - Gould Simpson	1985		$444,840	$400,000	
Heating, Ventilation and Air Conditioning		**$ 4,800,000**	**$ 8,020,000**	**$ 2,000,000**	**$ 14,820,000**
6 Mechanical Systems					
Bathroom Upgrades					
Vet Science - Bldg 90	1966	$ 27,877			
Main Library - Bldg. 55	1976	$ 118,537			
Administration - Bldg. 66	1966	$ 17,971			
Optical Science - Bldg. 94	1970	$ 69,323			
Bio East - Bldg. 43	1957	$ 37,632			
Ina Gittings - Bldg. 93	1964	$ 17,650			
Harvill - Bldg. 76	1979	$ 62,158			
Gould Simpson - Bldg. 77	1985	$ 175,371			
Anthropology - Bldg 30A	1962	$ 23,686			
Air Compressors/Vacuum Pumps					
Replace 2 Lab Air Compressors - Bldg. 65 Steward Observ.	1921	$ 34,064			
Replace 2 Lab Air Compressors - Bldg. 77 Gould Simpson	1985	$ 56,136			
Replace 2 Lab Vacuum Pumps - Bldg. 88 Bio West	1967	$ 51,857			
Replace 2 Lab Air Compressors - Bldg. 101 CAF	1989	$ 50,740			
Replace 2 Lab Vacuum Pumps - Bldg. 106 Life Science South	1990	$ 51,910			
Replace 2 Lab Vacuum Pumps - Bldg. 107 Marley	1990	$ 53,581			
Replace 2 Control Air Compressors - Bldg. 117 Student Rec.	1990	$ 27,360			
1 Redundant Air Compressor - Bldg. 76 Harvill	1979	$ 75,550			

	Year Built	FY 09'	FY 10'	FY 11'	Total
Sewer Line Projects					
Campus Sewer System Master Plan Development for Future Campus Expansion		$ 77,684			
Campus Wide Sewer System Evaluation/ Camera Survey, Prioritize Existing Line Rehabilitation Requirements		$ 212,570		$150,000	
Relining: Sewer Line, Includes Engineering Bldg. 66 Adm.	1966	$ 54,686			
Domestic Water System Piping Replacement - Bldg. 23 Economics	1952	$ 222,772			
Package & Split System Air Conditioning Units					
Replace 1 A/C Unit - Bldg. 29 - Centennial Hall	1936	$ 10,164			
Replace 1 A/C Unit - Bldg. 64 - Steward Observatory	1953	$ 27,232			
Replace 1 A/C Unit - Bldg. 65 - Steward Observatory	1921	$ 11,928			
Replace 1 A/C Unit - 93A - Gittings Tennis Ct. Bathroom	1988	$ 11,484			
Replace 1 A/C Unit - 93A - Gittings Tennis Ct. Bathroom	1988	$ 11,484			
Replace 1 A/C Unit - 408 Native Am Studies	1956	$ 11,783			
Replace 6 A/C Units - 460 FM	1988	$ 66,581			
Replace 1 A/C Unit - 471 - ARL/Judaic Studies	1946	$ 11,783			
Chilled Water Auxiliary Cooling Units for server rooms in the following buildings					
Bldg. 24 - CESL	1936	$ 39,100			
Bldg. 45A - Math Annex	2002	$ 10,350			
Bldg. 67 - Modern Languages	1966	$ 40,250			
Bldg. 67 - Modern Languages	1966	$ 42,550			
Bldg. 71 - Speech & Hearing	1952	$ 16,657			
Bldg. 71 - Speech & Hearing	1952	$ 40,739			
Bldg. 71 - Speech & Hearing	1952	$ 40,250			
Bldg. 71 - Speech & Hearing	1952	$ 17,250			
Bldg. 72 - Civil Engineering	1965	$ 32,200			
Bldg. 93 - Gittings	1964	$ 39,100			
Installation Phase to Install 5 A/H's, Includes 2nd Phase Engineering, Terminal Units, DDC Controls and Complete Air Balance - Bldg. 203	1967		$ 1,228,088	$ 250,000	
Installation Phase to Install 3 A/H's, Includes 2nd Phase Engineering, Terminal Units, DDC Controls and Complete Air Balance- Bldg 201	1968		$ 1,781,912	$ 100,000	
Mechanical Systems		**$ 2,000,000**	**$ 3,010,000**	**$ 500,000**	**$ 5,510,000**
7 Re-Roofing					
Engineering bldg. 20	1919	$ 55,038			
Cesar Chavez (tile only) bldg. 23	1952	$ 76,610			
CHRP/MC bldg. 46	1951	$ 114,413			
Gould Simpson (pavers only) bldg. 77	1985	$ 72,124			
Hillenbrand (96P)	1974	$ 89,700			
Computer Center bldg. 73	1967	$ 320,000			
Old Main copper roof (historic) bldg. 21	1891	$ 485,000			
AHSC roof area 10 (#201)	1968	$ 12,000			
Alumni bldg. 109	1988	$ 153,161			
Sunnyside:					
Bldg. # Roof Sf					
3302 30	1948	$ 22,500			
3303 62	1948	$ 46,500			
3304 62	1948	$ 46,500			
3305 62	1948	$ 46,500			
3309 135	1948	$ 101,250			
3310 (east half) 30	1948	$ 22,500			
3311 63	1948	$ 47,250			
3312 32	1948	$ 24,000			
3313 32	1948	$ 24,000			
Porches 222	1948	$ 153,414			
Central Animal Facility bldg. 101	1989		$ 168,636		
Drama & Theater bldg. 3	1956		$ 115,636		
Slonaker bldg. 6	1940		$ 56,636		
Centennial bldg. 29	1936		$ 197,636		
South Hall bldg. 32	1912		$ 76,636		
Forbes bldg. 36	1915		$ 216,636		
Nugent bldg. 40	1936		$ 66,636		
Main Library bldg. 55	1976		$ 256,636		
Creative Photography bldg. 103	1988		$ 316,636		
Life Sciences South bldg. 106	1990		$ 218,636		
1025 N. Mountain bldg. 112	1988		$ 61,636		

	Year Built	FY 09'	FY 10'	FY 11'	Total
Psychology bldg. 68	1968			$ 434,350	
Marvel bldg.	1973			$ 325,540	
Harvill bldg.	1979			$ 535,114	
Re-Roofing		**$ 1,912,460**	**$ 1,751,996**	**$ 1,295,004**	**$ 4,959,460**
8 Building Structural Components					
Old Main columns and exterior walls	1891	$ 413,605			
Old Engineering foundation, columns and exterior walls	1919	$ 586,395			
Defferred Maintenance Buildings					
McKale Memorial Center bldg. 96 (columns, exterior and interior walls and partitions)	1970		$ 315,505		
Gould-Simpson bldg. 77 (columns, exterior and interior walls and partitions)	1985		$ 156,416		
Communication bldg. 25 (Historic) (columns, exterior and interior walls, partitions and windows)	1909		$ 126,642		
McClelland Hall bldg. 108 (columns, exterior and interior walls, partitions and windows)	1990		$ 105,758		
Biological Sciences West bldg. 88 (columns, exterior and interior walls, partitions and windows)	1967		$ 99,006		
Henry Koffler Building 113 (columns, exterior and interior walls and partitions)	1990		$ 73,272		
Education (columns, exterior and interior walls and partitions)	1964		$ 64,509		
Marvel Laboratories bldg. 37 (columns, exterior and interior walls and partitions)	1973		$ 59,274		
Art & Art Museum bldg. 2 (foundation, columns, exterior and interior walls and partitions)	1957		$ 72,590		
Ina A. Gittings bldg. 99 (columns, exterior and interior walls and partitions)	2003		$ 52,758		
Harvill bldg. 76 (columns, exterior and interior walls, partitions and windows)	1979		$ 45,543		
Harshbarger bldg. 11 (columns, exterior and interior walls, partitions and windows)	1958		$ 45,320		
Life Sciences South bldg. 106 (columns, exterior and interior walls, partitions and windows)	1990		$ 44,345		
Student Recreation Center bldg. 117 (columns, exterior and interior walls, partitions and windows)	1990		$ 42,402		
Physics & Atmospheric Sci. bldg. 81 (columns, exterior and interior walls, partitions and windows)	1960		$ 40,390		
Slonaker Alumni bldg. 6 (columns, exterior and interior walls, partitions and windows)	1940		$ 39,516		
Civil Engineering bldg. 72 (foundation, columns, exterior and interior walls, partitions and windows)	1965		$ 37,238		
Psychology bldg. 68 (columns, exterior and interior walls, partitions and windows)	1968		$ 33,600		
Arizona State Museum North bldg. 26 (Historic) (interior walls, partitions and windows)	1934		$ 32,484		
Shantz bldg. 38 (columns, exterior and interior walls, partitions and windows)	1962		$ 30,671		
Defferred Maintenance Buildings					
Modern Language bldg. 67 (columns, exterior and interior walls and partitions)	1966			$ 33,845	
Architecture bldg. 75 (columns, exterior and interior walls, partitions and windows)	1965			$ 32,902	
Administration bldg. 66 (foundation, columns, exterior and interior walls)	1966			$ 30,197	
Arizona Materials Lab bldg. 490A-C (columns, exterior and interior walls, partitions and windows)	1978			$ 29,374	
Family & Consumer Sciences bldg. 33 (columns, exterior and interior walls, partitions and windows)	1959			$ 28,696	
House Energy Doctor bldg.. 75 (columns, exterior and interior walls, partitions and windows)	1965			$ 27,066	
Drama Addition bldg. 3 (Interior walls and partitions)	1956			$ 25,392	
Center for Desert Architecture bldg. 75 (columns, exterior and interior walls, partitions and windows)	1965			$ 24,790	
Scholarship Suites bldg. 58 (columns, exterior and interior walls and partitions)	1989			$ 23,444	
Social Sciences bldg. 27 (foundation, columns, exterior and interior walls)	1950			$ 23,119	
Music bldg. 4 (columns, exterior and interior walls and partitions)	1957			$ 38,606	
Biological Sciences East blg.43 (interior walls, partitions and windows)	1957			$ 20,699	
Kuiper Space Sciences bldg. 92 (columns, exterior and interior walls, partitions and windows)	1966			$ 38,071	
Arizona Materials Lab bldg. 490 (columns, exterior and interior walls, partitions and windows)	1978			$ 20,161	
CESL (Historic) bldg. 24(foundations, columns, exterior and interior walls, partitions and windows)	1936			$ 19,602	

		Year Built	FY 09'	FY 10'	FY 11'	Total
	Schaefer Ctr. Creative Photo. Bldg.. 103 (columns, exterior, interior walls and partitions)	1988			$ 19,432	
	Elec. & Comp. Engineering bldg.. 104 (columns, exterior walls and windows)	1986			$ 17,644	
	Life and Work Connections (columns, exterior walls and windows)	1930			$ 17,045	
	University Services Building 300 (columns, exterior and interior walls and partitions)	1966			$ 16,846	
	Speech & Hearing Sciences bldg.. 71 (columns, exterior and interior walls and partitions)	1952			$ 16,591	
	Steward Observatory Expansion bldg. 64 (columns, exterior and interior walls, partitions and windows)	1953			$ 16,390	
	Art Annex Ceramics bldg. 2 (columns, exterior and interior walls, partitions and windows)	1957			$ 15,982	
	Bear Down Gym bldg. 56 (Historic) (columns, exterior walls and windows)	1926			$ 14,615	
	Chavez bldg. 23 (columns, exterior and interior walls, partitions and windows)	1952			$ 14,207	
	Science-Engineering Library bldg. 54 (columns, exterior and interior walls, partitions and windows)	1963			$ 13,664	
	1203 N. Mountain bldg. 471A (columns, exterior and interior walls, partitions and windows)	1942			$ 13,633	
	Main Library bldg. 55 (columns, exterior and interior walls, partitions and windows)	1976			$ 12,785	
	Mines bldg. 12 (interior walls. partitions and windows)	1939			$ 12,103	
	Esquire Apartments bldg. 420 (interior walls. partitions and windows)	1967			$ 11,927	
	James E. Rogers Law Center bldg. 176 (columns, exterior and interior walls and partitions)	1969			$ 3,934	
	Building Structural Components		$ 1,000,000	$ 1,517,238	$ 632,762	$ 3,150,000
9	**Football Stadium Structural Repairs**					
	Water proof sections bldg. 58 22-25, rows 1-35	1929	$ 400,000			
	East side sections 1-5			$ 1,500,000		
	South end zone					
	Please reference to the entire "Engineering and Technology Structural Audit Report" dated February 2004 of the football stadium					
	Football Stadium Structural Repairs		$ 400,000	$ 1,500,000	$ 500,000	$ 2,400,000
	MAIN CAMPUS Totals by FY		$ 23,946,708	$ 28,337,234	$ 9,597,766	$ 61,881,708
	ARIZONA HEALTH SCIENCES					
1	**Fire Alarm**					
	Radiology Research #2 - Phase II	1987	$ 98,000			
	Comstock #559 - Phase II	1961	$ 102,000			
	Fire Alarm/Sprinkler Systems		$ 200,000			$ 200,000
2	**Electrical and Elevator Code Upgrades**					
	Controls upgrade					
	AHSC bldg. 201 elevator #9	1968	$ 100,000			
	AHSC bldg. 201 elevator #14	1968	$ 100,000			
	Electrical and Elevator Code Upgrades		$ 200,000			$ 200,000
3	**Heating, Ventilation and Air Conditioning**					
	Air Handlers					
	Pre-Purchase 5 A/H's, Includes Eng. - Bldg. 203 - College of nursing	1967	$ 481,895			
	Pre-Purchase 3 A/H's, Includes Eng. - Bldg AHSC Penthouse		$ 712,655			
	Pre-Purchase 1 A/H, Includes Eng. - Bldg. 201 - AHSC Basic Science	1968	$ 195,946			
	Pre-Purchase 1 A/H, Includes Eng. - Bldg. 151A - Babcock	1975	$ 68,081			
	Pre-Purchase 3 A/H's, Includes Eng. - Bldg. 207 - College of Pharmacy	1980	$ 249,541			
	Pre-Purchase 3 A/H's, Includes Eng. - Bldg. 559 Comstock	1961	$ 80,382			
	Replace Bldg. Chiller Unit w/Package Air Cooled System Bldg. 100	2000	$ 71,500			
	Installation Phase to Install 1 A/H, Includes 2nd Phase Engineering - Bldg. 151A - Babcock	1975		$ 178,324		
	Installation Phase to Install 3 A/H's, Includes 2nd Phase Engineering - Bldg. 207 - College of Pharmacy	1980		$ 613,828		
	Installation Phase to Install 3 A/H's, Includes 2nd Phase Engineering bldg. 20 - Bldg. 559 Comstock	1961		$ 207,848		
	Convert 2 large Air handling systems and 6 classrooms to incorporate digital controls		$ 140,000			
	Heating, Ventilation and Air Conditioning		$ 2,000,000	$ 1,000,000		$ 3,000,000

		Year Built	FY 09'	FY 10'	FY 11'	Total
4	**Mechanical Systems**					
	South tunnel mechanical equipment including $5,500 for engineering		$ 355,500			
	Replace 6 Autoclave Steam Sterilizers, 4 Glass/Utensil Washer/Dryers Bldgs. 201, 201B, 207, 222 AHSC, Pharmacy, AZ Cancer Center		$ 517,752			
	Public Restrooms					
	Radiology Research - Bldg 211	1987	$ 15,124			
	Faculty Office Building - Bldg 220	1983	$ 16,734			
	College of Nursing - Bldg 203	1967	$ 45,339			
	Air Compressor/Vacuum Pumps Replacement					
	Replace 2 Lab Vacuum Pumps - Life Science N Bldg 221	1990	$ 45,121			
	Replace 2 Lab Air Compressors - Life Science N Bldg 221	1990	$ 44,323			
	Replace 2 Lab Vacuum Pumps - CRC 201B	1991	$ 45,121			
	Replace 2 Control Air Compressors - CRC Bldg 201B	1991	$ 30,091			
	Replace 2 Lab Air Compressors for Basic Sci. - AHSC Bldg 201	1968	$ 54,365			
	Package & Split System Air Conditioning Units					
	Replace 1 A/C Unit - Bldg. 209G - BRL	1979	$ 9,841			
	Replace 1 A/C Unit - Bldg. 219A - Surgery	1929	$ 8,470			
	Replace 1 A/C Unit - Bldg. 219B - Emerg Medicine	1951	$ 9,819			
	Replace 1 A/C Unit - Bldg. 219C - Center on Aging	1946	$ 10,333			
	Replace 1 A/C Unit - Bldg. 219D - Center on Aging	1951	$ 9,819			
	Installation Phase to Install 1 A/H, Includes 2nd Phase Engineering - Bldg. 201 - AHSC Basic Science			$ 400,000		
	Mechanical Systems		**$ 1,217,752**	**$ 400,000**		**$ 1,617,752**
5	**Re-Roofing**					
	AHSC central plant #46	1951	$ 87,540			
	AHSC Roof Area #10	1968	$ 12,000			
	Roof area #11	1968	$ 118,000			
	Roof area #12	1968	$ 77,000			
	Roof area #13	1968	$ 58,000			
	Life Science North	1990		$ 248,000		
	Re-Roofing		**$ 352,540**	**$ 248,000**		**$ 600,540**
6	**Building Structure Components**					
	AHSC (interior walls and partitions) bldg. 201	1968	$ 139,211			
	Biomedical Research Lab (interior walls and partitions) bldg. 209	1979	$ 42,038			
	Surgery Emergency Medicine (foundation, columns, exterior and interior walls, partitions and windows) bldg. 201	1968	$ 38,419			
	Nursing (columns, exterior and interior walls and partitions) bldg. 203	1967	$ 36,825			
	Cancer Center (columns, exterior and interior walls and partitions)bldg. 222	1986	$ 28,264			
	Health Related Professions (foundation, columns, exterior and interior walls, partitions and windows) bldg. 48		$ 25,802			
	Radiology Med. Res. Lab (columns, exterior and interior walls, and partitions) bldg. 211	1987	$ 19,859			
	Comstock House (columns, exterior and interior walls and partitions) bldg. 559	1961	$ 17,447			
	Central Heat & Refrig. Bldg. (foundation, columns, exterior and interior walls, partitions and windows) bldg. 46	1951	$ 16,997			
	College of Public Health (columns, exterior and interior walls, partitions and windows) bldg. 202	1978	$ 28,457			
	AHSC Faculty Offices (interior walls and partitions) bldg. 220	1983	$ 13,002			
	Fac. Mgmt. Warehouse (columns, exterior and interior walls and partitions) bldg. 215	1946	$ 12,145			
	Continuing Medical Education (columns, exterior and interior walls, partitions and windows) bldg. 121		$ 10,956			
	Emergency Medicine (interior walls and partitions and windows) bldg. 219E	1954	$ 9,106			
	Radiology Trailer (columns, exterior and interior walls and windows) bldg. 226	1990	$ 8,754			
	College of Medicine Administration (columns, exterior walls and interior walls, partitions and windows) bldg. 201	1968	$ 7,655			
	Fac. Mgmt. Shops (columns, exterior and interior walls, partitions and windows) bldg. 205	1967	$ 7,177			
	AHSC Steele Mem. Child. Res. (interior walls and partitions) Bldg. 201B	1991	$ 6,571			
	Pharmacy (columns, exterior and interior walls and partitions) Bldg. 207	1980	$ 6,556			

	Year Built	FY 09'	FY 10'	FY 11'	Total
Herbert K. Abrams Bldg. 204.02 (columns, exterior and interior walls and partitions)	1961	$ 4,004			
Emergency Medicine bldg. 201 (foundations, interior walls and partitions)	1968	$ 3,389			
Center on Aging bldg. 196 (columns, interior and exterior, and windows)	1946	$ 4,735			
Center on Aging bldg. 219 D(columns, interior and exterior, partitions and windows)	1951	$ 4,904			
Fac. Mgmt. Warehouse Add. Bldg. 215 (columns, exterior and interior walls and partitions)	1946	$ 2,741			
Sydney E. Salmon Building 222 (interior walls and partitions)	1986	$ 4,986			
Building Structure Components		$ 500,000			$ 500,000
AHSC Total by FY		$ 4,470,292	$ 1,648,000	$ -	$ 6,118,292
Total Deferred Maintenance		**$ 28,417,000**	**$ 29,985,234**	**$ 9,597,766**	**$ 68,000,000**

UNIVERSITY OF ARIZONA

10/30/08

Building Renewal Lottery Bond Projects - $68 M

Hello Leatta,
Following is our response to your most recent questions regarding additional detail on SPEED BR project priorities, and HEALTH/FIRE/LIFE SAFETY concerns.

INTRODUCTION

It is important to note that the University has a deferred maintenance backlog of HEALTH/FIRE/LIFE SAFETY issues well in excess of the SPEED proposal. While the University has incrementally pursued addressing these issues on a priority basis, the effort has been largely stifled by the lack of an adequate allocation of Building Renewal funding from the State for nearly a decade. The initial SPEED proposal presented to the Legislature included $130 million of Building Renewal projects related to repair, replacement, deferred maintenance, and HEALTH/FIRE/LIFE SAFETY improvement needs that had accumulated all across the campus. When the approved SPEED package funding amount was reduced from the initial proposal, the UA worked to reduce its portion of BR projects from $130 million to its current $68 million amount. This significant 48% BR project reduction already has caused the UA to go forward only with the highest priority renovations needed to address HEALTH/FIRE/LIFE SAFETY issues. All of the lesser priority renovations have already been removed from the initial list of needed renovation projects. Further reductions or prioritizing places the health and safety of our students, faculty and staff at risk.

The repairs/replacements in this project are the UAs highest priority safety concerns.

Below is an expanded summary of the 10 specific projects included in the overall $68 million UA SPEED BR Project. As has been previously noted, eight of these 10 specific projects consist of categories of renovations that are spread across almost 100 different buildings across the campus. Projects Nos. 9 and 10 relate to specific areas -- the Football Stadium Structure and the Arizona Health Sciences Complex. The UA projects are organized and presented in this manner due to the large number of critical repairs and replacements needed in so many different buildings. It quickly became clear that the most effective and efficient approach to completing several categories of critical repairs in this many buildings, was to establish specialized construction contracts that bundled similar types of work that could then be efficiently scheduled and completed throughout the many buildings.

Therefore, the specific UA projects have never been organized on a per-building basis, and a literal response to the question regarding a write-up for each of our almost 100 buildings is not feasible. We have, however, responded to your questions as they relate to our specific projects based on renovation categories, and provided a few specific examples to help describe the type and urgency of the needs - which we hope will provide all of the information that you need. We have also provided a revised project/building matrix similar to that which was included in our Executive Summary to include additional information related to building age and per building project cost. Please let us know if you have additional questions after reviewing this information. Thank you for your support and assistance in this important effort.

1. JUSTIFICATION

- As construction in the state has significantly slowed, the expenditures for the building renewal projects will provide an economic stimulus.
- State funding for Building Renewal improvements has averaged less than 12% of the building renewal formula over the last 10 years.
- The University's buildings are in critical need of building/system renewal. The average age of the buildings and systems is between 50 and 60 years. These projects consist of only the most urgently needed, highest priority HEALTH/FIRE/LIFE SAFETY work.
- The building renewal projects will provide critically needed repairs and replacements to extend the useful life of aging facilities while reducing the risk of potentially disruptive system failures which would adversely affect the health and safety of the occupants.
- Delay in executing these repairs and improvements increases risk and consequential damages, increases costs due to escalation, and effectively reduces the work that can be completed within the same budget.
- These critical BR projects are directly related to the HEALTH/FIRE/LIFE SAFETY of our 50,000 students, faculty and staff on campus. The failure to complete this work could put the health and safety of those on campus at risk.

2. DESCRIPTION OF PROJECTS

- There are nine types of repair/renovation projects spread across approximately 100 buildings throughout the entire campus and the Arizona Health Sciences Center including buildings and systems that have failed and/or are in imminent danger of failing. All of the work is meant to improve the highest priority conditions related to health, fire and life safety. There are multiple projects occurring in most of the buildings. Projects need to occur at the same time in a given area or building in order to avoid inefficiencies and waste associated with tearing up recently completed facilities and to obtain the benefits of economy of scale and minimizing facility downtime.

Project Descriptions:

1. Fire alarms and fire sprinklers – 14 buildings/$6,980,000 – repair, replace or install essential life safety systems for occupant safety and code compliance. These systems are directly related to occupant safety and protection. Alarm systems facilitate detection and notification of a safety emergency and aid in the evacuation of facilities under emergency distress situations. Fire sprinkler and detection systems aid in arresting fires, saving lives, reducing property loss and preserving data and research. Installation and repairs are necessary to provide and maintain life protection systems in operable condition while replacing obsolete parts and equipment, reducing downtime and costs from frequent break downs, creating savings from increasing energy efficiency, reduced repairs and damages related to system failures.

   Due to lack of code compliance and negative operational conditions, in early 2000 the Arizona State Fire Marshal required The University to completely replace fire alarm systems in 63 buildings. While the University has incrementally pursued

this replacement on a priority basis, the effort has been hampered by the lack of an adequate allocation Building Renewal funding from the State.

Also, as an example, as per the attached October 30, 2008 memorandum, a fire and explosion in the Chemistry building #41 caused the activation of its old and substandard fire alarm system. The inadequacy of this system caused the alarm to not report the type or location of device that activated; no ADA compliant signals were activated in the building; emergency responders had to waste significant time searching the building for the location of the event; some emergency responders had to be diverted to find building occupants to escort them out of the building – slowing the response time to the lab explosion; while this facility was fortunate to have a fire sprinkler system, the slowed response time caused significant fire sprinkler chemical contaminated water damage to the entire first floor and basement; an emergency responder had to be hospitalized due to the extended exposure to the chemical contamination caused by the delayed response to the lab. Fire detection and quick response saves property, and more importantly, saves lives. The consequences of this lab fire and explosion could have been much, much worse however even in this example, the losses, injury and costs would have been significantly mitigated by having a standard fire detection system as required. The lack of standard fire detection systems, as required, places people, the University and the State at significant risk.

Please also see the attached 27 May, 2008 memorandum outlining that 22 of the University's Fire Alarm Panels no longer have the UL listing that is required for these systems together with the cost to cure. Again, the lack of standard fire detection systems, as required, places people, the University and the State at significant risk.

2. Electrical code upgrades – 9 systems/$2,534,248 – install or repair critical electrical emergency generators, transformers and switchboards. Emergency generators and electrical equipment are essential to the safe operation of these facilities. Generators and Uninterruptable Power Supplies (UPS) are required for backup power to critical/emergency and life safety equipment/systems. This equipment and the repairs are necessary to provide and maintain life protection related systems in operable condition while replacing obsolete parts and equipment, reducing downtime and costs from frequent break downs, creating savings from increasing energy efficiency, reduced repairs and damages related to system failures.

   The University has documented conditions which must be addressed. The current conditions place people, the University and the State at significant risk. The buildings and systems in this project are the highest priority health and safety concerns.

3. Elevators/code compliance upgrades – 9 buildings/$1,928,000 – replacement of vital and failing controls, fire alarms, and hydraulics. Elevators and their emergency systems are in danger of failure. This equipment and the repairs are necessary to provide and maintain life protection related systems in operable

condition while replacing obsolete parts and equipment, comply with federal ADA requirements, reduce downtime and costs from frequent break downs, create savings from increasing energy efficiency, and reduce repairs and damages related to system failures.

As an example, a part of this project concerns the older hydraulic elevators on campus and a mandate, by the Industrial Commission of Arizona, Division of Occupational Safety and Health Elevator Section, that existing hydraulic elevators must meet certain safety standards including a requirement that the cylinders must be manufactured with an integral safety bulkhead. On January 1st, 2004 the ASME A17.1 2000 edition of the Elevator Safety Code was adopted by the Industrial Commission of Arizona, Division of Occupational Safety and Health Elevator Section. This code requires that all hydraulic elevators be compliant with 8.6.5.8 which requires that elevator cylinders be manufactured to include a safety bulkhead as an integral part of the cylinder. The portion of rule 8.6.5.8 that applies to the safety bulkhead has been a requirement for all new installations subsequent to the publication of ASME A17.1 1971 edition. Hydraulic elevator cylinders incorporating a safety bulkhead were not installed as a common practice prior to the adoption of the 1971 code and the State of Arizona Inspection Department was formed in November of 1972. While the University has incrementally pursued this replacement on a priority basis, the effort has been hampered by the lack of an adequate allocation Building Renewal funding from the State. The buildings in this project are the highest priority safety concerns remaining. The University is currently operating 24 elevators that must be retrofitted to meet this mandate and to avoid the life safety risks associated.

The University has documented conditions which must be addressed. The current conditions place people, the University and the State at significant risk. The buildings and systems in this project are the highest priority health and safety concerns.

4. Interior & exterior building components – 16 buildings & critical campus electrical infrastructure/$19,600,000 - replacements including transformers and replacement of critical and aging/de-rated equipment (de-rated because the equipment/wiring is past it's acceptable service life) necessary to continue serving the campus and hospital functions. The continued provision of electricity to the campus and hospital are at stake. A reliable and redundant supply of electricity is also required to the University Medical Center which is the only Level One Trauma Center in Southern Arizona. This adequacy is further required by the Joint Commission on Accreditation of Hospital and Clinic Operation (JCAHO). This equipment and the repairs are necessary to provide and maintain life protection related systems in operable condition while replacing obsolete parts and equipment, reducing downtime and costs from frequent break downs, creating savings from increasing energy efficiency, reduced repairs and damages related to system failures.

   The University has documented conditions which must be addressed. The current conditions place people, the University and the State at significant risk. The

buildings and systems in this project are the highest priority health and safety concerns.

5. Heating, ventilation & air conditioning – 16 buildings/$14,820,000 – replacement of failing A/C units/air handlers, controls & critical chemical exhaust fans. Ventilation of laboratories with chemicals and bio hazardous materials is vital. So too is maintaining healthy indoor air quality for occupants. Failed and failing exhaust and fresh air systems do not allow us to meet air quality standards and requirements established by the American Society of Heating, Refrigeration and Air Conditioning Engineers, Inc. (ASHRAE), the American National Standards Institute (ANSI) guidelines and standards, nor the State of Arizona Department of Environmental Quality (ADEQ) and Pima County Department of Environmental Quality (PDEQ) regulations. In addition, both OSHA and the EPA regulate requirements relative to air quality that are compromised when systems fail or are down for repairs. This equipment and the repairs are necessary to provide and maintain life safety and protection related systems in operable condition while replacing obsolete parts and equipment, reducing downtime and costs from frequent break downs, creating savings from increasing energy efficiency, reduced repairs and damages related to system failures.

   As an example, relative to Indoor Air Quality (IAQ), the Environmental Protection Agency has established that the term "Sick Building Syndrome" (SBS) is used to describe situations in which building occupants experience acute health and comfort effects that appear to be linked to time spent in a building, but no specific illness or cause can be identified. In contrast, the term "building related illness" (BRI) is used when symptoms of diagnosable illnesses are identified and can be attributed directly to airborne building contaminants. In the early and mid 1900's building ventilation standards called for 15 cubic feet per minute (cfm) of outside air for each building occupant. However, as a result of increasing energy conservation needs, those standards were reduced to 5 cfm per occupant. These reduced outdoor air ventilation rates have been found to be inadequate to maintain the health and comfort of building occupants. Inadequate ventilation and distribution has been found to be an important factor in SBS. In an effort to achieve acceptable IAQ while also minimizing energy consumption, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) revised its ventilation standards to provide a minimum of 15 cfm of outdoor air per person (20 cfm/person in office spaces). While the University has identified potential causes of BRI that need to be corrected relative to chemical and biological contaminants, we have also identified buildings with original mechanical systems (40 and 50 years old) that have significantly inadequate ventilation and high levels of Volatile Organic Compounds (VOCs) or carbon dioxide levels which must be improved. The University has documented conditions which must be addressed. The current conditions place people, the University and the State at significant risk. The buildings and systems in this project are the highest priority health and safety concerns.

6. Mechanical system repairs & replacements – 43 buildings/$5,510,000 – critical repairs/upgrades to compressors, vacuum pumps, exhaust & conditioned air systems, sewer lines & plumbing lines that are failing. These plumbing and mechanical repairs are critical to sanitary and safe operation of these facilities,

and thus the health of their occupants. Department of Environmental Quality requirements for plumbing systems must be met, and the repairs are necessary to provide and maintain life protection related systems in operable condition while replacing obsolete parts and equipment, reducing downtime and costs from frequent break downs, creating savings from increasing energy efficiency, reduced repairs and damages related to system failures.

Compliance with the Uniform Mechanical Code (UMC) and Uniform Plumbing Code (UPC) and other basic standards are required for the safe operation of systems and are standards that must be met in order to preserve health and safety. The University has documented conditions which must be addressed. The current conditions place people, the University and the State at significant risk.

7. Critical roofing repairs – over 30 buildings/$4,959,460 – repair or replacement of roofing systems that are failing, leaking and causing interior and structural damage. The replacement/repairs are necessary to prevent failure of the roof systems and the safety related dangers of roof collapse and electrical equipment malfunction. Replacements reduce the risk of failure and further subsurface damage while reducing downtime to the building functions and costs from frequent leaking - creating savings from increasing energy efficiency, reduced repairs and collateral damages within the buildings. Roof leaks also cause mold infestations within affected areas, leading to health risks of building occupants.

   As an example, while there is the potential for significant structural, electrical and systems damage, ceiling collapse and other water related damages also cause significant loss of property/data and risk exposure to occupants. The collateral damage associated with water damage often exceeds the cost of re-roofing. Water penetration into walls, floors and building materials can facilitate the rapid formation of fungi (mold) which must be remediated. Many fungi have been identified as toxic agents which pose a significant health hazard to building occupants. Molds can be extreme allergens and exposure can also result in permanent lung damage (Department of Health , Executive Summary May 7, 1993). The University has many documented complaints, mold issue reports, and reports relative to the significant collateral damages of roof leaks and the costs relative to this and the redundant temporary repairs. The continued exposure to mold and the illness it creates, as well as the hazards of ceiling/structural failure places people, the University and the State at significant risk.

8. Building structural components – 75 buildings/$3,150,000 – vital interior/exterior repairs & replacements to the structural elements & building envelope. These replacements/repairs are vital to the safety of the occupants and the usability of the buildings. Repairs/Replacements reduce the risk of catastrophic structural failure and further subsurface damage while reducing downtime to the building functions and costs from frequent repairing or shoring - creating savings from reduced repairs and collateral damages within the buildings. The University has documented structural conditions which must be addressed. Specific reports are available. The current conditions place people, the University and the State at significant risk.

9. Football stadium structural repairs – 1 building/$2,400,000 - critical repair of deteriorated concrete structure and reinforcing materials in Arizona Stadium. These replacements/repairs are vital to the safety of the occupants and the usability of the stadium. Repairs reduce the risk of catastrophic structural failure and further consequential damage while reducing downtime to the building functions and costs from frequent repairing or shoring - creating savings from reduced repairs and collateral damages within the buildings. A specific structural investigation and report was created for the stadium which concluded, among other concerns, that the significant age of the stadium and water infiltration has caused severe corrosion to the reinforcing steel. This corrosion has caused concrete spalling, cracking and portions of the concrete to be dislodged and to fall from the structure. Repairs are required as the current conditions place people, the University and the State at significant risk.

10. Arizona Health Sciences critical improvements – 23 buildings/$6,118,292 - the repairs and replacements related to fire alarm/fire sprinkler systems, electrical and elevator code upgrades, heating venting and air conditioning, mechanical systems, re-roofing, and building structural components for this clustered group of buildings are as defined in the above categories (1-8).

Attachments follow

The University of Arizona
Facilities Management

U of A Fire Safety
Integrated Systems Group
Physical and Electronic Access Systems
C-3 Dispatch Center

Office 520-626-6657 <-> Fax 520-626-6659

MEMORANDUM

Date: October 30, 2008

To: Al Tarcola, Director
Facilities Management

From: Joseph M. Branaum, Manager
Integrated Systems Group

Re: Comparison of Current Class Fire Alarm Systems as opposed to Fire Alarm Systems on Speed Project / Deferred Maintenance.

Below you will find a comparison between our current class fire alarm systems and our old technology fire alarms that are listed on both the speed project and are on the deferred maintenance list.

The most direct consequences of not replacing these old technology systems are:

i. Smoldering fires are not automatically detected.
ii. An alarm occurs after a fully involved fire erupts.
iii. Delayed response to building fires due to delayed detection.
iv. It is possible for some building occupants not to hear a fire alarm.
v. Emergency response operations are "search and find cause" based.
vi. Dirty smoke detectors cause a false fire alarm.
vii. Device failures or faults may not be reported.
viii. Any damage to the system results in a loss of detection, notification, or both.
ix. No electronic logs of events are available.

The most direct benefits of the current class fire alarm systems are:

i. Smoldering fires are automatically detected.

ii. An alarm occurs prior to a fully involved fire erupting.
iii. No delayed response to building fires due to delayed detection.
iv. ADA compliant evacuation signals to building occupants.
v. Emergency response operations are "respond to the actual event" based.
vi. Dirty smoke detectors do not cause a false fire alarm.
vii. Device failures or faults are reported.
viii. Damaged systems continue to provide detection and notification or can rapidly be restored to operation.
ix. Detailed electronic logs of events are available.

To demonstrate the real world difference between the old and new systems I can draw on two similar events that occurred at Chemistry #41, old technology fire alarm, and at Basic Sciences #201, new class fire alarm. At both buildings a researcher reached across an active gas burner while holding a glass beaker and opened a valve on a plastic 5 gallon jug of ether alcohol to fill the beaker. At each building the researcher burned their arm, dropped the beaker which in turn broke. The active gas burner ignited the spilled alcohol, which in turn ignited the 5 gallon jug, which then exploded.

At Basic Science #201 the fire and explosion caused:

i. The fire sprinkler system to activate.
ii. Hallway smoke detectors activated from the smoke.
iii. The fire alarm system reported to UAPD and to the C3 Center detailed data to include what type of devices were in alarm and where they were located.
iv. The fire alarm activated ADA compliant evacuation signals to building occupants.
v. All emergency responders went directly to the lab involved.
vi. 5 minutes after the explosion the entire event was contained and the balance of the building was reopened for use.

At Chemistry #41 the fire and explosion caused:

i. The fire sprinkler system to activate.
ii. The fire alarm system reported to UAPD and to the C3 Center that there was a fire alarm at the building.
iii. The fire alarm activated non-ADA compliant evacuation signals to building occupants.
iv. All emergency responders search the building for the lab involved.
v. Some emergency responders had to be diverted to finding building occupants and escorting them out of the building further slowing the actual response to the lab explosion.
vi. By the time the lab involved was located, sprinkler water contaminated with laboratory chemicals has flooded the entire 1st floor and basement.
vii. The basement and 1st floors had to be decontaminated along with the footwear of all the emergency responders.
viii. One emergency responder had to be taken to the hospital due to the extended exposure to the chemical contamination caused by delayed response to the lab.
ix. 2 hours after the explosion the entire event was contained and the balance of the building was reopened for use.

In both cases the building fire alarm and fire sprinkler systems worked as designed. However the lack of up-front detailed information delayed proper response in the first critical minutes of the event at Chemistry #41 and then the delay was compounded by having to divert resources to search and evacuate building occupants.

The bottom line is:

i. Every minute of delay could cost a person his or her life.
ii. The lack of upfront detailed information can result in insufficient resources being sent to an event and then an extended delay in getting the proper resources on site.

On the next page is a feature / capacity overview for each of the two classes of fire alarm systems we have in service.

Current Class Fire Alarm System:

These state of the art systems provide:

i. Real time smoke detection in the hallways
ii. Real time smoke detection in the ductwork.
iii. Real time heat detection in various areas of the building.
iv. Alarm and trouble data are reported by each device, i.e. 4th Floor Smoke Detector in Hall by Room 427 Fire Alarm.
v. Real time control and monitoring of the emergency power generator.
vi. Real time monitoring of the fire sprinkler system.
vii. Detects dirty smoke detectors preventing false fire alarms.
viii. Reports every detail of the system real time to the Centralized Computer Command, C3, Center.
ix. Reports device type per floor, i.e. 4th Floor Smoke Detector Fire Alarm, to UAPD.
x. Provides ADA compliant evacuation signals to building occupants.
xi. Can be remotely bypassed to support construction and maintenance activities therefore preventing a false fire alarm.
xii. Interface intelligently to other building systems.
xiii. Device failures or faults are reported in detail.
xiv. Maintain electronic logs of all actions the system has taken.
xv. Can continue to operate even if damaged, i.e. contractor cutting thru fire alarm pipe and wire.
xvi. Can share data from fire alarm panel to fire alarm panel, i.e. send data to UMC Fire Alarm systems instantly as to AHSC alarm events.

Speed Project and Deferred Maintenance Fire Alarm Systems:

These old technology systems provide:

i. Smoke detection at elevator lobby.
ii. Partial smoke detection in the ductwork.
iii. Only a generic Fire Alarm and system trouble are reported to UAPD and the C3 Center, i.e. Marvel #37 Fire Alarm.
iv. Non-ADA compliant evacuation signals to building occupants.
v. To determine what type of alarm and from where an emergency responder must go to the fire alarm panel.
vi. At the fire alarm panel, device detail is generic, i.e. 4th Floor Smoke Detectors / Pull stations.
vii. No remote bypass ability.
viii. No real time information.
ix. Can not operate if damaged, i.e. contractor cutting thru fire alarm pipe and wire.

Fire Safety Department

The University of Arizona
Facilities Management

Integrated Systems Group
Security Systems Shop
C-3 Dispatch Center

Office 520-626-6657 <-> Fax 520-626-6659

MEMORANDUM

Date: 27 May 2008

To: Al Tarcola

Director, Facilities Management

From: Joseph M. Branaum

Manager, Integrated Systems Group

Re: UL Listing expiration on Simplex 2001 Fire Alarm Panels

The University was notified on the 16th of May 2008 by Tyco International, the parent company of SimplexGrinnell, that they have chosen not to renew the UL listing for the Simplex model 2001 Fire Alarm Control Panel due to a lack of replacement parts. In 2005 SimplexGrinnell stopped producing parts for the 2001 Fire Alarm Control Panel. The UL listing expiration will result in the entire building fire alarm system no longer being UL listed.

The quickest and most cost effective method of replacing the fire alarm system is to replace the fire alarm head-end, the master controller, while reusing the existing field devices such as smoke detectors, pull stations, ect. The average cost per system is $21,000.00. The existing field devices will still require replacement at a later date as part of the normal fire alarm upgrade process; however we will at that time be able to build from the new head-end installed as part of this process.

Below is a list of the twenty FM maintained building with a Simplex 2001 Fire Alarm Control Panel installed:

Art #2, Maroney #3, Mines/Geo #11/12, Social Science #27, Douglas #28, Forbes #36, Marvel #37, Shantz #38, Old Chemistry #41, Bio East #43, Science Library #54, Bear Down Gym #56, Speech #71, Harvill #76, ECE #104, Radiology Research #211, Faculty Office #220, 22nd Street Warehouse #458, Comstock #559, Fleishman Lab #3054.

The estimated cost to replace these Simplex 2001 head-end units is: $420,000.00

The Department of Residence Life has two of these class systems still in service at Coconino #5 and at Babcock #151 with an estimated head-end replacement cost of $42,000.00.

If you have any questions, please feel free to contact me directly at 520-626-6657

STATE OF ARIZONA

Joint Committee on Capital Review

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DATE: November 6, 2008

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

THRU: Richard Stavneak, Director

FROM: Leah Kritzer, Fiscal Analyst

SUBJECT: Northern Arizona University - Review of $26.3 Million in University Lottery Bond Projects - Building Renewal

Request

A.R.S. § 15-1683 requires Committee review of any university projects financed with revenue bonds. Northern Arizona University (NAU) requests Committee review of $64.8 million in Building Renewal projects. This issuance represents a portion of the University Lottery Bonding package as authorized by the FY 2009 Education Budget Reconciliation Bill (BRB) (Laws 2008, Chapter 287).

The $64.8 million NAU request was presented for information only at the October 2, 2008 meeting. This memo now addresses the review of $26.3 million for the North Campus utility upgrade project and the North Union Building renovation.

Recommendation

The Committee has at least the following 2 options:

1. A favorable review, with the standard university financing provisions (listed below).

2. An unfavorable review.

Under either option, the JLBC Staff recommends the provision that ASU submit a final debt service schedule and a list of projects.

Standard University Financing Provisions

- 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.

(Continued)

- NAU shall submit to JLBC Staff any reallocation above $500,000 between the individual projects. The Committee may review these items depending on the substantive nature of the reallocation.

Analysis

This agenda item is comprised of 2 types of building renewal projects, at an estimated total cost of $26.0 million. Building renewal appropriations provide for the major maintenance and repair of state-owned buildings. The universities, however, have received about 12% of their building renewal formula over the last 10 years. NAU's FY 2009 Building Renewal formula would have been approximately $10.4 million.

The $26.0 million in projects consists of NAU's North Campus utility upgrade project and the North Union Building renovation. The North Union Building project would address aging wiring, sprinkling, and mechanical code issues. NAU notes that the building is almost 50 years old and is in need of fire suppression and asbestos remediation. They also plan to address Americans with Disabilities Act compliance issues and replace the roof and original copper wiring. NAU has also planned a utilities retrofit project for its North Campus, which would include plumbing and electrical improvements that are intended to improve capacity. The 3 boilers, which currently supply heat and hot water, are over 25 years old, which NAU states is past the equipment's useful life. This equipment would be replaced with a new steam generator and related equipment. NAU indicates that portions of both the North Plant and North Union buildings have been red tagged by the State Fire Marshal to prevent them from being occupied until the safety concerns are remediated.

Projects that are part of the requested $64.1 million, but are not part of the new $26.0 million review, include the renovation of 3 additional buildings. The Hotel and Restaurant Management (HRM) Building renovation would convert the old Inn at NAU hotel rooms and dining areas to classroom and lab space. The Liberal Arts Building project would include roof, mechanical, and electrical system replacements in addition to classroom renovations. Lastly, NAU's Skydome renovation would address deficiencies such as seating, handrails, and wheelchair spaces in addition to electrical, mechanical, and water issues.

NAU's projected costs contain no contingency monies. NAU intends to shift monies among projects once the final building or project assessment is developed, which they note will not exceed the total project cost. The standard university financing provisions listed above include a requirement for NAU to submit for Committee review any reallocation above $500,000 between the individual projects depending on the substantive nature of the of the reallocation.

Financing

The FY 2009 Education BRB authorized the Arizona Board of Regents (ABOR) to enter into lease-to-own and bond transactions up to a maximum of $1.0 billion to pay for building renewal projects and new facilities. Of that amount, ABOR cannot issue more than $285.0 million in FY 2009 and not more than $500.0 million in FY 2010. The annual debt service payments will be paid from the newly-created University Capital Improvement Lease-to-Own and Bond (UCI) Fund and will be comprised of 80% Lottery revenues and 20% state university system revenues, as required by the FY 2009 Education BRB.

Under the Lottery financing proposal, the prior caps on Lottery advertising have been removed. As a result, advertising expenditures are projected to increase from $11.0 million to $20.2 million. Along with other modifications, the Arizona State Lottery Commission estimates that these changes will increase Lottery proceeds by $103.2 million, or 22%, in FY 2009. After accounting for prizes, this would result in $12.7 million more for Lottery beneficiaries.

All current Lottery beneficiaries will continue to receive their current funding allocations with 1 exception. Local mass transit projects will receive $9.5 million instead of $18.0 million in FY 2009. Most of the growth will be deposited in the UCI Fund. It is uncertain whether these proposed changes

(Continued)

will generate the percent increase in proceeds as forecast by the Commission. Given this uncertainty, more than 20% of the debt service may need to be paid by university sources.

Of the $1.0 billion amount, the FY 2009 Education BRB requires ABOR to allocate $470.0 million for construction of the University of Arizona Phoenix Biomedical Campus. The legislation permits ABOR to determine the distribution of the remaining funds. Of the remaining $530.0 million, ABOR plans on allocating $20.0 million to ASU's School of Construction and $170.0 million to each of the 3 universities for building renewal and new construction projects. This project up for review represents a single NAU issuance, which is $26.3 million of NAU's $170.0 million allocation.

The original project cost totaled $64.8 million, with $0.7 million for issuance costs and $64.1 million for project costs. The new cost totals $26.3 million, with $0.3 million for issuance costs (which assumes costs are proportionate to the original issuance), and $26.0 million in project costs. NAU plans on issuing A/A3-rated revenue bonds with an estimated 5.85% annual interest rate and a term of 20 years. The actual interest rate may change when the bond goes to market in January 2009. Both Arizona State University and University of Arizona have also assumed a 5.85% interest rate for their proposed Lottery project issuances, although they have better credit ratings than NAU.

Based on a request of $64.8 million, NAU originally estimated an average annual debt service cost of $5.5 million with a 20-year total cost of $110.1 million. It is assumed that the new total cost of $26.3 million will result in a proportionate average annual debt service cost to the original estimates. The new average annual debt service is estimated to cost $2.2 million, with a 20-year total cost of $44.6 million.

The debt service is designed to be funded with 2 separate revenue streams as prescribed by the FY 2009 Education BRB. Approximately $1.8 million, or 80%, will come from state Lottery proceeds, while $0.4 million will come from local university funds. Given the uncertainty with Lottery proceeds, as described above, local funds will likely need to provide more than their 20% share. NAU plans to begin construction in January 2009, which is the same time they plan on issuing the bond. NAU indicates they will use their current cash flow to cover immediate costs of approximately $8.4 million in pre-construction costs necessary to begin operation of its plan. When the bonds are issued, it is intended that NAU will be repaid with its Lottery bond proceeds.

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. The FY 2009 Education BRB provided that the University Lottery building projects will be exempt from university debt limit calculations. If the debt service for the requested $64.8 million was included in the calculation, however, the debt ratio would increase by 1.6% from the current 5.16% rate to a new debt ratio of 6.76%.

Construction Costs

Total project costs up for review are estimated at $26.0 million, which typically include direct construction costs, architect fees, furniture and equipment costs, and contingency fees. As noted earlier, NAU's cost estimates are still preliminary and do not include contingency costs. The direct construction costs total $21.3 million, which includes construction labor and material costs only. *Table 1* lists estimated capital costs and renovation scopes for the all 5 projects requested for review by NAU and also provides a comparison of NAU's requested projects to those which will be reviewed by the Committee.

(Continued)

Table 1

NAU Building Renewal Costs and Scopes

Project	Description	NAU Request	Review
North Campus Utility Upgrade (Phase 1)	Project would upgrade plumbing; electrical; lighting; and heating, ventilation, and air conditioning (HVAC) systems. Improvements to the underground delivery system and capacity are also planned.	$22,000,000	$22,000,000
Skydome Renovation	Addresses deficiencies including seating, handrails, and wheelchair space. Upgrades would include electrical and mechanical systems in addition to installing a fire suppression system. NAU also plans to remodel the men and women's locker rooms.	21,900,000	0
Liberal Arts Building Renovation	Project includes roof replacement, HVAC system upgrades, and fire sprinklers installation. NAU also plans on classroom renovations including flooring and lighting.	8,900,000	0
HRM Renovations at the old Inn at NAU	15 hotel rooms would be converted to classrooms, 3 hotel rooms would be converted to student lab space, and the kitchen would be expanded and remodeled for a lab.	7,340,000	0
North Union Building Renovation	Fire sprinklers would be installed throughout the building. Ingress and egress issues would also be addressed.	4,000,000	4,000,000
Total		**$64,140,000**	**$26,000,000**

NAU hired design consultants for building and utility assessments to develop cost estimates for its projects. The costs for the North Union Building were based on preliminary design work and cost estimates in 2007, which were escalated for 2008. Many of the proposed projects have a large range of project specifications, and comparable projects were not applicable to assess cost reasonableness.

The Liberal Arts and HRM buildings, which are not up for review by the Committee, have comparable costs which were used to determine reasonableness. The 55,900 square foot Liberal Arts Building renovation project is estimated to cost a total of $8.9 million, with a direct construction cost of $7.2 million. Of this amount, $5.0 million represents the total project cost for classroom renovations, with $4.1 million for direct construction costs. The proposed classroom renovations are planned on the first and second floors for a total square footage of 38,300. The total cost per square foot is $130, while the direct construction cost per square foot is $107. The Committee recently favorably reviewed NAU's School of Communications Building renovation at a direct construction cost per square of $111. When compared to the School of Communications project, the costs for the Liberal Arts Building renovation appear reasonable.

The HRM Building is estimated to cost a total of $7.3 million, with a direct construction cost of $6.1 million. The building is currently 14,600 square feet and NAU is proposing to add 5,300 square feet, for new square footage of 19,900. The total construction cost per square foot is $369, with a direct construction cost per square foot of $305. This project will renovate the existing Inn at NAU into classroom, lab, and kitchen space. While this project is unique, NAU's 2007 Union Dining Expansion, which was favorably reviewed by the Committee, included both kitchen and student space. The direct construction cost per square foot was $278. It is unclear if the costs for the HRM Building appear reasonable given the differences between the proposed project and the 2007 dining expansion project.

Procurement Method

NAU would contract all bond projects 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

(Continued)

on price competition, selecting the lowest bid. Additionally, CMAR defines a guaranteed maximum price, after which the general contractor must absorb almost all cost increases except those caused by scope changes or unknown site conditions. Occasionally, in the case of substantial materials price inflation, a university will partially cover higher costs to maintain good contractor relations.

RS/LK:ss

PO Box 4092
Flagstaff, AZ 86011-4092

928-523-1848 fax
nau.edu/president

September 23, 2008

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

Subject: **Northern Arizona University: Stimulus Package for Economic and Educational Development - Building Renewal Projects Review**

Dear Chairman Pearce:

I request that Northern Arizona University's SPEED building renewal projects be placed on the next available agenda for the Joint Committee on Capital Review.

The Arizona Board of Regents approved the university's request for SPEED building renewal projects and related cost on September 3, 2008. The Capital Committee project approval submittal, debt service schedule and funding plan should provide the required information and is attached for your review.

If you require additional information please do not hesitate to contact me at (928) 523-6515.

Thank you for your consideration of this request.

Sincerely,

M.J. McMahon
Executive Vice President

Attachments

c: Joel Sideman
Lorenzo Martinez
Christy Farley
Leah Kritzer
Kathe Shinham
Robert Norton
John Haeger

NORTHERN ARIZONA UNIVERSITY

Project / Building	Fire / Life Safety	Roof Replacement	Mechanical Replacement	Main Electrical System Replacement	Elevator Replacement
Ardrey / PFA Classrooms	X		X	X	
HRM Stimulus Renovation			X	X	
Liberal Arts Stimulus Renovation		X	X	X	
North Union Stimulus Renovation	X			X	
North Campus Utility Retrofit			X	X	
Skydome ADA / Health Issues	X		X		X
SBS Stimulus Renovation		X	X		

EXECUTIVE SUMMARY

ITEM NAME: **Combined Project Implementation Approval and Project Approval for SPEED Deferred Maintenance and Building Renewal Projects (NAU)**

☒ Action Item ☐ Discussion Item ☐ Information Item

ISSUE: Northern Arizona University seeks combined Project Implementation Approval and Project Approval for the SPEED Deferred Maintenance and Building Renewal Projects, including approval to shift funding among projects as project assessments are further developed provided the bottom line budget is not exceeded.

Previous Board Actions: Capital Development Plan: June 2008
SPEED Projects Allocation: July 2008

Project Justification/Strategic Implications:

- In June 2008, the Legislature approved the Stimulus Plan for Economic and Educational Development (SPEED) with the provision the funds would be used for critical new construction and deferred maintenance projects.

- As part of the Northern Arizona University SPEED plan approved at the July 24 Capital Committee meeting, the university identified several deferred maintenance projects based upon the following critical factors:
  1. What are the most immediate health, life, and safety issues that impact NAU students, faculty and staff?
  2. Which projects can be started immediately so that the intent of the stimulus package is fulfilled?
  3. Which buildings can be taken off line for six months to a year in order to complete the necessary renovations? The university cannot, at this stage, simply shut down a classroom building without having identified alternative space.

- The NAU SPEED plan also identified two critical new construction projects, a new Health Professions facility and new campus classrooms at the Wellness Center, as well as the NAU portion of the Biomedical facility in Phoenix.

- In addition, at the same July 24 meeting, NAU requested a waiver to seek concurrent Project Implementation and Project Approval for bundled projects with a single, combined budget for the bundle. Funds would have the flexibility

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EXECUTIVE SUMMARY

to be allocated within the bundled projects as long as the bottom line budget is not exceeded, and the Board would be provided regular updates on the projects.

Project Description and Scope:

- In accordance with the plan put forth in July, NAU is bringing forward its deferred maintenance and building renewal bundle for simultaneous Project Implementation and Project Approval. Pre-programming services are complete and Design Professional (DP) and Construction Manager at Risk (CMAR) selections are currently in process. Most selections will be completed before the September Board meeting.

- The following projects are included in this bundle:

  1) **Fire Life Safety projects** include Skydome Health and ADA issues, Ardrey (part of Performing and Fine Arts), and the North Union. The Skydome project addresses deficiencies in seating, handrails, and wheelchair spaces. Restricted egress and accessibility will be corrected in a number of areas as part of this project. In addition, the project addresses life-safety storage, electrical, mechanical and water issues. The Ardrey Auditorium project addresses aging, unsafe seating (a patron fell through a seat last year) and rigging, electrical, fire alarm and pit structure issues. The North Union project addresses aging wiring, sprinkling, and mechanical code issues.

  2) **Classroom Renovation projects** include renovations of the old Inn at NAU for Hotel and Restaurant Management classrooms, Liberal Arts 1st and 2nd floor classrooms and Performing and Fine Arts Classrooms. The nationally ranked Hotel and Restaurant Management program has outgrown its existing building and is in need of adequate lab facilities for student training. To correct these program deficiencies, The Inn will be renovated to provide larger, functional classrooms, as well as modern laboratory facilities. Performing and Fine Arts renovations address aging classrooms with an adjusted age of over 30 years. The Liberal Arts facility is approximately 40 years of age, and the building is one of the busiest on campus. Classroom renovations will correct the aging condition of these environments. These buildings are not the only aged buildings on campus, but they are some of the most heavily used and/or are home to significantly growing programs.

  3) **The Utilities Retrofit project** focuses on building systems such as plumbing, electrical, lighting, and HVAC that affect the operational integrity of campus buildings. Improvements to underground delivery systems and capacity will be addressed by this project.

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- The following table shows the renovation activity to be done by building:

NORTHERN ARIZONA UNIVERSITY
SYSTEM REPAIR TABLE

Project / Building	Fire / Life Safety	Roof Replacement	Mechanical Replacement	Main Electrical System Replacement	Elevator Replacement
Ardrey / PFA Classrooms	X		X	X	
HRM Stimulus Renovation			X	X	
Liberal Arts Stimulus Renovation		X	X	X	
North Union Stimulus Renovation	X	X		X	
North Campus Utility Retrofit			X	X	
Skydome ADA / Health Issues	X		X		X
SBS Stimulus Renovation	X	X	X		

- The new Health Professions project which focuses upon space needs for new and existing health programs is moving forward rapidly. Approximately 100 DPs and CMARs attended the pre-submittal meeting on July 21st. Fourteen DP firms submitted and selection of the DP will be completed shortly. Twelve CMARs submitted and selection of the CMAR is in process.

- The new classrooms have been incorporated into the Wellness project. The availability of SPEED funds, along with the early stage of programming on the Wellness facility provides a unique opportunity to create additional classroom capacity with the addition of two and a half floors, without creating a separate building footprint and at a cost significantly less than originally anticipated. Expanding the Wellness Center will increase campus density while preserving green space, reduce the cost of the utility infrastructure required for a stand-alone building and provide additional flexibility for siting other future buildings.

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Statutory/Policy Requirements:

- Board Policy 7-109 requires Capital Committee review and Board approval of projects with a total project cost over $20 million.

- As a group, the bundled projects exceed $20 million. The new Health Professions Building is $80 million and Wellness is approximately $100 million with the classroom additions.

Additional Project Considerations:

- To maximize the long-term investment of the new construction projects, Wellness and Health Professions are being built to last 50 to 75 years. They will be designed in accordance with the NAU Design Standards and will be constructed of high quality, maintainable materials and building systems to maximize energy efficiency and minimize operational, repair and replacement costs.

- NAU continues its commitment to responsible, sustainable design and construction for new projects which are planned to receive, at a minimum, a LEED Silver certification in accordance with the governor's guidelines.

- NAU renovation projects will include responsible, sustainable options where feasible and depending upon the specific needs of the programs being served.

Project Delivery Method and Process:

- Every project in the deferred maintenance bundle and new construction are being delivered through the Construction Manager at Risk (CMAR) method. This approach was selected because it can save time through fast-track project scheduling, it provides contractor design input and coordination throughout the project, it improves potentially adversarial project environments, and it allows for the selection of the most qualified contractor team for each individual project. With the use of two independent estimates, qualification selection and low bid subcontractor work for the actual construction, this method also provides a high level of cost and quality control.

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- Selections of the Design Professional and CMAR are ongoing. Projects have received between 10 and 25 submittals. Selections are through the capital project selection process prescribed by the ABOR Procurement Code. For each CMAR, a licensed contractor and a design professional were included on the selection committee as required by Board Policy.

Project Costs:

- The total project budget for the deferred maintenance and building renewal bundle is identified as $73 million. Additionally, $5,850,163 in SPEED funding is required for programming and design efforts in FY2009 for the new Health Professions building and new classrooms at the Wellness project. Also, $1.1 million is determined as the NAU portion for the Biomedical facility this fiscal year.

- The initial project budget was developed for the University Stimulus Plan. Pre-programming efforts have developed cost estimates based upon preliminary examination of the physical conditions of the buildings identified in the deferred maintenance and building renewal bundle.

- Comparable cost data for these projects will be provided in updates to the Board. Relevant comparable projects identified at that time will also be included in the updates.

- As part of the Board updates, two cost estimates for each project will be prepared independently by the Construction Manager at Risk and the Architect's estimating consultant. These estimates will be reconciled together to confirm accurate, competitive scope quantities and unit prices to form the GMP for the entire scope of work. NAU will identify what percentage of the CMAR's current estimate is made up of subcontractor bid commitments, price projections from subcontractors, and estimates prepared by the CMAR team.

- All subcontractor work will be awarded on the basis of lowest cost and qualifications. Contracts for CMAR's will include Board approved requirements for Veteran's preference hiring programs. A final report on project control procedures such as change orders and contingency use will be provided at project completion.

Fiscal Impact and Financing Plan:

The NAU Deferred Maintenance and Building Renewal Bundle will be funded through system revenue bonds, with debt service paid from the University Capital Improvement Lease-To-Own and Bond Fund created as a result of the Stimulus Plan for Economic

EXECUTIVE SUMMARY

and Educational Development (SPEED) initiative. The fund will receive lottery revenues intended to cover 80% of the annual debt service, and university revenues intended to cover the remaining 20% of debt service.

The university will pay interest only for the first 5 years of the SPEED projects in order to allow for implementation of newly authorized lottery enhancements and full realization of increased lottery revenues from those enhancements.

The bonds for new construction will be repaid over a 35 year period, and the bonds issued for building renewal will be repaid over a 20 year period.

Debt Ratio Impact: The SPEED Projects are exempt from the university debt ratio. However, the annual debt service (principal and interest) for these projects is estimated to be $5,578,770 for the $73.0 million in building renewal projects and $468,502 annually for the remaining $7.2 million in new construction costs.

The incremental debt ratio from annual debt service for the $73,000,000 in building renewal projects is .95%. The incremental debt ratio from annual debt service for the $7,200,000 in new projects is .11%. The projected highest debt ratio including these projects is 10.10%. This includes all projects in the University CDP and CIP as well as the SPEED funded projects.

The projected highest University debt ratio for all projects not including SPEED is 6.59%, this ratio remains well below the maximum debt ratio of 8%.

Project Status & Schedule:

- All projects are progressing on schedule. Pre-programming or design is in process for the bundle of projects and new construction. Scheduled completion include:

Project	Completion Date
Liberal Arts	July 2009
HRM	July 2009
Skydome	July 2009
Ardrey/Performing and Fine Arts Classrooms	December 2009
Infrastructure	August 2010
Classrooms at Wellness Center	July 2011
New Health Professions Building	July 2011

EXECUTIVE SUMMARY

- Project Approval is being requested prior to the receipt of the overall GMP for the bundle projects to expedite renovations and per the approved NAU plan. NAU will provide construction and financial updates to the Board.

Committee Review and Recommendation:

The Capital Committee reviewed this item at its September 3, 2008 meeting and recommended Board approval with the provision that the addition or removal of any projects from the list be submitted for Committee review and Board approval.

Recommendation:

That the Board grant combined Project Implementation and Project Approval for SPEED Deferred Maintenance and Building Renewal Projects, including approval to shift monies among the projects once the final building or project assessment is developed, provided that the bottom line budget will not be exceeded, and that the addition or removal of any projects be submitted for Committee review and Board approval.

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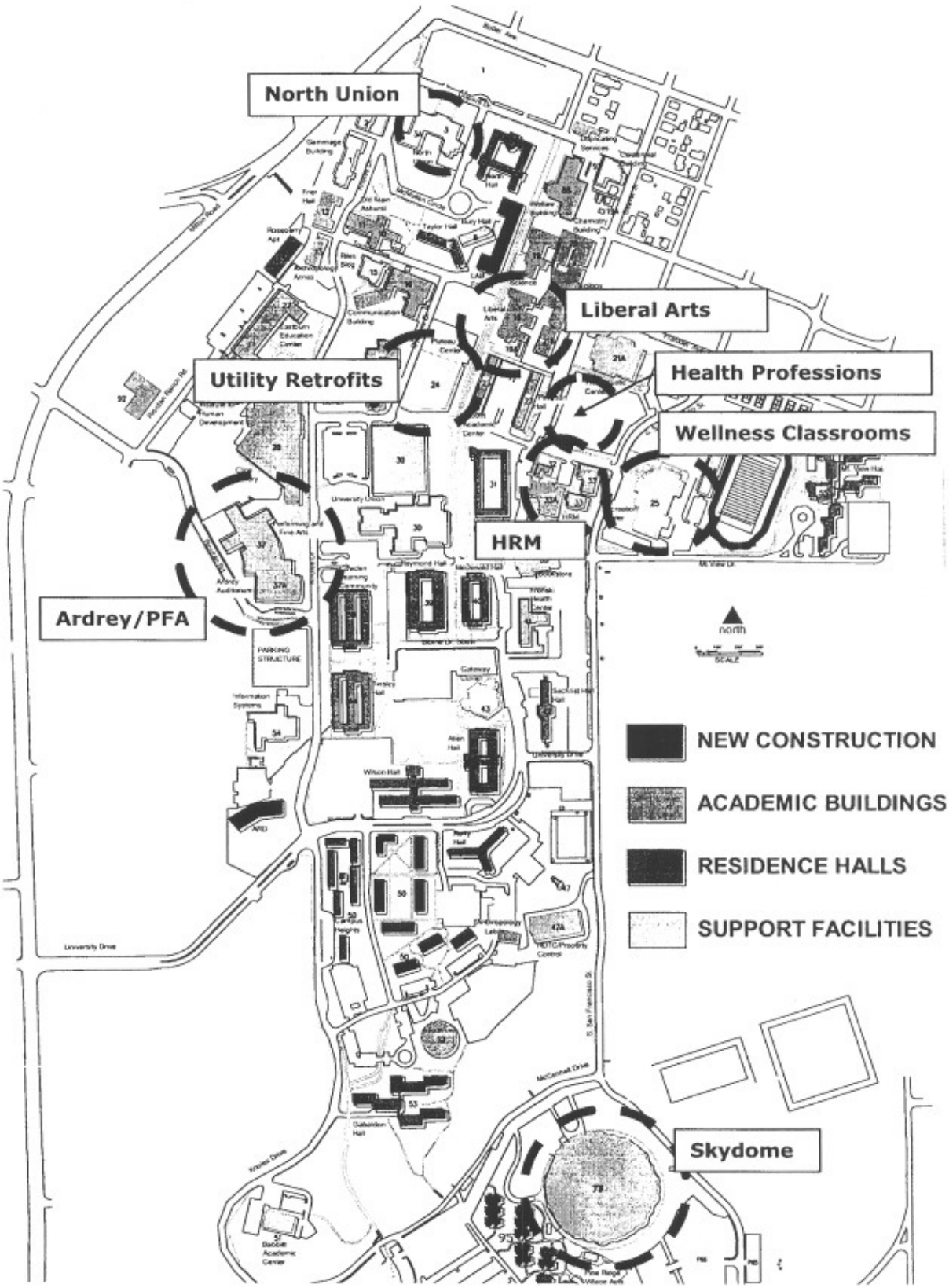
NORTHERN ARIZONA UNIVERSITY

Project	Cost	GSF	Status	Description
DEFERRED MAINTENANCE / BUILDING RENEWAL				
Ardrey / PFA Classrooms	$10,000,000	90,000	CDP 7/08	17 DP submittals, selection 9/16; 15 CMAR submittals, selection 10/7
HRM Stimulus Renovation	$6,000,000	16,470	CDP 7/08	14 DP submittals received, DP selection 9/10; 15 CMAR submittals received, selection 9/23
Liberal Arts Stimulus Renovation	$4,000,000	33,337	CDP 7/08	10 DP submittals, selection complete 8/20; 12 CMAR submittals, selection complete 9/05
North Union Stimulus Renovation	$2,000,000	15,000	CDP 7/08	DP submittals due 9/30
North Campus Utility Retrofit	$25,000,000	NA	CDP 7/08	9 DPs submittals, selection complete 8/21; 14 CMAR submittals; selection complete 9/11
Skydome ADA / Health Issues	$20,000,000	265,056	CDP 6/08	DP selected 8/19, 8 submittals received; 10 CMAR submittals, selection 8/25
SBS Stimulus Renovation	$13,000,000	50,000	CDP 7/08	DP submittal date TBD
Subtotal	**$80,000,000**			
NEW CONSTRUCTION				
Health Professions Expansion	$80,000,000	120,000	CDP 6/08	14 DPs submittals, selection complete 8/27; 12 CMARs submittals, selection complete 9/18
Recreation and Wellness Expansion Projects	$100,000,000	255,000	CDP 1/08	Classrooms were approved in 9/06 as separate building. Design in process by OWPP; Mortenson is CMAR.
Phoenix BioMedical Campus	$18,800,000	805,000	CDP 6/08	This project is managed by UofA.
Subtotal	**$198,800,000**			
Cumulative Project Totals	**$278,800,000**			

EXECUTIVE SUMMARY



JCCR Capital Review
SPEED Deferred Maintenance and Building Renewal Projects
Northern Arizona University

Debt Issuance:

	Building Renewal
Anticipated Financing Method	SPEED Revenue Bonds
Project Costs	$ 64,140,000
Issuance Costs	675,000
Total issuance	$ 64,815,000
Estimated Interest Rate	5.00%
Payment Term (Years)	20
Asset Useful Life (Years)	20

Fund sources for debt payment

Annual Debt Service (2010-2014)	
State Lottery Allocation Proceeds	$2,592,600
Tuition and Other Local Funds	$648,150
Total Annual debt service	$3,240,750
Annual Debt Service (2015-2029)	
State Lottery Allocation Proceeds	$4,995,540
Tuition and Other Local Funds	$1,248,885
Total Annual debt service	$6,244,425
Total debt service (by fund source)	
State Lottery Allocation Proceeds	$88,112,154
Tuition and Other Local Funds	$22,028,039
Total Debt Service	$110,140,193
Expected Date of Issuance	February 2009
Anticipated Bond Rating (1)	A and A3

Debt Ratio:
The SPEED financed projects are exempt from the statutory debt ratio. If included, the debt ratio impact would be as follows:

Current Debt ratio (Estimated FY09)	5.16%
Incremental ratio change with SPEED debt issuance	0.83%
Total debt ratio (2)	5.99%

(1) S&P Rating Services/Moody's Investor Services
(2) based on debt service (2010-2014)
(3) The estimated not-to-exceed cost of the financing for Deferred Maintenance and Building Renewal s $675,000 excluding potential costs for credit enhancements which would increase the debt rating and reduce the interest rate on the debt.

Northern Arizona University - Debt Service Schedule
JCCR Capital Review October 2008
SPEED-Deferred Maintenance and Building Renewal Projects

Fiscal Year	Payment	Principal	Interest	Outstanding Principal
				64,815,000
2009	270,063		270,063	64,815,000
2010	3,240,750		3,240,750	64,815,000
2011	3,240,750		3,240,750	64,815,000
2012	3,240,750		3,240,750	64,815,000
2013	3,240,750		3,240,750	64,815,000
2014	3,240,750		3,240,750	64,815,000
2015	6,244,425	3,003,675	3,240,750	61,811,325
2016	6,244,425	3,153,859	3,090,566	58,657,465
2017	6,244,425	3,311,552	2,932,873	55,345,913
2018	6,244,425	3,477,130	2,767,296	51,868,784
2019	6,244,425	3,650,986	2,593,439	48,217,798
2020	6,244,425	3,833,535	2,410,890	44,384,262
2021	6,244,425	4,025,212	2,219,213	40,359,050
2022	6,244,425	4,226,473	2,017,952	36,132,577
2023	6,244,425	4,437,797	1,806,629	31,694,780
2024	6,244,425	4,659,686	1,584,739	27,035,094
2025	6,244,425	4,892,671	1,351,755	22,142,423
2026	6,244,425	5,137,304	1,107,121	17,005,119
2027	6,244,425	5,394,169	850,256	11,610,950
2028	6,244,425	5,663,878	580,547	5,947,072
2029	6,244,425	5,947,072	297,354	0
Total	110,140,193	64,815,000	45,325,193	

NORTHERN
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NAU SPEED PROJECTS
JCCR Update

1. Please provide a greater level of detail for each of your requested projects.
    a. Attached is a detailed write up of each project.
2. Please provide a list of your requested projects in order of priority. The priority of projects for Northern Arizona University are as follows:
    a. Skydome
    b. North Plant Utility Retrofits
    c. North Union Infrastructure
    d. Liberal Arts Academic building
    e. Hotel and Restaurant Management
3. For all of your requested projects, please identify which projects have health and safety issues and the rationale behind the health and safety concerns.
    a. Attached in the detailed report
        i. Skydome – Health, Fire Life, Safety and ADA compliance
        ii. North Plant - Health, Fire Life, Safety, and North Campus utility reliability and service upgrades
        iii. North Union - Health, Fire Life, Safety and ADA compliance
        iv. Liberal Arts - Health, Fire Life, Safety and ADA compliance and renovations.
        v. HRM – Repurposing of space, upgrades to HVAC and other utility delivery systems.

1. L.J. Walkup Skydome

The Skydome was constructed in 1975, and during the past 33 years has undergone several minor interior renovations. The entire scope of this project is related to fire, life, safety and ADA and code compliance. Since the construction of the Dome, the Americans with Disabilities Act was enacted by Congress, which emphasizes why the facility is so deficient in this aspect. There have also been yearly fire code updates since the original construction of the Dome plus two major code updates; the National Fire Code Update of 1988 and the 2003 International Building Code/Fire Code which was adopted by the State of Arizona in 2007. The Dome is out of compliance on all code requirements which include items such as: sprinkler system installation, fire notification, ADA modifications for accessibility in restrooms and public viewing areas, egress improvements for safety, and elevators for ADA access to lower and upper levels.

A building assessment, performed by SmithGroup Architects and Engineers in August 2008 confirmed the university's non-compliant status regarding fire, life, safety and ADA accessibility. The assessment documented that the Skydome has major compliance deficiencies in both areas, including: 1) the lack of ADA accessibility in restrooms and lower dome levels; 2) the lack of ADA compliant viewing areas throughout the stadium; 3) inadequate fixture capacity in restrooms; and 4) no fire suppression in the entire dome. The Skydome project will add a wet suppression system on the concourse and lower levels of the dome that are occupied and where equipment and material are stored. All restrooms will be renovated and expanded to provide ADA accommodation and meet IBC standards for adequate fixture quantities for the capacity of the facility, plus bring inoperable toilets and sinks into working order to comply with local health code.

The project scope will address other deficiencies such as existing locker rooms which require reconfiguration to provide quick and safe access to and from the playing field. Currently access is through a maze of hallways to both the men's and women's locker rooms on the west side. Existing egress is through restrictive corridors; is not ADA compliant and poses a safety concern if there were to be a fire in the facility. There is only one elevator in the dome on the east concourse; code requires an additional elevator on the west concourse. Additionally, there is no ADA access to the broadcasting booth or other levels of the stadium.

Existing stadium access aisles are narrow in width and have no center hand railing which creates a major safety issue in the Dome. The project scope includes replacement of the existing seating with wider seats which will reduce the stadium capacity, increase the aisle width and provide adequate space for the installation of hand railings. (Note: the existing stadium has a capability of 14,500+; reducing the seating capacity to 10,000+ will help address compliance issues for the entire dome as ADA requirements are directly related to capacity.)

The above stated non-compliance issues drive the renovation of these various spaces to correct current conditions that are potential safety hazards. Due to the heavy use of the Skydome for events encompassing university colligate athletic programs, intramural sports programs, and public events, this is a high traffic facility for students, faculty and staff and the community and a university responsibility to operate safely. Initial construction will commence upon review with additional planning immediately, a light construction phase begins in March while the facility remains occupied, with heavy construction performed from May through July 2009. Light construction activity will continue in August 2009 until the completion of the project. We are planning a single phase construction with only one complete shutdown occurring during the heavy construction period.

2. North Plant Utilities Retrofit Project – Boiler Plant and Power Upgrades

North Utilities Boiler Plant

Currently, there are three boilers in the North Plant. They are all 45,000 pound per hour steam boilers. Boiler #1 was installed in 1980, boiler #2 was installed in 1966, and boiler #3 was installed in 1969. These boilers are used to produce medium pressure steam for all north campus building heat and domestic hot water. These boilers currently serve 40 buildings on north campus, and additional buildings or expanded spaces are scheduled to be added. The average useful life of a boiler is recommended to be 25 years. The capacity and reliability of these current boilers is not sufficient. In 2006 peak campus steam demand was 45,000 pounds per hour which gave the plant exactly N+1(had 100% redundancy) reliability because boiler #3 had been out of service for 10 years. The new lab building added an additional 12,000 pounds per hour to the existing demand, creating a situation in which there was no redundancy (back up in case of a failure) at the plant. At that time, boiler #3 was upgraded and brought back online to provide some back up capacity.

As currently configured, the plant does not have adequate capacity to meet the standard reliability criteria identified by our utility master plan consultants. The primary system concern is that all three water tube steam generators have substantially exceeded their useful life. Furthermore, the recently retubed boiler #3 continues to demonstrate tube corrosion problems. The purchase and installation of a new steam generator is a prudent step in ongoing plant renewal and will provide the necessary back-up services for an institution of our size. Additionally, given the age and condition of other components in this plant and the increasing demands on use, it would be wise to also replace aged steam system ancillaries including the existing deaerator (takes the oxygen out of the water), feed water system, controls, instrumentation, and motor control center during this project. With the additional facilities on north campus from previous and planned construction, it is projected that this plant will experience a peak load greater then 90,000 pounds per hour.

The North Plant building renovation is a necessary part of the fire, life and safety upgrades. Sections of the North Boiler Plant have been red tagged (once red tagged a building should not be occupied until the health and fire, life, safety concerns are remediated) by the state fire marshal due to egress issues, unapproved construction, and lack of sprinklers. Current sprinklers are sporadic, there are many parts of the building with poorly constructed mezzanines and other structures that need to be removed. Once these pieces are removed, the necessary fire systems upgrades will be reduced. The building can continue providing service during the upgrades, installations and construction and will not have to be closed.

North Utilities Power Upgrades

The existing electrical distribution cable is in the north campus tunnel system. This electrical cable provides power to all buildings on north campus. The tunnel is old, some portions from the early 1900s, and has many leaks and structural failures which not only increase the likelihood of interrupted or failed service, but also create a risk for the technical professionals that are required to work in these areas.

The main distribution switchgear is a 20+ year old unit which consists of six fused disconnect switches serving six sections of campus loads. The switchgear does not include a main disconnect which limits operational functionality and precludes the addition of more switches (National Electric Code limit). The switchgear includes no metering of power or energy usage which makes it impossible to monitor energy usage trends and makes it near impossible to assess system capacities. The switch gear configuration does not allow preventive maintenance because it contains no redundancy which would allow select disconnects to be de-energized; therefore, no maintenance has been performed since it was placed in service. The full functionality of the switching mechanisms is suspect. The distribution feeders are simple "radial" feeders which do not provide service redundancy to buildings, which is a major deficiency for the University. Lack of service redundancy results in substantially reduced power reliability to buildings due to unplanned outages and planned maintenance and switching procedures.
This project is fire, life and safety and improves utility capacity and efficiency. There is no renovation in this project

3. North Union / Prochnow

The North Union was constructed in 1959 with subsequent additions, including Prochnow Auditorium and what was once a dining hall. This entire project is safety driven by health, fire, life, safety and ADA compliance items and does not include renovations. Portions of the building are red tagged (again once red tagged it is strongly recommended that the building should not be occupied until the issues are remediated) by the State Fire Marshal. The current building does not have a fire sprinkler system or fire separation between the three sections of the building. This means that should a fire occur in this facility, it could not be contained to any one section of the building. The proposed addition of fire suppression connected to the infrastructure comprises a significant portion of this project. Additionally, the building has never had any asbestos remediation, and the attic, ceiling tiles and floors will all need to be remediated. The original copper wiring in the building and the roof will be replaced as well as ADA compliance addressed.

Prochnow auditorium is a 900 seat auditorium that serves students, faculty and staff and the community. Events, primarily for students, are held in this facility on a regular basis. Egress from the auditorium does not comply with either the fire code or ADA. The structure supporting the ceiling is weak and replacement of sound and lighting fixtures poses safety concerns. The age of the rafters provides no structural reliability and they are covered on the attic side by asbestos. Because of this the attic is not assessable to make repairs to the sound and lighting systems therefore additional expense is incurred to bring equipment (i.e. scissor lifts, etc.) in to make these repairs from the ceiling side.

There are a few locations where interior renovations have updated sections of equipment, but as a whole, the building must be updated to minimize hazards and upgrade code compliance. While the HVAC system is very inefficient and due for replacement, this item will only be addressed if the total project budget allows after fire life safety items, roof replacement and ADA improvements have been completed.

4. Liberal Arts

The Liberal Arts building was constructed in 1963, an elevator was added in 1982. The largest part of this project is fire, life, safety and ADA compliance upgrades although a small portion of the budget has been identified for renovations.

The mechanical system heats this facility in two ways: radiators for much of the building and individual split systems for the large lecture halls, corridors, and some office space. The radiators are fairly new and working well, however the split systems are at or beyond their working life expectancies at 22 to 30 years old. Additionally, these units are undersized for the space they are currently serving. The replacement option for the building is to install a system that would utilize the central plant's steam and chilled water rather than replace the existing system. This option increases the utility efficiency in the building and decreases maintenance and repairs substantially.

This building suffers from noncompliance with several code requirements as determined through an architectural assessment. The restrooms and larger classrooms have ADA and IBC (International Building Code) compliance deficiencies ranging from access and fixture counts, to fan output and egress. Additionally, the classroom furniture in all classrooms on the first and second floors does not offer ADA accessible options.

The building does not have a code compliant fire protection system. The notification systems on the first and second floor do not meet IFC (International Fire Code) or NFPA (National Fire Protection Association) requirements. These entities set industry standards and codes for fire systems. The elevator does not meet the IFC and NAU Fire Life Safety (FLS) requirements to provide an "accessible route/accessible means of egress" which requires a back-up generator for the elevator nor does it meet the City of Flagstaff Fire Code, because it will not accommodate a gurney. Finally, the building does not have a fire sprinkler system and does not meet outside air ventilation requirements per ASHRAE (American Society of Heating, Refrigeration and Air Conditioning Engineers: this group sets indoor air quality standards for the industry). These deficiencies were determined mainly by the University Fire Life Safety/State Risk Department in conjunction with the State Fire Marshal, with additional input from a mechanical engineer and architect.

In 2007, the third floor classrooms and hallways were renovated to improve student learning environments. Available resources limited the scope of the project and no improvements were done to help with code compliance at that time. These repairs require that the entire building be closed for a few months so the university will schedule this project during the less occupied summer months.

While the building is closed and under construction it is an efficient use of resources to also address some needed renovations to improve the appearance and usability of the first and second floors. Most of the interior on the first and second floors are original to the building. Separating the components of this project into fire, life, safety and ADA issues and renovations would increase the overall cost of the project and cause additional closures and relocations to be necessary. Completing the entire project scope during summer 2009 is more efficient and less disruptive to students and faculty. Separating this project into two separate projects would cost at least $210,000 for a second mobilization of the contractor.

5. Hotel, Restaurant Management – The Inn renovation

The former Hotel and Restaurant facility is comprised of two structures – 1) the old president's home, built in 1960 which has had some minor changes and additions and 2) the hotel known as The Inn. The Inn was built in 1987 as a practicum facility. The functions housed in this building no longer serve the needs of the university and until renovations can occur this building in central campus has been closed.

With the new, expanded dining programs on campus and the opening of the High Country Conference Center and increased relationships with local hoteliers, the practicum portion of the Hotel and Restaurant Management program relocated to these new, state of the art facilities to facilitate student learning environments. To accommodate program growth and student demand, the old space is proposed to be renovated into much-needed hands-on teaching laboratories, as well as other student learning spaces including a computer lab and classrooms.

To accommodate these programs, this building will be undergoing an entire change of occupancy classification from a working hotel (R-1) and restaurant (A-2) to a combination academic building (B groups), assembly room (A-3) and demonstration kitchen (A-2). It's important to note that the "restaurant" portion (A-2) of the current facility does not satisfy the current IBC A-2 requirements (ventilation, electrical, fire protection etc.) and so even continued use of the facility with the existing programs would have required compliance investments. With the change of purpose, room sizes and occupancy classifications, all building systems require replacement. For example, all the individual radiators and AC units for each of the guest rooms would be completely inappropriate for 40-60 person classrooms or a 1 person office. Other examples would be the ventilation system (also part of HVAC changes), the fire protection notification system, the egress locations, all lighting systems plus inefficient and problematic hydronic units which require expertise from outside contractors for maintenance. Lastly, the heating equipment, gas furnaces and air handler in the former president's house are well beyond their life expectancies.