STATE OF ARIZONA

Joint Committee on Capital Review

STATE
SENATE

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

1716 WEST ADAMS
PHOENIX, ARIZONA 85007

PHONE (602) 926-5491

FAX (602) 926-5416

http://www.azleg.state.az.us/jlbc.htm

HOUSE OF
REPRESENTATIVES

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

JOINT COMMITTEE ON CAPITAL REVIEW
Wednesday, October 26, 2005
1:30 p.m.
Senate Appropriations Room 109

MEETING NOTICE

- Call to Order
- Approval of Minutes of September 28, 2005.
- DIRECTOR'S REPORT (if necessary).

1. SCHOOL FACILITIES BOARD – Review of New School Construction Report
2. ARIZONA BOARD OF REGENTS – UNIVERSITY OF ARIZONA/ARIZONA STATE UNIVERSITY – Review of Arizona Biomedical Research Collaborative Building Project.
3. LEGISLATIVE COUNCIL – Presentation on State Archives and History Building Project. (For Information Only.)

The Chairman reserves the right to set the order of the agenda.
10/17/05

People with disabilities may request accommodations such as interpreters, alternative formats, or assistance with physical accessibility. Requests for accommodations must be made with 72 hours prior notice. If you require accommodations, please contact the JLBC Office at (602) 542-5491.

STATE OF ARIZONA

Joint Committee on Capital Review

STATE
SENATE

1716 WEST ADAMS
PHOENIX, ARIZONA 85007

PHONE (602) 926-5491

FAX (602) 926-5416

http://www.azleg.state.az.us/jlbc.htm

HOUSE OF
REPRESENTATIVES

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

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

MINUTES OF THE MEETING
JOINT COMMITTEE ON CAPITAL REVIEW

Wednesday, September 28, 2005

The Chairman called the meeting to order at 3:25 p.m., Thursday, September 28, 2005 in Senate Appropriations Room 109 and attendance was as follows:

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

Senator Burns moved the Committee approve the minutes of September 1, 2005 as presented. The motion carried.

ARIZONA STATE UNIVERSITY/INDUSTRIAL COMMISSION OF ARIZONA – Review of Elevator Code Upgrade Component of Academic Renovations and Deferred Maintenance Phase I.

Ms. Shelli Carol, JLBC Staff, presented the review of Arizona State University (ASU) $3 million Elevator Code Upgrade Component of ASU Academic Renovations and Deferred Maintenance Phase I project discussed at several past meetings. JLBC Staff recently received an implementation plan from ASU, the document also includes specific answers to Representative Tom Boone's questions on the Construction Manager at Risk procurement method.

The elevator issue involves upgrades required by the Industrial Commission of Arizona and national codes for certain hydraulic elevators. There are 18 elevators at ASU that require the retrofit. The university states that the specific change will cost $50,000 per elevator and other upgrades must be performed at the same time that will cost an additional $150,000 per elevator. The Industrial Commission states that 1 staff member has directly observed at least 1 in-state catastrophic elevator failure during an inspection, and that Arizona elevator companies have directly witnessed several gradual failures. The Industrial Commission also prefers to continue reasonable negotiations with ASU to complete the retrofits, rather than to take elevators out of service.

Mr. Larry Etchechury, Director, Industrial Commission of Arizona stated that the national consensus standard from 2000 was adopted by the Commission in 2003. The code requires only the change in the cylinder, there is no requirement to upgrade other elevator components to current code. The cost is only with respect to the cylinder. ASU has a cost of $50,000, which may or may not be correct. In contacting different elevator companies, the cost range would be $18,000 to $30,000 depending upon what is encountered. University of Arizona (UA) submitted their plan of 23 elevators at a cost of $600,000 or $26,000 to $29,000 per elevator.

Senator Burns stated there was a lack of understanding by the Committee as to the agreement between the Commission and ASU on the time schedule.

Mr. Etchechury stated there was a letter sent out that stated the code changes and what changes need to be incorporated as soon as possible. Subsequent discussions with the universities were made and plans were to be submitted. Northern Arizona University (NAU) and UA submitted their plans, but ASU had not submitted a plan. UA will be doing their plan through 2006 and 2007, and that was acceptable. The plan that ASU recently put forward in response to the Committee's question, is acceptable.

Senator Burns asked if code requirement is a critical issue that has to be done.

Mr. Etchechury answered that yes, it is critical. If there is a catastrophic failure in the cylinder, it is going down to the bottom of the shaftway. An elevator inspector was doing a load test, when there was a failure. The national consensus code is produced nationally and if the change was unnecessary, the change would have been challenged.

Representative Pearce stated that ASU does regular maintenance and none of the elevators exhibit concerns that will lead to failure.

Mr. Etchechury stated that the cost should not be more that $600,000. There is no way to visually look and determine whether there is corrosion to cause a catastrophic failure because the cylinder is in the ground. There is an annual load test that increases the pressure in the cylinder to 125% of its operational standard. The gauge will show if the pressure holds and if it is at the same pressure as the prior test. If there is a decrease in holding the pressure, then you know you have a leak in the cylinder and at that point, the requirement would be to replace that cylinder. This test is done once per year.

Senator Burns asked if NAU and UA had 2 years to complete their project and if ASU would also have 2 years.

Mr. Etchechury replied that NAU has completed their project. UA is doing their project over 2 years with completion in 2007. ASU will have 2 years to complete their project.

Senator Johnson asked what the cost was for NAU and UA to upgrade their elevators.

Mr. Etchechury answered that according the elevator company that did the work for NAU, the cost was $18,000 per elevator with the understanding that there may be conditions that would increase the price. UA has a total cost for 23 elevators at $600,000 or $26,000 per elevator.

Senator Johnson said that ASU stated that once they replace the cylinder, they will have to retrofit other parts, bringing the cost to $150,000 per elevator.

Mr. Etchechury said there is no code requirement to bring other components of the elevators up to code by just changing the cylinder. There may be elective changes like replacing the hydraulic pumping system, but there is no code requirement to do that. The only requirement is to replace the cylinder.

Senator Johnson asked where the elevator was that had a failure and if it was the same type of elevator.

Mr. Etchechury answered that the elevator was in a Tucson office and was a hydraulic elevator. ASU has 16 to 19 elevators that need to be replaced under the new code.

Mr. Scott Cole, Deputy Executive Vice President, Arizona State University stated that the cost of $50,000 per cylinder came from the contractor. As the elevator is taken apart the electrical controls and the hydraulic systems need to be replaced because of the age of the systems, as part of deferred maintenance. There are other things being done to the interior of the elevators and controls to make them ADA accessible that have not been done. Of the $3 million being asked, the ADA component of that amount is $250,000.

Representative Pearce asked if the ADA changes are a requirement or a choice. ADA mandates are not to effect existing facilities.

Mr. Cole answered that the university believes that it is a requirement.

Representative Pearce asked the JLBC Staff to look into the ADA requirements.

Mr. Cole stated that the ADA components would be $1,000 to $1,500 per elevator. There are 19 elevators.

Senator Johnson asked what the results were on the pressure test, when the test occurred at ASU, and if there were any leakages.

Mr. Cole answered that the tests are done annually. All the elevators are inspected on an annual cycle and the results are submitted to the Industrial Commission. There have not been any problems. There was hydraulic leakage corrected but it was not in the cylinder.

Senator Johnson asked if the mandates come from the Commission.

Mr. Cole answered that it comes from the code the Commission follows.

Representative Boone moved the Committee give a favorable review, with the provision that the Industrial Commission allow ASU another 2 years to complete the elevator upgrades.

The motion carried.

ARIZONA LOTTERY – Review of FY 2006 Building Renewal Allocation Plan and Lottery Facilities Improvements.

Ms. Leatta McLaughlin, JLBC Staff, presented the review of the Arizona Lottery Commission FY 2006 Building Renewal Allocation Plan and Facilities Improvements. The Lottery Commission combined its building renewal appropriation along with its capital appropriation for a total of $124,500. The appropriated monies will be used to upgrade its fire system and bathroom fixtures, as well as replace carpeting in the Commission's Phoenix facility.

There was no discussion on this item.

Representative Pearce moved the Committee give a favorable review to the combined FY 2006 Building Renewal and Lottery Facilities Improvements capital appropriations expenditure plans.

The motion carried.

ARIZONA DEPARTMENT OF TRANSPORTATION – Report on 5-Year Transportation Plan.

Mr. Bob Hull, JLBC Staff, presented the Arizona Department of Transportation (ADOT) report of the 5-Year Transportation Plan for FY 2006 – FY 2010. This item is for information only, and no Committee action is required. JLBC Staff recommends, however, that:

- ADOT provide an Executive Summary of its 5-Year Transportation Facilities Construction Program for FY 2007-FY 2011, due by July 31, 2006. The Executive Summary should include at least as much information as the current submission.
- If unavailable by the Committee meeting, ADOT report by October 14, 2005 on how the Federal-Aid Highway Reauthorization bill affects the 5-Year Transportation Plan and whether it includes any projects listed in the 5-Year Plan. The report is to include a comparison of the federal funding levels with the assumptions in the 5-Year Plan, as well as an explanation of how ADOT has programmed the $41.3 million earmarked in the bill for ADOT's highest priority projects (1 of Arizona's 41 earmarks) for the 6 years FY's 2004-2009.

Senator Karen Johnson asked for information on federal dollars for the Canamex Highway that the Governor signed an agreement on with the federal government to build through Arizona.

Mr. Terry Trost, Budget Director, ADOT said they are not aware of anything yet, they will be able to report back on October 14 about the content of the federal bill.

Representative Pearce asked about the discrepancy between the federal funds of $619.7 million versus the $445.3 million as reported by ADOT.

Mr. John McGee, Chief Financial Officer, ADOT answered that the $619.7 million is a total estimated amount of apportionments that the state will receive in FY 2006. ADOT only retains about 75% of the federal dollars. The rest goes to the Maricopa Association of Governments (MAG), Pima Association of Government (PAG), and Councils of Governments (COG's) for various federal aid activities. The $445.3 million primarily represents the portion of the $619.7 million that ADOT gets to keep.

Representative Pearce asked that a breakdown of the specific projects earmarked be given to JLBC Staff. The breakdown should show how much is going to each project and how it affects the 5-Year Plan.

Mr. McGee said the information can be gathered from a historical basis. The percentage numbers will not change much in terms of the new authorization from the past.

Representative Pearce said there is $137 million in earmarked projects through FY 2009 and asked how that affects the 5-Year Plan.

Mr. McGee answered that it does not have a significant affect on ADOT. The reason is because earmarks for some states represent additional monies over and above what they would otherwise be getting. Arizona is a donor state, which means the state gets 90.5% of the relative share. When ADOT submitted projects for high priority funding, they were projects that were already in the 5-year program so that if it was a below the line allocation, we do not get hurt because the projects were already in the program. All the ADOT projects were already on the 5-year program.

Representative Pearce asked if the earmarked projects are included in the 90.5% even though they are earmarked, and Arizona's federal highway dollars do not go up because of the earmark, why we would earmark in a federal bill to appear we are getting an extra $137 million when in reality we are not getting that money.

Mr. McGee stated that he cannot speak for our congressional delegation, but in terms of ADOT's 5-year program, the earmarks that were received will have no impact.

Mr. Richard Stavneak, JLBC Staff asked if the earmarks change the fund source and if the projects in 5-year program are planned by using federal or state dollars. This could indicate that the federal government will pay for these individual projects that might have otherwise been paid from state sources.

Mr. McGee stated that all the projects that were earmarked were to be federal aid projects. If we planned on using state dollars, by having them earmarked as federal dollars, that frees up state dollars for something else which would make it a virtual wash.

Representative Pearce asked if the federal bill permitting the expanded use of the State Infrastructure Bank (SIB) will affect our ability to accelerate highway construction in the state.

Mr. Hull stated that the federal bill expands the use of SIBs, now all states can apply to the secretary to have SIBs. He does not know whether Arizona's use of the SIB will expand.

Mr. McGee stated that the bill allows states to take a certain percentage of their federal funds and put it in a SIB and then lend the money out. We can take up to 10% of our federal funds and put it in the bank. We did that for 2 years which accumulated to about $15 million. The Legislature augmented that with the Board Funding Obligations program so that we now have about $210 million in the fund. After that initial 2-year demonstration program, Congress only allowed 5 states to continue doing that, and Arizona was not included. Under the new law, this has been opened up for all states and we are still waiting for guidance on how we have to format the new SIB. We have been estimating how much will be in the new bill and building the program around that, and the estimate is very close to the actual number. If funds were diverted to the SIB, the 5-year program may be impacted, unless unexpected additional funds came in.

Representative Pearce asked if there was anything else specific in the bill that passed that will be beneficial to Arizona.

Mr. McGee answered that the bill had a significant level of high priority projects, but there was no remarkable change over the prior legislation.

Senator Ron Gould asked why the money in the federal highway bill for a bridge between Bullhead City, Arizona and Laughlin, Nevada was not on the list of projects.

Mr. McGee answered that the money went to Nevada.

Senator Johnson stated in reference to Canamex, the Federal Highway Administration is proposing to bypass Hoover Dam with the new bridge at an estimated total cost of $198 million. The federal program requires the states to match the federal dollars. She asked what Arizona's cost will be on that match.

Mr. Mc Gee stated that total cost on the project for all phases is $234 million. The federal government is paying for all of it except for about $40 million, which will be split at $20 million between Nevada and Arizona for a match portion.

Senator Johnson asked why we are building a new bridge.

Mr. McGee stated that it has been a high priority for ADOT for a long time. The traffic time on the Hoover Dam, safety concerns, and additional security concerns determined that there was a need for a new bridge. The federal government is constructing the project.

Representative Lopes asked, in regard to the federal transportation bill for states that do have primary seat belt laws, what the monetary incentives are and if Arizona has intentions of pursuing the incentives.

Mr. McGee said that he can get the information.

This item is for information only, and no Committee action is required.

Without objection the Committee meeting adjourned at 4:15 p.m.

Respectfully submitted:

Yvette Medina, Secretary

Lorenzo Martinez, Assistant Director

Senator Bob Burns, Chairman

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

STATE OF ARIZONA

Joint Committee on Capital Review

STATE SENATE

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

1716 WEST ADAMS
PHOENIX, ARIZONA 85007

PHONE (602) 926-5491

FAX (602) 926-5416

http://www.azleg.state.az.us/jlbc.htm

HOUSE OF REPRESENTATIVES

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

DATE: October 19, 2005

TO: Senator Robert Burns, Chairman
Members, Joint Committee on Capital Review

THRU: Richard Stavneak, Director

FROM: Leatta McLaughlin, Fiscal Analyst

SUBJECT: School Facilities Board – Review of FY 2007 New School Construction Report

Request

Pursuant to A.R.S. § 15-2002, the School Facilities Board (SFB) requests the Committee review its demographic assumptions, proposed construction schedule, and new school construction cost estimates for FY 2007. The board is annually required to submit this information by October 15.

Recommendation

The JLBC Staff recommends deferring action on the item until the board has completed its project approval process in the current fiscal year. At this time, SFB does not have a specific list of projects for FY 2007. The approval process begins in November and will be complete by the spring. The JLBC Staff recommends that the board report by May 1, 2006 on its proposed construction schedule and cost estimates by project. This item is included on the agenda to provide the Committee with the board's current estimate of new construction spending in FY 2007.

The board estimates that it will spend a total of $308.4 million in FY 2007. This amount includes funding for construction projects that have already been approved by the board as well as projects that will be approved by the end of FY 2006. Of the $308.4 million, $250 million would be from the General Fund. (The Legislature has already appropriated $50 million of this amount to SFB for FY 2007 during the past session.) This $308.4 million estimate would change if the Joint Legislative Budget Committee approves an inflation adjustment in the per square foot construction cost. The JLBC is scheduled to consider such an adjustment on October 26.

Analysis

Demographic Assumptions

The SFB bases its demographic assumptions on its analysis of the school district forecasts of Average Daily Membership (ADM), included in the Capital Plans submitted by districts to the board. To conduct the analysis, SFB uses state population data, grade progression estimates, historical ADM growth, and, if

(Continued)

applicable, residential housing growth. Analysis of student enrollment growth is performed on a district by district basis.

For districts that submitted a Capital Plan to the board, SFB expects enrollment to grow at a higher rate in FY 2006 and FY 2007 than in FY 2005. The board expects enrollment growth to be 6.5% in FY 2006 and 7.1% in FY 2007. Actual enrollment growth was 6.2% in FY 2005.

For FY 2007, within Maricopa County SFB expects growth of approximately 8.0% in the southeastern portion of the county, including the cities of Chandler and Gilbert. In the northern part of the county, including Cave Creek, Deer Valley, and Scottsdale, the board expects growth of about 6.5%. In the western and southern districts of Phoenix, including Tolleson, the board expects growth of 6.3%. In the districts outlying the western edge of the Phoenix metro area, including Agua Fria, Avondale, Buckeye, Litchfield, and Saddle Mountain, SFB expects growth of 13.8%.

In the other areas of the state, the board expects growth of 12.7% in Pinal County, 3.4% in Yuma County, 3.8% in Southern Arizona, and 3.6% in Northern Arizona.

Construction Schedule

SFB has not provided a detailed construction schedule for FY 2007. Once the board has completed its FY 2006 approval process, a detailed construction schedule should be available.

Cost Estimates

The board estimates spending a total of $308.4 million in FY 2007. The table below provides a summary of the board's estimated expenditures:

Expenditures	**FY 2007 ($ in M)**
Land	$ 35.0
Construction Projects	272.4
Emergency Deficiencies	1.0
TOTAL	**$308.4**

Of the total $308.4 million expected to be spent in FY 2007, the board expects to incur the following costs:

- $35 million for land. The estimate is based on prior year expenditures.
- $272.4 million for construction projects (see *Attachment 1*). The estimate is based on prior year expenditures and includes:
  - $184.0 million for projects approved prior to FY 2006.
  - $62.9 million for projects approved in FY 2006. The board expects to approve a total of $225.8 million of projects in FY 2006. Based on prior year trends, the board expects to spend 27.8% of the total amount, or $62.9 million, in FY 2006.
  - $12.5 million for architecture and engineering fees. Once the board approves a project, it immediately distributes 5% of the total cost of the project to the school district. Based on a rough estimate of $250 million of approvals in FY 2007, the board would distribute $12.5 million for these fees.
  - $13.0 million for potential early project spending. The SFB has added in these monies to provide a more conservative estimate of FY 2007 spending.
- $1 million for Emergency Deficiencies Corrections Projects. The estimate is based on outstanding approved projects that have yet to receive funding.

(Continued)

In addition, SFB did not submit information on how the $308.4 million is to be allocated among projects.

To finance the projected $308.4 million in expenditures, the board expects to use lease-purchase proceeds remaining from prior years and new cash funding. The table below provides a summary of the board's estimated financing:

Financing	FY 2007 ($ in M)
Lease-Purchase Proceeds	$ 1.5
Appropriation	250.0
Lease Revenues (Land Department)	10.0
New School Facilities Fund Balance	46.9
TOTAL	**$308.4**

Of the total $308.4 million amount, the board expects to allocate funding from the following revenue sources:

- $1.5 million in lease-purchase proceeds from prior year lease-purchase agreements. The board expects to spend all remaining lease-purchase proceeds in FY 2007.
- $250 million in cash provided in FY 2007. This amount is based on the amount the board has requested for FY 2007. The actual amount will depend on what the Legislature appropriates.
- $10 million in lease revenues from the Land Department. The Land Department leases land to school districts. Any monies the Land Department receives from school district leases, however, are deposited in the New School Facilities Fund.
- $46.9 million in cash from the New School Facilities Fund balance. The estimated FY 2007 beginning fund balance is $54.2 million. Allocating $46.9 million for FY 2007 expenditures, therefore, would leave the fund with an ending FY 2007 balance of $7.3 million.

RS/LMc:ym

STATE OF ARIZONA

Joint Committee on Capital Review

STATE
SENATE

1716 WEST ADAMS
PHOENIX, ARIZONA 85007

HOUSE OF
REPRESENTATIVES

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

PHONE (602) 542-5491

FAX (602) 542-1616

http://www.azleg.state.az.us/jlbc.htm

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

DATE: October 26, 2005

TO: Senator Bob Burns, Chairman
Members, Joint Committee on Capital Review

THRU: Richard Stavneak, Director

FROM: Amy Strauss, Fiscal Analyst

SUBJECT: Arizona Board of Regents - University of Arizona, Arizona State University – Review of Biomedical Research Collaborative Building Project

Request

A.R.S. § 15-1682.01 requires Committee review of any university projects financed with Certificates of Participation (COP), also known as lease-purchase agreements. The Arizona Board of Regents (ABOR), on behalf of the University of Arizona (UA) and Arizona State University (ASU), requests Committee review of a Biomedical Research Collaborative Building. The universities would finance these projects with a COP issuance not to exceed $33 million dollars.

Recommendation

JLBC Staff recommends a favorable review of the Biomedical Research Collaborative Building with the following standard university financing provisions for each:

- UA and ASU shall report to the Committee before expenditure of any allocations that exceed the greater of $100,000 or 10% of the reported contingency amount total for add-alternates that <u>do not expand</u> the scope of the project.
- UA and ASU shall submit for Committee review any allocations that exceed the greater of $100,000 or 10% of the reported contingency amount total for add-alternates that <u>expand</u> the scope of the project. In the case of an emergency, UA and ASU may report immediately on the scope and estimated cost of the emergency rather than submit the item for review. JLBC Staff will inform the university if they do not concur with the emergency nature of the change in scope.
- UA and ASU shall report to the Committee with a comparison between any compliance costs of the Governor's Executive Order 2005-05, concerning energy efficiency, and operating and other savings generated through those efficiencies when the Guaranteed Maximum Price is set. Future requests for capital project reviews should include these comparisons as part of the initial submission.
- A favorable review by the Committee does not constitute endorsement of General Fund appropriations for operational costs when the project is complete. These costs should be considered by the entire Legislature through the budget development process.

(Continued)

The UA and ASU New Biomedical Research Collaborative Building is part of the university research infrastructure lease-purchase plan authorized by the Legislature in 2003. The COP would consist of $33 million for the Research Collaborative Building. UA would contribute $17.2 million and ASU would contribute $12.4 million.

The estimated annual payment requirement, based on an assumed 4.75 % interest rate, is $2.3 million. The funding source of debt service is General Fund appropriations staring on July 1, 2007. Until that time, there will be financial assistance through the state sales tax exemption for the contractor of this project, which will be captured by UA and ASU, and the capitalization of interest payments. UA and ASU anticipate selling the COP in November 2005, with a Standard and Poor's AAA credit rating, for a term of 25 years, at an estimated interest rate of 4.75%. The universities plan to sell either fixed or variable interest rate COPs or a combination of each, in one or more series. The current intent is to sell the COPs at a fixed interest rate.

A.R.S. § 15-1683 allows each state university to incur projected annual debt service for bonds and certificates of participation of up to 8% of each institution's total projected annual expenditures. This calculation is known as the debt ratio. These projects would increase the UA debt ratio from 4.3% to 4.4%, and the ASU debt ratio by 4.9% to 5.0%.

UA and ASU estimate new operating and maintenance costs of $866,000 for the project. UA and ASU plan to use Indirect Cost Recovery Fund monies to support these expenses.

UA and ASU would contract the Biomedical Research Collaborative Building using Construction Manager at Risk (CMAR). 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.

The costs for this project are below the average for other comparable university projects (see *Table 1*).

Analysis

UA and ASU submitted the New Biomedical Research Collaborative Building as a research infrastructure project. A.R.S. § 15-1670 defines research infrastructure as "installations and facilities for continuance and growth of scientific and technological research activities at the university." Laws 2003, Chapter 267 amended A.R.S. § 42-5075 to confer tax-exempt status on the proceeds and income of research-infrastructure-related construction contracts, with the intent of lowering project costs.

Chapter 267 also appropriates debt service payments from the General Fund between FY 2008 and FY 2031 to support research infrastructure lease-purchases. In exchange, Chapter 267 requires the universities, starting in FY 2008, to deposit into the General Fund a portion of licensing, royalty, and intellectual property income.

Chapter 267 makes an annual General Fund appropriation, from FY 2008 through FY 2031, of $14,472,000 to ASU and $14,253,000 to UA for debt service payments. Given previously reviewed projects and assuming this COP issuance takes place, UA and ASU would have exhausted their research infrastructure capacity (see *Table 2*).

<u>Biomedical Research Collaborative Building</u>

UA and ASU would construct an 85,600 square-foot New Biomedical Research Collaborative Building Facility in the Downtown Phoenix Campus on Fifth Street, just north of Van Buren. The project has an estimated cost of $29.6 million including $590,000 to purchase the land from the City of Phoenix. The building is a four-story structure. This facility includes wet research laboratory space for UA and dry research space for ASU. The building's primary function is to support biomedical research and includes such research disciplines as biology, chemistry, and biomedical informatics. In addition to the research functions, the building also accommodates and houses administration and office areas for graduate students, post-doctorate

(Continued)

students, research fellows and principal investigators. UA and ASU estimate the Biomedical Building would require 17 months of construction.

The Biomedical Research Collaborative Building is adjacent to the Phoenix Medical Campus and is intended to facilitate collaboration between UA, ASU, the Translational Genomics Institute (TGen), and other research entities. The building will house the ASU Biomedical Informatics Department and support the UA Phoenix Medical Campus curriculum.

The total cost per square foot for the Biomedical Building would be approximately $345 and the direct construction cost per square foot would be $264. *Table 1* compares the costs of university research infrastructure projects. According to this table, both total cost per square foot and direct construction cost per square foot are below the averages for similar research infrastructure projects.

Table 1

University Research Infrastructure Projects
Estimated Per Square Foot Costs

Project	Total Project Cost	Total Cost Per Square Foot	Direct Construction Cost Per Square Foot
ASU-Interdisciplinary Science and Technology Building 2	$18,000,000	$300	$217
ASU-Interdisciplinary Science and Technology Building 3	12,000,000	305	228
UA/ASU- Biomedical Research Collaborative Building	**29,600,000**	**345**	**264**
NAU-Applied Research and Development Facility	20,500,000 1/	342	275
AVERAGE		***$387***	***$298***
UA-Thomas W. Keating Bioresearch Building	65,652,000 2/	389	306
UA-Medical Research Building	54,350,000	392	317
ASU-Interdisciplinary Science and Technology Building 1	74,000,000	412	285
NAU-New Laboratory Facility	33,000,000	413	335
ASU-Biodesign Institute, Building B	73,000,000	425	307
UA-Chemistry Building Expansion	46,100,000 3/	507	415

1/ Includes a $2.5 million U.S. Department of Commerce grant.
2/ Includes $5.7 million in federal funds.
3/ Includes $1.1 million from indirect cost recovery and donations.

University Research Infrastructure Projects

Laws 2003, Chapter 267 appropriated a total of $34,625,000 annually to the three state universities from the General Fund beginning in FY 2008 and continuing through FY 2031 for the debt service on lease-purchase financing for research infrastructure projects. *Table 2* lists the total appropriation to each university, and the remaining capacity.

Table 2

University Research Infrastructure
Debt Service Commitments Financing FY 2008 – FY 2031

	Annual Appropriation	Total Committed	Remaining Capacity
ASU	$14,472,000	$14,654,200	$ (182,200)
NAU	5,900,000	5,900,000	0
UA	$14,253,000	$14,245,200	$ 7,800
Total	$34,625,000	$34,799,400	$ (174,400)

(Continued)

Table 3 is a summary of university research infrastructure projects.

Table 3

University Research Infrastructure Project Summary

NAU Projects	Total Project Finance Cost	Annual Debt Service	Total Debt Payments
College of Engineering and Technology Renovation	$15,000,000	$1,311,600	$ 31,478,400
Applied Research and Development Facility	18,000,000	1,576,000	37,824,000
New Laboratory Facility	33,000,000	2,573,300	61,759,200
North Campus Research Infrastructure	5,000,000	439,100	10,538,400
Subtotal	**$71,000,000**	**$5,900,000**	**$141,600,000**
ASU Projects			
Interdisciplinary Science & Technology Building 3	$ 12,000,000	$ 783,000	$ 18,792,000
Interdisciplinary Science & Technology Building 2	18,000,000	1,408,000	33,792,000
Interdisciplinary Science & Technology Building 1	74,000,000	5,788,700	138,928,800
Biodesign Institute 2	73,000,000	5,711,000	137,064,000
Biomedical Research Collaborative	12,400,000	963,500	23,124,000
Subtotal	**$189,400,000**	**$14,654,200**	**$351,700,800**
UA Projects			
Medical Research Building	$ 63,568,800	$ 4,372,800	$104,947,200
Chemistry Building Expansion	53,848,200	3,704,100	88,898,400
Thomas W. Keating Bioresearch	65,652,000	4,831,800	115,963,200
Biomedical Research Collaborative	17,200,000	1,336,500	32,076,000
Subtotal	**$200,269,000**	**$14,245,200**	**$341,884,800**
Totals	**$460,669,000**	**$34,799,400**	**$835,185,600**

RS/AS:ss

INFORMATION WILL BE PROVIDED AT THE MEETING