A REPORT
TO THE
ARIZONA LEGISLATURE

Performance Audit Division

Performance Audit

Arizona's Universities—

Capital Project Financing

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REPORT NO. 08-03

Debra K. Davenport
Auditor General

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OFFICE OF THE
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June 2, 2008

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Dr. John D. Haeger, President
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Mr. Joel Sideman, Executive Director
Arizona Board of Regents

Transmitted herewith is a report of the Auditor General, a Performance Audit of Arizona's Universities—Capital Project Financing. This report is in response to Arizona Revised Statutes (A.R.S.) §41-2958 and was conducted under the authority vested in the Auditor General by A.R.S. §41-1279.03. I am also transmitting with this report a copy of the Report Highlights for this audit to provide a quick summary for your convenience.

As outlined in their responses, the University of Arizona and Northern Arizona University agree with the findings and plan to implement the recommendations specific to them. In addition, responses from Arizona State University and the Arizona Board of Regents are included.

My staff and I will be pleased to discuss or clarify items in the report.

This report will be released to the public on June 3, 2008.

Sincerely,

Debbie Davenport
Auditor General

Enclosure

cc: Mr. Fred Boice, President
Arizona Board of Regents

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SUMMARY

The Office of the Auditor General has conducted a performance audit of capital project financing at Arizona State University (ASU), the University of Arizona (UA), and Northern Arizona University (NAU) pursuant to Arizona Revised Statutes (A.R.S.) §41-2958. This audit was conducted under the authority vested in the Auditor General by A.R.S. §41-1279.03 and is the second in a series of three performance audits of the universities. The other two audits focus on technology transfer programs and information technology security.

The universities' capital expenditures for fiscal years 2005 through 2007 reflect significant capital development. The universities spent slightly more than $1 billion during this period. Approximately $754 million was used for constructing new academic and research buildings, parking structures, residence halls, and other facilities. The remaining $253 million was used for renovating, repairing, and improving existing facilities. State support for the universities' research goals, as well as enrollment growth demands and other factors, has fostered capital development.

The universities' capital development process is overseen by the Arizona Board of Regents (Board) and the Legislature's Joint Committee on Capital Review (JCCR). Specifically, the Board reviews and approves the universities' capital plans and all projects, or groups of related projects, with an estimated total cost of $2 million or more. In addition, the Board must approve any debt instrument used to finance capital projects. The JCCR reviews projects financed with bond proceeds, acquired through lease-purchase agreements, or through indirect or third-party financing.

Universities have several options to pay for capital projects (see pages 11 through 22)

Universities have several alternatives to choose from to pay for capital projects as they encounter growing infrastructure needs. ASU, UA, and NAU have primarily used debt in the form of revenue bonds and certificates of participation (COPs) to raise the money for their capital projects. As of June 30, 2007, the universities had a total of approximately $1.8 billion in outstanding debt obligations and will additionally pay

more than $973 million in interest on these obligations over the next 33 years, between fiscal years 2008 and 2040. Nearly $959 million in principal was issued between fiscal years 2003 and 2007 for 61 major and minor capital projects. UA relies mainly on COPs to pay for its capital projects while ASU and NAU rely more on bonds.

The universities have also relied on third-party financing arrangements to support capital development needs. In 2002 through 2007, the universities initiated 18 projects through these arrangements. Although the nature of third-party arrangements varies, they commonly involve leasing university land to a third party that builds a facility on the land. Many of the universities' arrangements have involved issuing tax-exempt bonds through nonprofit corporations affiliated with the universities, while a smaller number have involved partnerships with local governments, for-profit companies, or a combination of government and the private sector. ASU has used these arrangements more extensively than UA or NAU. During the audit, UA and NAU finance officials expressed a preference for using more traditional financing approaches, while ASU uses a mix of approaches. Similar to bonds and COPs, some of the universities' third-party arrangements result in long-term debt, specifically a long-term lease payment that is paid over a long period of time. As of June 30, 2007, the universities owed more than $135.5 million in principal and $105.2 million in interest on lease obligations associated with third-party financing arrangements that end in 2045.

Finally, the universities have also occasionally used cash, donations, and federal grants to pay some capital project costs.

Universities follow good debt management practices (see pages 23 through 28)

The universities generally conform to recommended debt issuance and management practices, although some improvements can be made at UA and NAU. In addition, all three universities have good credit ratings.

The National Association of College and University Business Officers, other professional organizations, and finance literature recommend several practices for issuing and managing debt. Following these practices helps ensure that the universities do not acquire too much debt or pay too much in interest and other debt-related costs. Recommended practices include adhering to debt limits, using a professional finance team, grouping projects to save on issuance costs, using credit enhancements, using a mix of variable- and fixed-rate debt, and refinancing debt when appropriate. The universities follow all of these practices.

However, one recommended practice that is not uniformly in place is a debt management policy. A debt management policy provides overall context and general direction for an institution's use of debt, establishes parameters for issuing and managing debt, and provides internal guidance to university officials so the institution does not exceed acceptable debt levels. ASU has formal debt management guidelines that contain all of the elements recommended by literature. UA has only a draft policy, and it does not include a recommended provision for monitoring compliance with federal tax law requirements on the private use of facilities constructed using tax-exempt debt.[1] UA should include provisions for monitoring private use, and then finalize and implement its debt management policy. Finally, NAU does not have a debt management policy and should develop and implement a policy or formal guidelines that contain the elements recommended by literature.

Universities follow recommended practices in third-party projects (see pages 29 through 36)

The universities follow practices that allow them to mitigate potential risks and liabilities associated with entering into arrangements with third parties, which may include partnerships with local governments and the private sector. Third-party financing arrangements can entail risks such as potential impact to the universities' debt capacity; potentially paying higher interest rates than the universities; potentially conflicting goals between the third parties and the universities; confusion in the roles and responsibilities of the third parties and universities; an increase in number of contracts and contract complexity; and a lack of university control over the development, design, construction, and operation of projects.

Professional literature identifies several practices that may mitigate some of the potential risks associated with third-party financing arrangements. These practices include financing projects through a component unit rather than a private developer, verifying third parties' qualifications, including purchase options and maintenance requirements in project contracts, and conducting feasibility studies. However, because third-party projects are often unique, some practices may not always apply. Auditors reviewed nine of the universities' third-party projects initiated between 2002 and 2007 to determine whether the universities followed recommended practices identified in professional literature to mitigate third-party project risks. Auditors found that the universities used the recommended practices to mitigate these risks.

1 The Internal Revenue Service (IRS) defines private use as "trade or business of a nongovernmental person." At the universities, private uses can include retail stores or restaurants operated by private firms in campus buildings and conducting certain research on behalf of private industry in university laboratories.

Other pertinent information (see pages 37 through 42)

As part of the audit, auditors gathered other pertinent information regarding how the universities pay for building renewal. Building renewal refers to major activities undertaken to preserve buildings and maintain their expected useful life. The universities annually request state appropriations to pay for building renewal using a state-approved funding formula. However, between fiscal years 1999 through 2008, the universities received only 14 percent of their total requests. Because of limited state funding, the universities have used debt to address some of their building renewal needs. Between fiscal years 2003 and 2007, the universities used or dedicated nearly $94.3 million in debt proceeds (including both bonds and COPs) for building renewal projects that were eligible for state funding. Despite this, the universities reported, as of June 30, 2007, an estimated $419 million in deferred maintenance.

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INTRODUCTION & BACKGROUND

The Office of the Auditor General has conducted a performance audit of capital project financing at Arizona State University (ASU), the University of Arizona (UA), and Northern Arizona University (NAU) pursuant to Arizona Revised Statutes (A.R.S.) §41-2958. This audit was conducted under the authority vested in the Auditor General by A.R.S. §41-1279.03 and is the second in a series of three performance audits of the universities. The other two audits focus on technology transfer programs and information technology security.

Capital projects—Construction, renovation, or improvement of buildings, structures, facilities, or infrastructure. Major capital projects are projects with a total cost of $2 million or more and require the Board of Regents' review and approval.

Source: Arizona Board of Regents Policy.

Expenditures for capital projects reflect significant capital development

The universities have undertaken significant capital development in recent years, as reflected by capital expenditures for new construction, renovation and improvement, and other capital projects. The universities' total capital expenditures for fiscal years 2005 through 2007 slightly exceeded $1 billion (see textbox). Approximately three-quarters of these expenditures—$754 million—was used for construction of new academic and research buildings, parking structures, residence halls, and other facilities. For example, ASU completed construction of several new research facilities, including two Biodesign Institute buildings at the Tempe campus and, in partnership with UA, the Arizona Biomedical Collaborative Building 1 at the Phoenix Biomedical campus (see Photo 1, page 2). UA also completed the expansion or construction of several research and academic buildings, including the chemistry and optical sciences buildings and the Roy P. Drachman Hall, an interdisciplinary academic building. NAU completed construction of the Applied Research and Development facility (see Photo 2, page 2) and a new College of Business Administration, and started construction of a new conference center. The remaining $253 million was used for renovating, repairing, and improving existing facilities. (See Appendix, Table 3, pages a-ii through a-iii for a list of capital projects costing $10 million or more for which the universities reported expenditures between July 1, 2004, and June 30, 2007.)

Universities' Capital Expenditures Fiscal Years 2005 through 2007 (Unaudited)

ASU	$ 482 million	(48%)
UA	350 million	(35%)
NAU	175 million	(17%)
Total	$1,007 million	(100%)

Source: Auditor General staff analysis of fiscal years 2005 through 2007 capital expenditure information in each university's 2007-2009, 2008-2010, and 2009-2011 capital improvement plans.

Photo 1: ASU and UA's new Arizona Biomedical Collaborative Building 1

Source: UA's 2009-2011 Capital Improvement Plan.

Photo 2: NAU's new Applied Research and Development Facility

Source: Courtesy of NAU. Photograph by Jerry Foreman.

State-supported research goals, enrollment growth, and other factors have contributed to capital development

State support for the universities' research goals, as well as enrollment growth demands and other factors, has fostered capital development. Specifically, the State has established funding to support the universities in financing new research facilities. In addition, the universities have constructed and renovated buildings to accommodate and attract a growing student body and maintain existing facilities.

State-supported research goals—ASU and UA are nationally recognized research universities whose strategic plans maintain a strong focus on research. Although NAU focuses more on undergraduate education, its strategic initiatives also include promoting student participation in research. The Legislature has supported these goals through 2003 research infrastructure legislation and the Technology and Research Initiative Fund.

- Research infrastructure legislation—The Legislature passed Laws 2003, Chapter 267, to assist the universities in expanding their research infrastructure. Specifically, the law states that the Legislature intends to appropriate General Fund monies to pay for university research infrastructure projects financed through lease-purchase agreements entered into before July 1, 2006. According to the law, the Legislature intends to appropriate approximately \$14.5 million to ASU, \$14.3 million to UA, and \$5.9 million to NAU in fiscal years 2008 through 2031 for lease payments. The universities have completed or started 13 research infrastructure projects that qualify for the appropriations (see textbox). In fiscal year 2008, the universities received research infrastructure appropriations for the amounts identified in statute.

University Research Infrastructure Capital Projects

ASU	Biodesign Institute Building B
	Interdisciplinary Science & Technology Building I
	Interdisciplinary Science & Technology Building II
	Interdisciplinary Science & Technology Building III
ASU/UA	Arizona Biomedical Collaborative Building 1
UA	Medical Research Building
	Thomas W. Keating Bioresearch Building
	Chemistry Building Additions
NAU	Applied Research and Development Facility
	New Laboratory Facility
	College of Engineering and Technology Renovation
	North Campus Research Infrastructure
	NAU—Yuma Applied Research Facility

Source: Auditor General staff summary of information in the fiscal year 2008 Joint Legislative Budget Committee (JLBC) appropriations report.

- Technology and Research Initiative Fund (TRIF)—In 2000, Arizona voters approved Proposition 301 to increase the state sales tax to support education. That same year, the Legislature created TRIF to allocate some of the increased tax revenues to the universities. Administered by the Arizona Board of Regents

(Board), these TRIF monies may be used for projects relating to academic or research fields. Up to 20 percent of TRIF monies may be used for capital project costs, including debt service. According to the Board's 2007 TRIF report, ASU is using TRIF monies to support debt repayment for capital projects at the ASU West and ASU Polytechnic campuses. The report indicates that UA and NAU have also used TRIF monies for debt service and other capital expenditures.

Enrollment growth demands and other factors—Enrollment growth and other factors have also contributed to capital development needs. Total fall enrollment in the universities increased approximately 18 percent between 1997 and 2006. ASU accounted for most of this increase, growing from 49,243 to 63,278 students—nearly a 29 percent increase. Moreover, the universities expect student enrollment to continue to increase. For example, ASU projects an enrollment of approximately 90,000 students by 2022. To accommodate growth, ASU opened its Downtown Phoenix campus in August 2006 and began constructing a new academic complex at the Polytechnic campus in December 2006.

In addition to enrollment growth, the desire to attract more students, provide better services, and maintain existing facilities has also contributed to capital development needs. For example, according to university data, UA has updated plumbing, electrical, and other systems in some of its aging residential facilities; began constructing the Law Commons in May 2007 to enhance the reputation of its law school; and began expanding and renovating its intercollegiate athletics facilities in April 2007 to enhance recruitment of top-level student athletes. According to university data, NAU constructed a new building for its College of Business Administration to help it recruit and retain students, and broke ground for a new conference center in October 2006 that will benefit both NAU and the City of Flagstaff.

Board oversees multi-phase capital development process

The Board provides comprehensive oversight of the universities' capital development process. According to board policy, the Board reviews and approves the universities' capital plans and all projects, or groups of related projects, with an estimated total cost of $2 million or more. In addition, the Board must approve any debt instrument used to finance capital projects. As outlined in board policy, the capital development process is a multi-phase process that begins with strategic and master planning:

- **Strategic planning**—Each university maintains a 5-year strategic plan that identifies its mission and strategic goals. The strategic plan helps the universities identify and/or evaluate potential capital projects. The Board reviews the strategic plans, which the universities update each year, to ensure consistency with system-wide goals and current priorities.

- **Master planning**—Each university also maintains a long-term master plan that guides future land use and the development of campus facilities and infrastructure to support the strategic plan. The Board reviews and approves the master plans, which the universities update approximately every 5 years.

The universities then identify and develop projects through capital improvement and capital development plans that they submit to the Board for review and approval:

- **Capital improvement plan**—The universities each prepare an annual capital improvement plan as required by A.R.S. §41-793 and board policy. The capital improvement plan provides information on the university's land, leases, and buildings; reports on the condition of facilities and the status of ongoing or recently completed projects; and requests funding for building renewal.[1] In addition, the plan identifies projects to be implemented in the upcoming fiscal year and forecasted projects for the following 2 fiscal years. The Board's approval of the capital improvement plan authorizes the universities to begin spending monies on project planning—a maximum of 2 percent of a project's estimated total cost, but not more than $250,000 for each project.

- **Capital development plan**—Projects with an estimated total cost of $2 million or more must be included in a capital development plan. These annual plans identify projects to be implemented during the upcoming fiscal year. The plans generally include projects carried forward from the capital improvement plans, but provide more detailed information about the projects and their impact on the universities' debt capacities based on additional planning. The Board's approval of the capital development plan authorizes the universities to spend additional monies—up to 3 percent of the estimated total project cost or $500,000, whichever is greater—on developing each project's schematic design.

Once the Board has approved a project as part of a capital development plan, the universities must obtain additional project-specific approvals at two stages of the design process:

- **Project implementation approval**—The universities must request the Board's approval of a project's scope, schedule, and budget based on the schematic design. The Board's approval authorizes the universities to complete the design process and prepare related construction documents.

1 Building renewal is discussed in the other pertinent information section (see pages 37 through 42).

- **Project approval**—The universities must obtain project approval based on the completed design, related construction documents, and the final cost estimate or guaranteed maximum price.

After project approval, the Board must submit debt-financed projects for legislative review. Specifically, A.R.S. §§15-1682.01, 15-1682.02, and 15-1683 require the Joint Committee on Capital Review (JCCR) to review any projects to be financed with bond proceeds, or acquired through lease-purchase agreements or through indirect or third-party financing. Following the JCCR's review, the Board reviews and approves all debt instruments used to finance projects. Once a project receives all necessary approvals, the university can proceed with obtaining financing, soliciting construction bids, and completing the project.[1]

JLBC has recommended additional legislative oversight

In December 2007, the Joint Legislative Budget Committee (JLBC) proposed increasing legislative oversight of the universities' capital financing arrangements. In April 2007, the JLBC initiated a Strategic Program Area Review (SPAR) to examine financing arrangements at various state agencies, including the universities, that issue debt and rely on third-party financing arrangements. In the final report released in December 2007, the JLBC recommended that the State could benefit from having an independent third-party review of debt-related financial transactions that come before the JCCR. In response to this recommendation, the Board indicated that, in addition to receiving extensive review by the Board and its staff, each debt financing undertaken by the Board and the universities is reviewed by as many as 13 independent, third-party entities with specific expertise in debt financing by governmental units. The Board further stated that adding another third-party review could be redundant and time consuming and could increase costs for university transactions. As an alternative, the Board suggested that it could share more information regarding the analysis already conducted by the third parties involved in the transactions with the JLBC and JCCR. In response to the Board's suggestion, JLBC staff stated that they continue to recommend an additional third-party review. JLBC staff maintains that the State could benefit from an independent reviewer not directly involved in the transactions, who could confirm whether they are optimal for the State. In addition, JLBC staff stated that an independent reviewer could provide them with additional expertise where needed to review potentially complex financing proposals, which the Board's suggestion of sharing more information would not address.

1 The universities may use alternatives such as design-build or construction-manager-at-risk models to construct buildings, instead of the more standard design-bid-build approach. If using these alternative models, the universities may hire the contractors after capital development plan approval to prepare the project designs.

Scope and methodology

This audit focused on the universities' capital project financing options and their management of risks associated with direct debt and third-party financing. The report presents three findings and associated recommendations in the following areas:

- The universities have several options to pay for capital projects.
- The universities generally follow recommended practices for issuing and managing debt. UA should include provisions for monitoring compliance with private use requirements in its debt management policy, and then finalize and implement it. In addition, NAU should develop and implement a debt management policy or formal guidelines.
- The universities generally follow recommended practices for mitigating risks associated with third-party financing.

The report also presents other pertinent information regarding how the universities pay for building renewal.

Auditors used several methods to study the issues in this report. General methods included interviewing ASU, UA, and NAU officials and staff, board officials, JLBC staff, and higher education finance professionals, and reviewing applicable federal laws, Arizona Revised Statutes and session laws, board policies and procedures, and the universities' annual financial reports and capital improvement plans. In addition, auditors used the following methods to review each specific area:

- **Financing Options**—To define and describe the financing options available to the universities, including debt and third-party financing arrangements, auditors reviewed literature from the National Association of College and University Business Officers (NACUBO), the Government Finance Officers Association (GFOA), and other organizations, as well as information reported in the universities' fiscal year 2007 financial reports. Auditors also analyzed the universities' fiscal year 2007 financial reports to determine the universities' outstanding debt and capital lease obligations as of June 30, 2007. To determine the amount of debt issued between fiscal years 2003 and 2007, auditors analyzed university-prepared debt schedules. To identify and obtain information about the universities' third-party projects initiated between 2002 and 2007, auditors reviewed information that the universities compiled for the JLBC's 2007 SPAR, official statements for third-party revenue bonds issued for the projects, and other documents.

- **Direct Debt Financing**—To assess the universities' debt issuance and management practices, auditors compared the universities' practices with those recommended by professional organizations. To identify recommended practices, auditors reviewed literature from NACUBO, GFOA, and others (see Bibliography on pages b-i through b-iv) and took an online training course offered by NACUBO about effectively using debt. To identify the universities' practices, auditors reviewed ASU's and UA's debt management guidelines, the official statements for revenue bonds and certificates of participation (COPs) issued between fiscal years 2005 and 2007, information on outstanding debt from the universities' fiscal year 2007 financial reports, ASU's and UA's contracts with their bond counsel and financial advisors (a total of four contracts), prior audit work by the Office of the Auditor General's financial auditors, and university-prepared schedules on debt issued between fiscal years 2003 and 2007, which auditors reconciled to the universities' fiscal years 2003 through 2007 financial reports. Auditors also interviewed personnel from one of the credit rating agencies and reviewed documentation on the universities' credit ratings provided by two credit rating agencies.

- **Third-Party Financing**—To evaluate the universities' practices for managing third-party financing arrangements, auditors compared the universities' practices with recommended practices. To identify recommended practices, auditors reviewed literature on risks and recommended practices related to third-party financing, public-private partnerships, and privatized student housing (see Bibliography on pages b-i through b-iv). To identify the universities' practices, auditors reviewed a judgmental sample of 9 projects out of the 18 financed through third-party finance arrangements between 2002 and 2007. Auditors selected projects from each university, projects from different ASU campuses, projects based on function, projects financed through different types of third parties, and unique projects. In reviewing the 9 projects, auditors analyzed, in conjunction with the Office of the Auditor General's General Counsel, the projects' contracts, including leases and other agreements, to identify risks that the universities have encountered in third-party projects and methods they have applied to mitigate risks and liabilities. In addition, auditors reviewed statements from the Governmental Accounting Standards Board (GASB) to determine the requirements for issuing tax-exempt bonds through third-party organizations and reporting the debt in the universities' financial statements.

- **Other Pertinent Information**—To gather information about building renewal funding, auditors reviewed legislative documents, including the JLBC's September 2007 *Building Renewal Funding History*, the November 2006 Arizona State Senate Issue Brief *Arizona's Building Renewal Formula*, and a September 2007 JLBC Program Summary on building renewal. Auditors also analyzed deferred maintenance data from the universities' fiscal year 2009-2011 capital improvement plans; analyzed university-prepared debt schedules detailing the amount of debt proceeds used for building renewal projects from debt issued in fiscal years 2003 through 2007; toured some of NAU's facilities for building renewal needs; and reviewed other documentation provided by the universities. In addition, auditors reviewed articles on capital renewal published by APPA.[1]

- **Introduction and Background**—To gather information for the report's Introduction and Background, auditors analyzed the universities' capital expenditures for fiscal years 2005 through 2007 using information from the universities' capital improvement plans and analyzed the universities' student enrollment trends between 1997 and 2006 using information from the universities' 2006-2007 fact books. Auditors also reviewed the fiscal year 2008 JLBC appropriations report, the Board's *Technology and Research Initiative Fund (TRIF) Annual Report* for fiscal year 2007, and the universities' fiscal years 2009-2013 strategic plans.

- **Appendix**—To create Table 3, which lists capital projects with budgets of at least $10 million and for which expenditures were reported between July 1, 2004 and June 30, 2007, in the universities' capital improvement plans, auditors compiled and analyzed information from various sources including the universities' 2007-2009, 2008-2010, and 2009-2011 capital improvement plans, which report capital project expenditures for fiscal years 2005 through 2007; the universities' quarterly capital project status reports for fiscal years 2005 through 2007; information from the universities' capital project databases provided by university personnel; the fiscal year 2008 JLBC appropriations report; ASU's and NAU's fiscal years 2006 and 2007 financial reports; ASU's *Five-Year Strategic Plan*: *Fiscal Years 2009-2013*; ASU's and NAU's Web sites; documentation related to UA's Sixth Street Residence Halls project; and input from university officials and staff, who also verified the information compiled by the auditors. To create Table 4, which shows debt service requirements to maturity for revenue bonds, auditors analyzed the universities' outstanding revenue bonds and certificates of participation debt as reported in their fiscal year 2007 audited financial statements. To create Table 5, which lists third-party capital finance arrangements initiated in 2002 through 2007, auditors analyzed information that the universities compiled for the JLBC's 2007 SPAR and additional information provided by the universities. Finally, to create Table 6, which presents bond rating definitions and the universities' bond ratings, auditors reviewed the universities' bond ratings as reported by Standard & Poor's and Moody's Investors Service and literature defining bond rating categories.

This audit was conducted in accordance with government auditing standards.

The Auditor General and staff express their appreciation to the Arizona Board of Regents and its staff, and the universities' presidents and their staff for their cooperation and assistance throughout the audit.

1 APPA was formerly known as the Association of Superintendents of Buildings and Grounds, the Association of Physical Plant Administrators of Universities and Colleges, and APPA: The Association of Higher Education Facilities Officers. Since 2005, the organization has simply identified itself as APPA.

FINDING 1

Universities have several options to pay for capital projects

Universities have several alternatives to choose from to pay for capital projects as they encounter growing infrastructure needs. Arizona's universities have mainly used debt in the form of revenue bonds or certificates of participation (COPs) to raise the money for their projects. More recently, the universities have also entered into agreements with third parties such as other governmental organizations and private sector organizations to acquire some facilities, and some of these arrangements have resulted in long-term lease obligations. The universities use other options such as cash, donations, and federal grants less frequently to support capital projects.

Universities rely on debt to pay for major capital projects

Arizona's universities raise money to support capital projects primarily through debt financing. As of June 30, 2007, the universities' principal and interest obligations associated with debt financing, payable over the next 33 years, totaled more than $2.78 billion, including $1.8 billion in principal.

Universities issue both revenue bonds and COPs—The universities issue two types of public debt:

- Revenue bonds are securities in which the university pledges various revenue sources to repay the principal plus periodic interest payments, paid as a percentage of the principal. Although literature indicates they could pledge specific revenues, such as pledging student rental payments to repay bonds issued to build student housing, the universities pledge a pool of revenues, including tuition, fees, and revenue from other auxiliary activities, to repay revenue bonds. Federal law 26 U.S.C.A. §103 exempts investors from having to pay federal taxes on the interest they earn on the universities' bonds and, as a result, investors generally accept a lower interest rate than they require for other investments.

- COPs are securities in which the university enters into an agreement to make fixed lease payments for a period of time in exchange for occupancy or use of a facility owned by a third party. The third party sells shares in the agreement to investors and then pays the investors their share of the lease payments. Upon final payment of the debt, the university acquires title to the facility. The agreement is structured so the lease payments are sufficient to pay principal and interest on the shares sold to investors, and federal tax law exempts investors from paying federal taxes on the interest portion of the lease payments. According to a Joint Legislative Budget Committee (JLBC) staff report submitted to the Joint Committee on Capital Review (JCCR) in 2001, interest rates for COPs are typically higher than interest rates for revenue bonds. A.R.S. §15-1670 requires Arizona's universities to use lease-purchase financing for research and infrastructure projects that will be repaid with the monies the statute authorizes. All three universities used COPs, a form of lease-purchase financing, to finance those projects.

Revenue bonds and COPs generally have the same advantages and disadvantages.

Revenue bonds and COPs generally have the same advantages and disadvantages for the issuer. Specifically, both bonds and COPs permit the universities to acquire capital assets when they need them rather than waiting until they have sufficient cash to pay for them outright, and the universities can spread the payments over the useful life of the asset. However, bonds and COPs can limit the universities' financial flexibility. Specifically, they require long-term commitment of revenues for repayment, and the tax-exempt status limits how buildings constructed with the proceeds can be used.[1] Finally, both bonds and COPs have issuance costs including fees paid to external lawyers and financial advisors and the cost of credit enhancements, when used.

Arizona does not issue public debt on behalf of its universities. Constitutional limits on debt issuance prevent the State from issuing general obligation bonds on behalf of state agencies, including universities. The universities' bonds and COPs do not pledge the State's taxing power to repay debt.

Universities will pay $2.78 billion over the life of revenue bonds and COPs outstanding on June 30, 2007—As of June 30, 2007, the universities had approximately $869 million in revenue bonds and $935 million in COPs outstanding, as shown in Table 1 (see page 13).[2] Altogether, the payments on this debt, including principal and interest, will total more than $2.78 billion over the remaining 33-year life of the debt. In fiscal year 2008, the universities will pay a total of approximately $89.6 million toward revenue bonds and approximately $74.6 million toward COPs for a combined total of approximately $164.2 million toward principal and interest.

1 Federal law 26 U.S.C.A. §103 and §141 requires that no more than 10 percent of the bond proceeds from tax-exempt debt can be used for private purposes. This includes certain industry-sponsored research conducted in facilities constructed with tax-exempt bond proceeds.

2 In addition to bonds and COPs, the universities use capital leases to acquire facilities. As required by governmental accounting standards, the universities report capital leases as part of their long-term liabilities.

Table 1: Amount of Principal and Interest Owed on Capital Debt[1]
As of June 30, 2007
(In Thousands)

	Total Payments Owed as of June 30, 2007[2] Principal	Interest	Total	Fiscal Year 2008 Portion
Revenue bonds:				
ASU	$448,985	$219,761	$ 668,746	$38,464
UA	297,015	136,348	433,363	35,893
NAU	122,565	74,779	197,344	15,252
Total revenue bonds	$868,565	$430,888	$1,299,453	$89,609
Certificates of participation (COPs):				
ASU	$327,835	$189,776	$ 517,611	$30,521
UA	517,007	294,418	811,425	37,855
NAU	90,285	58,857	149,142	6,250
Total COPs	$935,127	$543,051	$1,478,178	$74,626
Capital leases[3]:				
ASU	$ 75,804	$ 59,151	$ 134,955	$ 3,657
UA	24,379	24,726	49,105	4,052
NAU	35,345	21,360	56,705	1,472
Total capital leases	$135,528	$105,237	$ 240,765	$ 9,181

1 Includes debt service requirements of revenue bonds and certificates of participation that were issued to advance refund other debt. The debt service requirements for the refunded debt are not presented in this schedule. Because advance refunded debt is not immediately paid off, but proceeds are put into trust to pay it off over time, this table includes only the debt service requirements on the newer debt issued. (See textbox, page 26, for definition of advance refunding and other refunding terms.)

2 The majority of ASU's obligations end in 2037; however, ASU has capital lease obligations through 2045. UA's and NAU's capital lease obligations end in 2036 and 2033, respectively.

3 Includes only capital leases that are related to capital project construction. These leases are with third parties as discussed on page 15.

Source: Auditor General staff analysis of the ASU, UA, and NAU audited financial statements for fiscal year 2007.

Although all three universities have used both financing methods, the University of Arizona (UA) has relied more on COPs, while the other two universities have relied more on bonds. As shown in Table 1, Arizona State University (ASU) will have the largest revenue bond payment compared to UA or Northern Arizona University (NAU) in fiscal year 2008, nearly $38.5 million, while UA will have the largest COPs payment, nearly $37.9 million. In total, UA's combined bond and COPs debt service of $73.7 million is greater than ASU's $69.0 million and NAU's $21.5 million. Overall, a greater proportion of the university system's total debt obligations are associated with COPs rather than bonds. (See Appendix, Table 4, page a-iv for universities' debt service requirements through 2040.)

A greater proportion of the university system's debt is associated with certificates of participation rather than bonds.

The universities' total outstanding debt has increased significantly since 2002. According to a December 2007 JLBC report, the universities' total indebtedness was just over $1 billion in 2002. The total outstanding bond and COPs principal of $1.8 billion reported by the universities at the end of fiscal year 2007 represents an 80.2 percent increase in outstanding principal between 2002 and 2007. This increase is due in part to the more than nearly $959 million in new debt that the universities issued between fiscal years 2003 and 2007.The debt issued in fiscal years 2003 through 2007 paid for a total of 61 major ($2 million or greater) and minor (under $2 million) capital projects. In all, ASU financed 22 capital projects at 4 campuses, NAU financed 20 capital projects at 2 campuses, and UA financed 19 capital projects at 2 campuses. See Photo 3 for an example of a capital project at ASU. Some of these monies were allocated to pay for building renewal needs. (See Other Pertinent Information, page 37, for additional information on building renewal.) Thirteen of the debt-financed projects at the three universities were research infrastructure projects supported with General Fund appropriations as allowed by A.R.S. §15-1670. (See Introduction and Background, page 3, for a list of these projects.)The total repayments associated with the research infrastructure projects will exceed $480 million, with fiscal year 2008 principal and interest payments totaling $34.8 million (see textbox).

Research Infrastructure Projects
A.R.S. §15-1670
Debt Service Requirements

	Total Principal	Fiscal Year 2008 Debt Service
ASU	$206,200,000	$14,571,394
UA	$202,885,000	$14,377,384
NAU	$ 77,475,000	$ 5,899,043
Total	$486,560,000	$34,847,821

Source: Auditor General analysis of A.R.S. §15-1670 and amortization schedules provided by ASU, UA, and NAU.

The universities' total outstanding principal of $1.8 billion in fiscal year 2007 represented an increase of 4.5 percent over the nearly $1.73 billion for fiscal year 2006 reported by the December 2007 JLBC report. According to the report, the three universities combined reported more outstanding debt in fiscal year 2006 than any other agency, including the Departments of Administration and of Transportation.

Photo 3: ASU's Biodesign Institute Building B

Source: ASU Web site <http://www.asu.edu/tour/tempe/bdb.html> accessed on April 8, 2008.

Universities also use third-party arrangements to pay for capital projects

In addition to issuing bonds and COPs, the universities have used third-party arrangements to support capital development needs. Although the nature of these arrangements varies, they commonly involve leasing university land to a third party that builds a facility on the land and leases the facility to the university. Most of the universities' third-party financing arrangements have involved issuing tax-exempt bonds through nonprofit corporations affiliated with the universities, while a smaller number have involved partnerships with local governments, for-profit companies, or a combination of government and the private sector. ASU has used third-party financing arrangements more extensively than UA or NAU and has the largest amount of lease payments associated with these arrangements.

Third-party partnerships have common characteristics—The National Association of College and University Business Officers (NACUBO) identifies several common elements in most third-party partnerships.[1] Specifically:

- The university owns land that it is willing to lease, in an agreement called a ground lease, to a developer who will develop property on the land.
- The university and third-party partners enter into a ground lease agreement that outlines responsibilities, rights, and controls of each party.
- The facility on the leased land provides a mechanism to generate adequate revenue to cover costs, including operating expenses and debt service. For example, potential revenues might stem from student rentals or other student fees, or institutional leases associated with office, classroom, or research space.

In 2002 through 2007, the three universities used third-party financing arrangements to support 18 capital projects. (See Appendix, Table 5, page a-v, for a complete list of third-party financing arrangements initiated between 2002 and 2007.)

The universities have entered into 18 third-party arrangements since 2002.

Many third-party projects have relied on tax-exempt bonds issued by nonprofit corporations—To pay for some third-party projects, the universities used the proceeds from tax-exempt bonds issued through nonprofit corporations to raise money for the projects. In all but one of these cases, the nonprofit corporations are component units of the universities. The universities used third-party financing arrangements to develop 12 capital projects in 2002 through 2007, and expect

Component unit—Legally separate entity whose resources are for the direct benefit of the primary government unit (the university).

Source: Government Accounting Standards Board Statement No. 39.

1 Dalbey, Matthew, et al. *Communities of Opportunity: Smart Growth Strategies for Colleges and Universities*. Washington, D.C.: National Association of College and University Business Officers, 2007.

to use such arrangements for a 13th project but bonds have not yet been issued for the project.[1] These projects include student housing, utilities infrastructure, a Flexible Display Center, and mixed-use real estate developments. For example, Northern Arizona Capital Facilities Finance Corporation (NACFFC) issued bonds to pay for its Pine Ridge Village student housing facility (see textbox). In addition to these component unit arrangements, ASU is working with a corporation, Downtown Phoenix Student Housing, LLC, to develop its Taylor Place project, a student housing facility at ASU's downtown Phoenix campus. ASU reports that this corporation will become a university component unit starting in fiscal year 2008. (See Appendix, Table 5, page a-v, for the 13 projects categorized under nonprofit corporation financing.)

Pine Ridge Village (NAU)

Description: Six apartment-style buildings that can house up to 336 students

Opening Date: August 2002

Project cost: $15.4 million

Type of agreement: Nonprofit financing

Partners and responsibilities:

- In 2001, the Arizona Board of Regents on behalf of NAU entered into a ground lease with Northern Arizona Capital Facilities Finance Corporation (NACFFC), a component unit of NAU, and NACFFC issued revenue bonds to finance the student housing complex.
- NACFFC used Ambling Development Partners to design and construct the facility, and the NAU Residence Life Department operates and maintains the apartment complex.
- In May 2005, the Arizona Board of Regents on behalf of NAU entered into an amended and restated ground lease with Pine Ridge Village/Campus Heights, LLC ("Company") to enable the Company to issue new revenue bonds totaling $35.9 million to acquire the Pine Ridge Village Project and finance a new housing development called Campus Heights.
- NAU is obligated to make base lease payments for a lease term starting in June 2005 and ending in May 2033 to repay the $35.9 million in revenue bonds for both housing projects.

Source: Auditor General staff analysis of Amended and Restated Ground Lease Agreement by and between the Arizona Board of Regents/NAU and Pine Ridge Village/Campus Heights, LLC., dated May 1, 2005; lease agreement dated May 1, 2005, between Pine Ridge Village/Campus Heights, LLC and the Arizona Board of Regents/NAU; NAU's May 2007 response to JLBC's April 2007 information request for its Strategic Program Area Review; information from NAU's Web site; and information provided by NAU officials.

Other third-party partnerships involve local government and the private sector—In addition to working with nonprofit corporations, the universities have entered into other third-party arrangements that involve intergovernmental agreements, partnerships with for-profit real estate companies, or a combination of local government and the private sector. Specifically:

- **University/local government partnerships**—ASU has entered into an intergovernmental agreement with the City of Phoenix to create the ASU Downtown Phoenix campus. The campus opened in the fall of 2006 and

1 The 13 projects do not include one, NAU's High Country Conference Center, that relied in part on tax-exempt bonds issued by NACFFC. NAU also partnered with the City of Flagstaff and the private sector to finance that project. See page 18 for more information. Also, as of June 30, 2007, ASU's component unit had not yet issued revenue bonds for one of the 13 projects, a planned capital project at ASU Polytechnic.

involved moving the College of Public Programs and the College of Nursing and Healthcare Innovations from the Tempe campus to downtown Phoenix. ASU also plans to move its Walter Cronkite School of Journalism and Mass Communication to the Downtown Phoenix campus, as well as its public broadcasting studios for KAET/Eight (see Photo 4). The City of Phoenix is providing both the land and the facilities for the campus, paying the costs with a City of Phoenix voter-approved bond program. The City of Phoenix considers ASU's expansion an economic development initiative. ASU is responsible for operating and maintaining the facilities and paying for furniture, fixtures, and equipment.

ASU will move its School of Journalism and public broadcasting station to downtown Phoenix.

Photo 4: Rendition of ASU's Walter Cronkite School of Journalism and Mass Communication constructed in partnership with the City of Phoenix

Source: ASU Web site <http://cronkite.asu.edu/about/building.php#newbuilding> accessed March 28, 2008.

- **University/for-profit company partnerships**—ASU has entered into agreements with a publicly traded student housing developer, American Campus Communities (ACC), to finance and construct Vista del Sol student housing facilities and the Barrett Honors College on the main Tempe campus. ACC is using its own money to construct the facilities on land leased from the university. Both projects involve a 65-year lease agreement in which ASU acquires the title to the facilities as soon as they are constructed and then leases them to ACC. The Vista del Sol agreement requires ACC to invest up to 25 percent of its own equity into the project, and allows ACC to use debt financing for the remaining 75 percent, while the Barrett Honors College agreement requires ACC to invest 100 percent of its own equity into the project. Both developments will have mixed uses, including residential housing, retail, dining, and parking, and Barrett Honors College will also include faculty offices and classrooms (see textbox, page 18). According to the terms of the arrangement, ASU will not incur any long-term debt associated with these projects. In both of these cases, ACC will generate revenues from operating and leasing the facility, including student rental payments. The Vista del Sol lease agreements require ACC to pay ASU a

Barrett Honors College (ASU)

Description: 490,000-square-foot facility including residence hall for 1,700 students, a central dining facility, 11 classrooms, a dean's office, 26 faculty offices, and retail space

Projected opening date: July 2009

Project cost: $110 million (estimated)

Type of agreement: Contract with a for-profit corporation

Partners and responsibilities:

- ASU provides the land, and American Campus Communities (ACC), a private developer, is responsible for design, development, construction, and maintenance.
- ACC will cash finance the total estimated $110 million in project costs.
- ASU has the option to bill and collect all revenues from the premises as an agent for ACC and turn over those revenues to ACC; ASU will bill and collect revenues from the dining facility and those revenues will belong to ASU.
- ACC will bill and collect retail revenues, and those revenues will belong to ACC.
- ACC will make rental payments to ASU over the 65-year lease term.

Source: Auditor General staff analysis of information from ASU Fiscal Year 2007 Financial Report; lease agreement dated October 30, 2007, between Arizona Board of Regents/ASU (lessor) and ACC OP, a limited liability company (lessee); and ASU Construction Information downloaded from ASU's Web site—http://www.asu.edu/fm/construction/projects.htm on May 2, 2007.

minimum rent of $665,990 per year for the first 5 years, plus variable rent amounting to 8.66 percent of gross revenues including student rental payments through the entire 65-year lease term. During the first 5 years, the variable rent amount is reduced by $334,010, and starting in year six, ACC will no longer have to pay minimum rent payments to ASU, but will only pay ASU the variable rent. The Barrett Honors College agreement is structured slightly differently. Specifically, it requires ACC to pay $250,000 in minimum rent payment per year for the first 10 years, and then variable rate payments of 2.35 percent of ACC's gross revenues for years 11 through 65. Similar to the Vista del Sol agreement, the minimum rent payment will eventually end, and ACC will be obligated to pay only variable rent.

- **Combination university, government, and private sector partnerships**—NAU and UA have entered into arrangements that include a combination of local municipalities, nonprofit corporations, and for-profit corporations. Specifically, NAU's arrangements to develop a new hotel and conference center involve a partnership with the City of Flagstaff and a private corporation, Drury Southwest Flagstaff, LLC, a Missouri-based hotel owner and operator. NAU's conference center financing arrangement involves a combination of tax-exempt bonds issued by an NAU component unit, and up to $2 million in planned investments from the City of Flagstaff. Similarly, UA's arrangements to open a new medical school in downtown Phoenix involve a partnership with the City of Phoenix, a Missouri-based private developer, The DESCO Group, and others. To finance its new downtown Phoenix medical school (see textbox, page 19), UA partnered with the City of Phoenix to use the federal

UA partnered with the City of Phoenix to use a federal New Markets Tax Credit program to arrange financing for the UA College of Medicine-Phoenix.

UA College of Medicine—Phoenix in Partnership with ASU
Phoenix Union High School Renovation Project

Description: Renovation of three historic former Phoenix Union High School buildings located in downtown Phoenix, including two facilities between 22,000 and 26,000 square feet and one 14,300-square-foot auditorium. The medical school is part of the City of Phoenix's larger effort to develop the Phoenix Biomedical Campus, which also involves the nonprofit research institute TGen and the ASU/UA-financed Arizona Biomedical Collaborative building.

Opening date: Fall semester 2007

Project cost: $27.7 million

Type of agreement: Federal New Markets Tax Credit project involving UA, the City of Phoenix, Phoenix Bioscience Development Company LLC, and private Missouri-based developer The DESCO Group

Partners and responsibilities:

- In March 2003, the federal government awarded $170 million in federal New Markets Tax Credits (NMTC) to Phoenix Community Development and Investment Corporation (PCDIC), an Arizona nonprofit corporation and a certified community development entity (CDE). The federal program allocates tax credits only to qualified CDEs. The City of Phoenix created the nonprofit PCDIC in order to apply for the federal tax credits.
- City of Phoenix owns the property and entered into a 33-year lease arrangement with UA for $1 per year.
- Acting as the "sponsor CDE," PCDIC suballocated $25 million of its NMTC allocation to Phoenix Bioscience Development Company, LLC, a limited liability company affiliated with the sponsor CDE.
- U.S. Bancorp Community Development Corporation made a $25 million equity investment in Phoenix Bioscience Development Company LLC.
- Phoenix Bioscience Development Company LLC used the $25 million equity investment to issue two loans totalling $23.2 million to developer DAZ 4-PUHS, LLC. a subsidiary of Missouri-based developer DESCO, and to pay up to $1.8 million to PCDIC for sponsor and legal fees.
- UA entered into 33-year lease arrangements with DAZ 4-PUHS, LLC. Total lease principal is approximately $24.5 million, which requires annual lease payments through June 30, 2036.
- UA and ASU will jointly offer academic programs at the medical college.

Source: Auditor General staff analysis of the Arizona Biomedical Collaborative, Inc., Request for Proposal (RFP), issued May 6, 2004; Response to RFP June 2004, submitted by The DESCO Group[SM]; lease agreement between the City of Phoenix (as landlord) and the Arizona Board of Regents/UA (as tenant) entered into September 27, 2005; Development sublease and development sub-sublease between Arizona Board of Regents/UA and developer DAZ 4-PUHS, LLC entered into September 29, 2005; Construction Loan Agreement dated October 17, 2005, between DAZ 4-PUHS, LLC and Phoenix Bioscience Development Company LLC; First Amendment to Development Sub-Sublease dated September 6, 2007; Fiscal year 2007 Financial Report; information from the Federal Reserve Bank of San Francisco Web site, the U.S. Department of Treasury Web site, the City of Phoenix Web site, and UA College of Medicine Web site; Sanders, Michael I., *Joint Ventures Involving Tax-Exempt Organizations*, Third Edition; and Kurt Salmon Associates, Interim Executive Report on Implementation of the Phoenix Program of the University of Arizona College of Medicine: Directions and Imperatives, June 15, 2005.

government's New Markets Tax Credit Program to renovate the historic Phoenix Union High School. According to UA officials, the financing arrangements were predicated upon meeting the federal requirements associated with the tax credit program.

UA and NAU make less use of third-party financing arrangements in favor of traditional financing—Although all three universities have used some third-party arrangements, during the audit, UA and NAU finance officials expressed a preference for using more traditional financing approaches. For example, although NAU used third-party arrangements for two student housing facilities completed in August 2002 and August 2006, it issued revenue bonds in fiscal year 2008 to finance another new student housing complex. Except for its La Aldea student housing facility and the downtown Phoenix medical school, UA has relied almost exclusively on traditional financing to pay for capital projects. In contrast, ASU uses a mix of approaches, as shown by its partnerships with the City of Phoenix to develop ASU Downtown Phoenix; Downtown Phoenix Student Housing, LLC to develop student housing in downtown Phoenix; and American Campus Communities to develop the Barrett Honors College campus and the Vista del Sol student housing development at its Tempe campus.

A change in accounting standards makes third-party arrangements less attractive now than in the past.

Some of the reasons that may have made third-party arrangements attractive in the past no longer exist. Specifically, until fiscal year 2004, component unit debt was not included in the liabilities shown in university financial statements, which made the financing method attractive because universities did not have to report the long-term liabilities associated with their component units. However, in 2003, the implementation of an accounting standard issued by the Government Accounting Standards Board required the universities to report component unit information in its audited financial statements. In addition, prior to 2006, Arizona statutes did not require the universities to present these projects to the JCCR for review. For example, an NAU official said that one reason they financed Pine Ridge Village using a component unit was because, at the time, they did not have to present these projects to the JCCR and, therefore, the NAU official believed the project could be completed more quickly. However, all third-party projects must now be presented to the JCCR for review.

Lease payment obligations associated with third-party arrangements total approximately $136 million—Some third-party arrangements require the universities to make long-term lease payments. In all, the principal associated with the three universities' lease payments totaled $135.5 million as of June 30, 2007 (see Table 1, page 13). ASU has more than $75.8 million in principal debt associated with lease payments, followed by NAU with $35.3 million and UA with $24.4 million. ASU's and NAU's lease obligations are entirely with component units. Specifically, ASU's lease commitments involve leases associated with the ASU Fulton Center, the Hassayampa Academic Village, and the Flexible Display Center at the ASU Research Park in Tempe, while NAU's lease obligations are associated with both the Pine Ridge and McKay student housing facilities. In contrast, UA's third-party lease obligations consist solely of the 33-year downtown Phoenix medical school lease with a private developer. (See Appendix, Table 5, page a-v, for a complete list of third-party financing arrangements.)

Universities use other options less frequently

In addition to issuing debt to pay for capital projects, the universities sometimes have other options that do not require the universities to issue debt or partner with a third party. Specifically:

- **Cash**—According to university officials, the universities occasionally use cash to pay for capital projects. For example, an official at NAU reported using cash to pay part of the cost of the Conference Center. As of September 2007, the university reported that it had dedicated approximately $3.6 million in cash for the facility. According to a National Association of College and University Business Officers (NACUBO) publication, using cash may be an inefficient use of monies because the cost of issuing tax-exempt debt may be lower than the investment return that these monies could otherwise earn.[1]

- **Private donations**—According to university officials, the universities use private donations to pay for some capital projects. For example, as of December 2007, ASU was soliciting donations for a basketball practice facility. According to UA officials, in November 2007, UA received a $9 million donation to pay for the construction of a Tree-Ring Archive Center, and as of November 2007, an official at NAU said that the university was seeking donations for a new basketball arena.

- **Federal grants**—According to university officials, federal grants are not typically used for capital construction. However, officials from ASU and UA report having occasionally used federal grant monies to help pay for capital projects. For example, according to an ASU official, ASU used $2 million in federal grant monies to pay part of the costs of the Biodesign Institute Building A, a $72 million project.

1 Klein, Eva, and John H. Augustine. Debt Financing and Management. *College and University Business Administration*. Ed. Caroline M. Grillis. Washington, DC: National Association of College and University Business Officers, 2000. 10-1-10-80.

FINDING 2

Universities follow good debt management practices

The universities have good credit ratings and generally conform to recommended practices for issuing and managing debt, although some improvements can be made. Recommended practices, such as adhering to debt limits and refinancing debt when appropriate, are designed to help ensure that universities do not acquire too much debt or pay too much in interest and other debt-related costs. Arizona State University (ASU) follows these recommended practices, and the University of Arizona (UA) and Northern Arizona University (NAU) adhere to them except for having a formal debt management policy in place. As an additional way to assure credit rating agencies of their commitment to good borrowing practices, both universities should put a policy or formal guidelines in place.

Universities have good credit ratings

All three universities have good credit ratings. Specifically, the ratings issued by the rating agencies Moody's Investor Services and Standard & Poor's place all three universities in the AA or A grade, indicating that they are quality investments (see Appendix, Table 6, page a-vi, for further information). Rating agencies evaluate a debt issuer and the issuer's bonds or Certificates of Participation (COPs) based on various factors such as the issuer's financial situation and operating performance, and then assign a letter rating to the issuer. A university may then use this letter rating when marketing its bonds and COPs. University officials stress the importance of maintaining a good bond rating. An institution with a good rating can usually obtain lower interest rates and more easily sell its bonds and COPs in the financial markets.

All three universities have bond ratings in the AA or A grade, indicating that they are quality investments.

Universities follow most recommended practices for issuing and managing debt

All three universities follow most of the practices recommended in literature for institutions that use bonds and COPs to raise money to pay for capital projects. The

Statutory Debt Limit

Fiscal year 2007 debt service as a percentage of total projected expenditures and mandatory transfers

Statutory Limit	**8.0%**
ASU	3.5%
UA	4.5%
NAU	4.3%

Source: ASU, UA, and NAU 2007 *Debt Capacity Review.*

A finance team typically involves the following parties:

- Issuer
- Issuer's counsel
- Bond counsel
- Financial advisor
- Underwriter
- Underwriter's counsel
- Trustee
- Trustee's counsel
- Bond insurer
- Bond insurer's counsel
- Rating agencies

Source: Rodgers, Ronald F., and Stephen E. Weyl. *Tax Exempt Bonds: Considerations for College and University In-House Counsel*; and Klein, Eva, and John H. Augustine. Debt Financing and Management. *College and University Business Administration, 6th Edition.*

National Association of College and University Business Officers (NACUBO), other professional organizations, and finance literature have identified several recommended practices for issuing and managing debt. Following these practices helps the universities ensure that they do not acquire too much debt or pay too much in interest and other debt-related costs. All of the universities follow the practices specified below:

- **Adhering to debt limits**—Limiting the amount of debt an institution incurs can preserve credit quality. Although there is no widely accepted standard for an acceptable level of debt and an appropriate debt limitation, it is generally considered a good idea to have some limit in place. A.R.S. §15-1683 stipulates that projected debt service for bonds and COPs may not exceed 8 percent of the university's total projected expenditures and mandatory transfers. As shown in the textbox, at the end of fiscal year 2007, all three universities were below the statutory debt limit.

- **Using a professional finance team**—Because of the complexity of issuing debt, finance literature indicates that the use of outside experts, or a financing team, is customary and necessary (see textbox). Each university has hired a professional finance team. Arizona Board of Regents (Board) policy stipulates that the appointment of financial consultants must be presented for board approval.

  Members of the finance team have varying responsibilities during the process of issuing debt. For example, bond counsel is responsible for a number of transaction documents, including tax and disclosure documents, as well as preparing an opinion indicating that the debt issue is tax-exempt and meets all other legal requirements. In addition, the financial advisor is responsible for planning and structuring the debt issue and provides advice on all financial matters relating to the proposed debt issue.

  For bond counsel services, ASU and NAU use a nation-wide law firm with a focus on public financing, and UA uses a global law firm with a focus on public financing. For financial advisory services, all three universities use the same nation-wide securities firm.

- **Grouping projects to save on issuance costs**—To reduce the costs associated with issuing debt, experts recommend grouping more than one capital project into one debt issuance. In fiscal years 2003 to 2007, the universities grouped most of their bond and COP issuances to include more than one capital project. For example, in fiscal year 2007, UA issued a bond for $31 million to finance four projects: intercollegiate athletics facilities expansions, improvements to the Law Commons, and improvements to two residence halls.

- **Using credit enhancements when appropriate**—To improve credit ratings and thus minimize interest rates they pay, the universities have used credit enhancements, which consist of bond insurance or letters of credit from banks (see textbox). When a bond issuer purchases bond insurance, the insurer agrees that if the issuer fails to make scheduled principal and interest payments when due, the insurer will pay these amounts and seek reimbursement from the issuer. Similarly, when a bank extends a letter of credit, that bank agrees to pay principal and interest on the bonds from its own monies should the need arise. Commercial banks typically provide letters of credit. In a review of six bonds and COPs the universities issued between fiscal years 2005 and 2007, the universities purchased bond insurance in all six instances.

Credit enhancement—Bond insurance or letter of credit that allows issuer to obtain a lower interest rate by guaranteeing that the insurer or bank will pay the debt if the issuer does not.

Source: Tigue, Patricia. *Structuring and Sizing the Bond Issue: How to Develop an Optimal Financing Approach*; and King, George A., Richard E. Anderson, David M. Cyganowski, and Patrick J. Hennigan. *NACUBO Guide to Issuing and Managing Debt.*

Even though the universities have customarily used bond insurance, changes in the financial marketplace that started in late 2007 may cause the universities to use credit enhancements less often in the future, because, according to university officials, the effect of these enhancements has diminished. When an institution purchases bond insurance for its bonds or COPs, the debt issue takes on the credit rating of the insurer, rather than the credit rating of the institution. However, since late 2007 the credit rating agencies have downgraded or given a negative outlook to the credit ratings of several bond insurance companies because of their involvement with sub-prime mortgage-backed securities. As a result, university officials expect that using bond insurance may not provide as much economic benefit as it has in the past. In fiscal year 2008, UA issued a bond for $43.1 million. For this bond, university officials found that the cost of insurance was greater than its economic benefit and decided not to purchase it.

- **Using a mix of variable- and fixed-rate debt when appropriate**—To reduce interest costs associated with issuing debt, universities can use a mix of variable- and fixed-rate debt (see textbox). Fixed-rate debt provides more certainty, because the interest rate does not change, but the university may pay an interest rate higher than the current market rates if the market rates decline after issuing the debt. Variable-rate debt typically carries lower interest rates, but the institution bears the risk that short-term interest rates will rise. Issuing variable rate bonds tends to be more complicated and, consequently, the transaction costs may be more expensive. However, the universities can achieve savings because of the lower interest rates, and these savings can offset the higher cost of issuing variable-rate debt.

  At the end of fiscal year 2007, only ASU reported having any variable-rate debt. Of a total principal balance of $449 million for bonds, $103 million was associated with two variable-rate bonds issued in 2003. However, because of a financing arrangement completed in January 2007, ASU's variable-rate debt could also be characterized as fixed-rate debt.[1] NAU did not have any variable-rate debt.[2] UA has used variable-rate debt in the

In a fixed-rate bond structure, the institution pays a fixed interest rate for the life of the bond. A variable-rate bond has a short-term interest rate that readjusts periodically. Variable-rate bonds can reset daily, weekly, monthly, semi-annually, or yearly.

Source: Tigue, Patricia. Structuring and Sizing the Bond Issue: How to Develop an Optimal Financing Approach; and Kurish, J.B., and Patricia Tigue. *An Elected Official's Guide to Debt Issuance*.

1 In January 2007, ASU entered into a swap agreement for the $103 million in variable-rate debt. This agreement effectively changed the interest rate on the 2003 bonds from a variable rate to a fixed rate of 3.91 percent. An ASU official stated that the purpose of this swap is to reduce the risk of fluctuations in the variable interest rate.

2 In May 2005, the component unit (Pine Ridge Village/Campus Heights LLC) entered into a swap agreement for the $36 million 2005 variable-rate bond. The agreement effectively fixed the interest rate on the bonds at 3.16 percent.

past, but officials at UA stated that the decline in long-term interest rates in fiscal year 2007 was conducive to refinancing variable-rate debt into fixed-rated debt at a lower interest rate. Therefore, in February 2008, UA reported that it did not have any variable-rate debt. Officials from UA also commented that having fixed-rate debt provides more certainty for planning and budgeting because repayment obligations for fixed-rate debt are predetermined and do not fluctuate like variable-rate debt payments. Although NAU does not have variable-rate debt, an NAU component unit and ASU component unit both have variable-rate debt, all of which financed third-party projects at NAU and ASU.

- **Refinancing debt when appropriate**—Refinancing offers opportunities for savings on debt repayment costs. An institution refinances (or refunds) an outstanding bond or COP by issuing a new bond or COP (see textbox). The proceeds of the new issuance are either immediately used to repay the outstanding bond or COP, or the proceeds are placed in an account and invested in U.S. Treasury securities. The institution servicing the account uses the principal and interest from these investments to make principal and interest payments on the old bond or COP until it is paid off, or until the institution chooses to pay it off early. The purpose of most refinancing is to take advantage of interest rates that are lower than the rates on the existing debt. Federal tax law does not allow tax-exempt securities, such as the universities' individual bonds and COPS series, to be advance refinanced more than once. Because of the complexity of refinancing, literature suggests using the services of a financial advisor when looking for opportunities to refinance, and the universities all report doing this.

Refunding—When the proceeds of the sale of a new bond or COP are used to repay an outstanding issue. Essentially, the new bond or COP replaces an outstanding bond or COP.

Call—When an issuer pays the principal amount prior to the final maturity date. A bond typically has a "no call" date of 10 years.

Maturity date—The date at which the principal amount of the security becomes due and payable.

Current refunding—When the new refunding bond or COP is issued within 90 days of the outstanding debt's call or maturity date. The proceeds of the new debt are used to pay the old debt in full.

Advance refunding—When the new refunding bond or COP is issued more than 90 days before the first call date of the outstanding debt. The proceeds of the new bond or COP are generally invested in U.S. government securities and the principal and interest of these investments are used to pay the outstanding debt, usually on the first call date.

Source: Securities Industry and Financial Markets Association. "Glossary of Bond Terms"; King, George A., Richard E. Anderson, David M. Cyganowski, and Patrick J. Hennigan. *NACUBO Guide to Issuing and Managing Debt*; Joseph, James C. *Debt Issuance and Management: A Guide for Smaller Governments*; and Klein, Eva, and John H. Augustine. Debt Financing and Management. *College and University Business Administration, 6th Edition*.

Between fiscal years 2003 and 2007, the universities issued 5 refunding bonds and 20 refunding COPs.

The three universities have refinanced several individual bonds and COPs issuances to obtain lower interest rates and to achieve debt service savings. Between fiscal years 2003 and 2007, the universities issued 5 refunding bonds and 20 refunding COPs. The universities reported an economic gain of several million dollars through refinancing.[1] For example, during fiscal year 2007, ASU reported an economic gain of $2.3 million by issuing a refunding COP and NAU also reported an economic gain of $2.3 million from issuing a refunding revenue bond. That same year, UA reported a total economic gain of $2.1 million from 2 refunding COP issuances and also issued a COP to refund a variable-rate COP. Because the original COP had a variable interest rate, UA's savings or loss on

1 The economic gain is a calculation of the difference between the present values of the old debt and new debt service payments.

this refunding will depend on future fluctuations in interest rates. However, UA estimates the impact of this refunding will be somewhere between a $107,000 economic loss and a $3.3 million economic gain.

NAU and UA should have a debt management policy or formal guidelines

The only practice that was not being followed at all three universities was issuing and following a written debt management policy. UA and NAU need to take steps to put such a policy or formal guidelines in place.

Debt management policy is part of recommended practices—

Literature recommends that universities establish a debt management policy. A debt management policy provides overall context and general direction for an institution's use of debt. It establishes parameters for issuing and managing debt and provides guidance to university officials so the institution does not exceed acceptable debt levels. A consistently applied debt policy provides evidence to the rating agencies of the university's commitment to good borrowing practices. The literature recommends that a debt management policy include a number of key elements (see textbox). Debt management policies also need to have enough flexibility to allow staff to respond to unforeseen circumstances or new opportunities.

> **Suggested Elements of a Debt Management Policy**
>
> - Describe purposes for which debt may be issued
> - Review of affordability
> - Provide limitations on indebtedness
> - Provisions on the types of debt that may be issued
> - Structural features of debt
> - Method of sale
> - Role of financing team and method for selection
> - Guidance on refinancing
> - Disclosure practices and arbitrage compliance
> - Compliance with IRS regulations, including private use
> - Investment of bond proceeds
> - Use of variable-rate debt
> - Considerations for the debt maturity schedule
>
> Source: Tigue, Patricia. *A Guide for Preparing a Debt Policy*; Larkin, Richard, and James C. Joseph. Developing Formal Debt Policies. *Handbook of Debt Management;* and Van Gorden, Judy. *Debt Rules.*

UA's debt management policy still in draft form and NAU does not have a debt management policy—

The universities vary in the degree to which they have such a policy in place. ASU has formal debt management guidelines in place, and they contain all of the recommended elements. UA's debt management policy exists only in draft form. The draft contains nearly all the elements recommended by literature but does not include a provision for monitoring compliance with Internal Revenue Service (IRS) private use requirements. These requirements specify that no more than 10 percent of the proceeds from tax-exempt bond issuances may be used for private purposes. At the universities, private uses—defined by the IRS as the "trade or business of a nongovernmental person"—can include retail stores or restaurants operated by a private firm in campus buildings and conducting certain research on behalf of private industry in university laboratories. UA should add a provision for monitoring private use and then finalize and implement its draft debt management policy. In contrast to ASU and UA, NAU does not have a formal debt management policy. To better ensure continued good debt issuance and management, NAU should develop and implement a debt management policy or formal guidelines that include the elements suggested in literature.

Recommendations:

1. UA should include provisions for monitoring compliance with IRS private use requirements in its debt management policy, as recommended by literature, and then finalize and implement it.

2. NAU should develop and implement a debt management policy or formal guidelines that include the elements recommended in literature.

FINDING 3

Universities generally follow recommended practices in third-party projects

Arizona's universities generally apply recommended practices when they enter into arrangements with third-party entities (see Finding 1, pages 11 through 22, for more information on third-party arrangements). Such arrangements can include a variety of risks and liabilities, such as projects still affecting the universities' debt and potential confusion in roles and responsibilities. Professional literature recommends a number of practices to help protect against these risks and liabilities, and the universities generally follow them.

Third-party financing arrangements carry risks

Professional literature identifies risks associated with third-party arrangements, and auditors' review of university projects identified additional risks.

- **Projects can still affect the universities' debt capacity**—According to a 2006 Standard & Poor's article, depending on the link between the project and the institution, the debt from such a project can still affect a university's debt capacity, even though the debt may not necessarily be part of the university's balance sheet.[1] In some cases, the university may have a lease payment that it is required to report as a long-term liability on its financial statements. For example, as of June 30, 2007, Arizona's universities reported $135.5 million in principal associated with lease payments related to third-party financing arrangements. In addition, in 2002, the Governmental Accounting Standards Board issued Statement No. 39, which states that legally separate, tax-exempt entities that meet the criteria to be component units should be evaluated for inclusion in a governmental entity's financial statements. Accordingly, the universities' financial statements report the financial position of the universities' component units. However, even in cases where there are no lease payments, bond rating agencies might still evaluate this type of third-party financing

1 Jacobson, Jonathan, and Lori Torrey. "Standard and Poor's Commentary: Public Finance, Public-Private Partnerships Advance U.S. Higher Education Student Housing Projects." March 23, 2006. Standard & Poor's. August 13, 2007 <http://www.standardandpoors.com>.

arrangement because of its potential impact on a university's debt capacity. Specifically, rating agencies consider how likely it is that a university would allow the facility to fail, meaning that if the third party fails, they consider how likely it is that a university would take on the project's debt. This occurred with Arizona State University's (ASU) American Campus Communities' (ACC) projects. Even though ASU has no lease payments associated with the projects, a January 2008 Rating Update by Moody's Investors Service discussing the projects still considered whether ASU would probably take over the projects should either one fail. Moody's reported that based on the ACC projects' financing structure, it did not include the project development costs associated with the Barrett Honors College and Vista del Sol projects in its calculation of ASU's debt, and it also did not expect ASU to take steps to provide financial or other support to the projects or ACC. However, it also noted that if the projects encountered difficulties in the future, and should ASU provide financial support, it could later view these projects as part of ASU's debt.[1]

- **Third parties potentially have to pay higher interest rates than universities, leading to higher costs for students**—Third-party financing can be more expensive than university financing because of higher interest costs and higher issuance costs. In fact, literature states that developers may pay from 0.5 percent to 1 percent more in interest than what the university would pay. For projects such as student housing facilities, this usually translates into higher rent for the students.

- **Conflicting goals between developers and universities**—According to literature, the basic difference between the goals of third-party developers and universities is that developers want a quick return on their investment and universities take a long-term approach. This can be especially evident in the construction of high-performance buildings, such as research facilities, where universities expect high design quality and construction, and developers are interested in keeping costs as low as possible.

- **Confusion in definition of roles and responsibilities**—The involvement of multiple parties makes necessary the assignment of roles and responsibilities regarding such areas as design, development, construction, and operation of buildings. In these arrangements, one potential risk is that the various roles may not be clearly assigned.

- **Increase in the number of contracts and contract complexity**—As the number of parties involved in a project increases, so does the number of contracts. For example, the redevelopment of Phoenix Union High School for the University of Arizona (UA) College of Medicine—Phoenix in Partnership with ASU involved a contract for a building lease agreement, a development sublease, an

1 Moody's Investors Service. "Global Credit Research Rating Update: Arizona State University, AZ." January 31, 2008. Moody's Investors Service. February 11, 2008. <http://www.moodys.com>.

amendment to the development sublease, a development sub-sublease, and an amendment to the development sub-sublease. Also, the arrangement of the contracts and financing of the improvements for this project are complicated and hinge on tax credits obtained from the New Markets Tax Credit program instituted by the U.S. Department of the Treasury (see Finding 1, pages 18 through 19).

- **Lack of control in the development, design, construction, and operation of projects**—When involving a third party in a project, the university must be careful when relinquishing control over certain aspects of a project, such as design, construction, and operation. This occurred in UA's La Aldea student housing facility, which was constructed in 2003. UA entered into an agreement with a third-party developer who assumed responsibility for financing the project, constructing the facility, and managing and operating the building after completion of the project. However, according to a UA official, the third-party entity's operation of the facility did not meet the university's desired levels of occupancy or maintenance standards. In 2004, UA determined it was more feasible for the university's Residence Life Department to manage the apartment, and the university issued bonds to refinance and acquire the building from the third party. Initially UA was interested in using a developer to design, construct, and finance the project while managing and operating the facility through its Department of Residence Life. A UA official indicated that in response to a Request for Qualifications (RFQ), developers made strong cases for keeping the entire scope of design, construction, project financing, and operational services with the development team. According to the official, developers also showed that this was standard procedure and presented qualifications to successfully operate the facility. After agreeing upon clear contractual requirements, UA determined it would be in UA's best interest to place operational responsibility with the developer. In future arrangements the universities should ensure that third-party partners are capable and qualified to perform the necessary functions associated with a project.

Involving a third party in a project can cause the university to relinquish control over certain aspects of a project, such as design, construction, and operation.

Universities generally use recommended practices to protect against risks and liabilities of third-party arrangements

The universities have applied recommended practices and other protections identified from professional literature to many third-party projects. Because these types of projects are generally unique, recommended practices do not apply in all cases, and it is important to use experts when structuring the arrangements. In addition, professional literature identifies other recommended practices for third-party arrangements. Auditors conducted a detailed review of 9 of the universities' 18 third-party projects initiated between 2002 and 2007, including evaluating the

Third-party projects are generally unique and, as such, recommended practices do not apply in all cases; it is important to use experts when structuring arrangements.

process for procuring third parties, interviewing university officials, and reviewing contracts, feasibility studies, and other documents associated with the projects. In the review, auditors found that, depending on the project, the universities generally used recommended practices when appropriate to mitigate risk and protect their interests as well as the State's.

Third-party arrangements are unique and should use experts—Third-party projects are often unique in their structure and, as such, recommended practices from literature are not always necessary or applicable in all instances. In fact, literature indicates that projects should be handled on a case-by-case basis. Because of this, and because of the potential complexity of contract structure, the universities can benefit from using experienced and knowledgeable legal experts. These specialists can be university in-house legal counsel, industry experts in areas such as real estate, contract lawyers, or other professionals. For example, in structuring the Barrett Honors College and Vista del Sol projects performed in partnership with American Campus Communities, ASU used university staff from the Capital Programs Group, the Debt Management Department, General Counsel, and the University Architect Office. ASU also used external professionals including financial advisors, real estate attorneys, and a bond rating agency. In the 9 projects reviewed by auditors, the universities used experienced professionals and other experts in all instances.

Professional literature identifies additional recommended practices—In addition to the use of experts, auditors reviewed literature and found other recommended practices such as verifying qualifications of third-party partners, including a purchase option and maintenance requirements in project contracts, and conducting feasibility studies regarding the need and potential success of projects. Specifically:

Component units' goals are aligned with those of the university.

- **Complete financing through a component unit of the university**—Financing a project through a university foundation or other university component unit is viewed as a stronger, more stable approach than using a private developer. Although they are legally separate entities, component units' purposes, goals, and decisions are tightly aligned with those of the university. According to literature, projects financed through a component unit tend to have a stronger pledge of revenues, and if managed by the university, they fit seamlessly with existing facilities, even though ownership tends to reside with the external party. As Appendix, Table 5, page a-v, shows, between 2002 and 2007, ASU has financed eight projects and is planning to finance another one through a component unit, UA has financed one project, and Northern Arizona University (NAU) has completely financed two projects and partially financed one project through a component unit.

- **Verify qualifications of third parties**—It is important to verify the qualifications and capabilities of financers, developers, operators, and other third parties involved in a project. According to criteria published by the Texas A&M

University System Real Estate Office, in order for the developer to be able to perform satisfactorily under the terms of the contract, the developer must possess the financial capability, construction experience, operational management experience, and experience in implementing student life programs.[1] It is also important to evaluate third-party operators' abilities to ensure that they can successfully manage facilities.

Request for Proposal—Document that is used in soliciting proposals for professional services and construction services.

Request for Qualifications—Document that is used in soliciting statements of qualification used to determine the best qualified offeror based on evaluation factors set forth in the RFP.

Source: ABOR Policy Manual 3-803A.17, 3-803B.5, 3-803E.5, 3-803A.16, 3-804B.2

Verifying the qualifications and capabilities of third parties can be accomplished through the implementation of a procurement process for selecting partners who possess the necessary experience and expertise to successfully complete the project. Board policy has provisions for acquiring professional services through the use of RFQ and Request for Proposal (RFP) processes (see textbox). In all but two of the projects reviewed, the universities used a competitive RFQ/RFP process to select developers. The exceptions were the ASU Downtown Phoenix Campus and ASU's Fulton Center. For both of these projects, an ASU official stated that an RFP process was not necessary because the nature of each project determined the partner with whom ASU could perform the project. The official further added that ASU's Downtown Campus was an initiative of the City of Phoenix—the City wanted ASU to have a strong presence associated with the overall development of downtown Phoenix. The City contributed the land for the project, arranged the financing, and handled construction contracts. Similarly, the official stated that the ASU Foundation was the only entity the university would consider partnering with for a project such as the Fulton Center, which consists of shared space for ASU Foundation operations and ASU central administrative functions. Also, the ASU Foundation contributed a portion of the land on which the project was constructed.

- **Include purchase option**—Because executing these types of arrangements makes the universities susceptible to additional risks, including a buyout or purchase option in appropriate situations could allow the universities to avoid inheriting additional and unnecessary liabilities. Auditors' review of contracts for nine third-party projects found that the universities included purchase option provisions when appropriate. In these contracts, the purchase option specifies that the university has the right to prepay the remaining mortgage in an amount sufficient to pay or defease any bonds or other obligations of the lessee and acquire the project.

  In addition to the purchase option, literature recommends that the ground lease of a project should not exceed the anticipated life of the facility, the developer should not be allowed to leverage the property without prior written authorization from the university, and the buyout clause should require the purchase price to be based on fair market value.

1 Buchly, Dan K. "Suggested Criteria for Evaluation of Privatized Student Housing Proposals." November 2, 1998. System Real Estate Office, Texas A&M University System. August 17, 2007. <http://www.tamus.edu/offices/realestate/docs/AUREOLST.DOC>.

Because the universities often acquire facilities upon the termination of a lease, it is important to have minimum maintenance standards in contracts.

- **Ensure maintenance requirements**—Because universities will often acquire the building upon termination of a lease, establishing minimum maintenance requirements is an important consideration. In such arrangements, if minimum requirements are not established, the university could find itself assuming control of a building that has been maintained in a substandard manner and is in need of rehabilitation. According to literature, universities should identify those facilities or improvements that will need to be repaired or replaced during the life of the project. Also, the universities should reserve the right to inspect the property or hire an independent party to perform inspections. Of the nine projects reviewed, the original lease agreements assigned property management duties to third parties in six cases, and all six agreements included maintenance standards.

- **Conduct feasibility studies**—In order to assess the need for and potential success of a project, universities can conduct feasibility studies. According to criteria published by the Texas A&M University System Real Estate Office, in these studies the universities can use an impartial third party to look at factors such as the supply and demand analysis of the local market area, survey of similar properties, cost/benefit analysis to the university, and financial impact on the university's existing debt.[1] For example, NAU contracted for a feasibility study regarding the construction of a conference center in the City of Flagstaff. The results of the study confirmed the need for the facility and showed that the building was likely to achieve desired levels of utilization, and that it would produce a positive economic impact. Of the nine projects reviewed, all had feasibility studies performed to determine the potential success of the respective facility except for the ASU Downtown Phoenix Campus, ASU's Fulton Center, and UA's La Aldea student housing facility. According to an ASU official, a feasibility study was not necessary for either of the ASU projects. The official stated that from ASU's perspective, having $223 million of capital facilities provided to ASU by the City of Phoenix is unquestionably beneficial to ASU. With regard to the Fulton Center, the official stated that the project originated from the ASU Foundation's need for additional space. The Foundation wanted to build a new facility to house all of its operations, and it made sense to combine with ASU to construct a larger building where ASU could rent a portion for ASU central administrative functions. A UA official indicated that a feasibility study was not necessary for the La Aldea project since it originated as a result of UA's effort to replace an older graduate housing facility that experienced safety hazards and was not economically feasible to renovate. The official also stated that additional information needed to provide an understanding of needs, costs, rates, conditions, and challenges was obtained through a comprehensive series of questions included in the RFQ document and responded to by proposing development teams. Of the six projects that had studies performed, four used an independent party to perform the study and two had studies performed by the developer.

1 Buchly, Dan K. "Suggested Criteria for Evaluation of Privatized Student Housing Proposals." November 2,1998. System Real Estate Office, Texas A&M University System. August 17, 2007. <http://www.tamus.edu/offices/realestate/docs/AUREOLST.DOC>.

- **Update policies and statutes**—Because third-party arrangements are relatively new, policies and statutes have been updated to provide appropriate guidance. Both the Arizona Board of Regents (Board) and the Legislature have addressed third-party agreements. Specifically, board policies show that all capital projects with an estimated total project cost of $2 million or more shall be brought to the Board's Capital Committee and the Board for approval regardless of funding source or financing structure. Further, in 2006, the Legislature approved A.R.S. §15-1682.02 to require projects secured by indirect or third-party financing to be reviewed by the Joint Committee on Capital Review (JCCR), similar to requirements set forth in A.R.S. §15-1683 for bond-financed projects and in A.R.S. §15-1682.01 for lease purchases. Finally, in its Strategic Program Area Review report released in December 2007, in addition to recommending that the State could benefit from an independent third-party review of debt-related financial transactions that come before the JCCR, the Joint Legislative Budget Committee also noted that an external reviewer might provide greater clarity as to the feasibility of using third parties to finance capital projects.

OTHER PERTINENT INFORMATION

As part of the audit, auditors gathered other pertinent information regarding how the universities pay for building renewal.

Building renewal refers to the State's budgeting process for preserving its capital assets. A.R.S. §41-790 defines building renewal as "major activities that involve the repair or reworking of a building and the supporting infrastructure that will result in maintaining a building's expected useful life." According to statute, building renewal does not include new building or infrastructure additions, landscaping and area beautification, routine maintenance, or demolition and removal of a building.

Universities follow the State's process for requesting building renewal monies

Arizona statute establishes the budget process for addressing building renewal needs in the State's building systems.[1] A.R.S. §41-793 requires each building system to compute its building renewal needs and request state appropriations through annual capital improvement plans. The requests are based on a uniform funding formula approved by the Joint Committee on Capitol Review (JCCR), as required in A.R.S. §41-793.01. The formula is a modified version of the Sherman-Dergis formula developed in 1981 by Douglas R. Sherman and William A. Dergis of the University of Michigan. Based on a 50-year building life cycle, the formula takes into account the replacement value and the age of each building in the system. Age may be adjusted for prior building renovations.

Arizona statute establishes the budget process for addressing building renewal needs in the State's building systems.

The State's building renewal funding formula = (replacement value x .667) x (age/1275).

Although statute defines building renewal and establishes the budget request process, session laws that appropriate building renewal monies may impose additional restrictions or requirements on how state agencies, including the universities, use them. For example, since 1995, these laws have stipulated that up to 25 percent of appropriated monies may be used for projects that ensure compliance with the federal Americans with Disabilities Act or, since 1997, for supporting infrastructure projects. Session laws since 2006 have also stated that any

1 A.R.S. §41-790 defines a building system as a group of buildings that constitute a single unit for planning, land acquisition, construction, or building renewal. A.R.S. §41-793 identifies three building systems in the State of Arizona: the Department of Administration, the Department of Transportation, and the Arizona Board of Regents (the universities).

monies unexpended or unencumbered within 1 year of the end of the fiscal year for which they were appropriated will revert to the state fund from which they were appropriated.

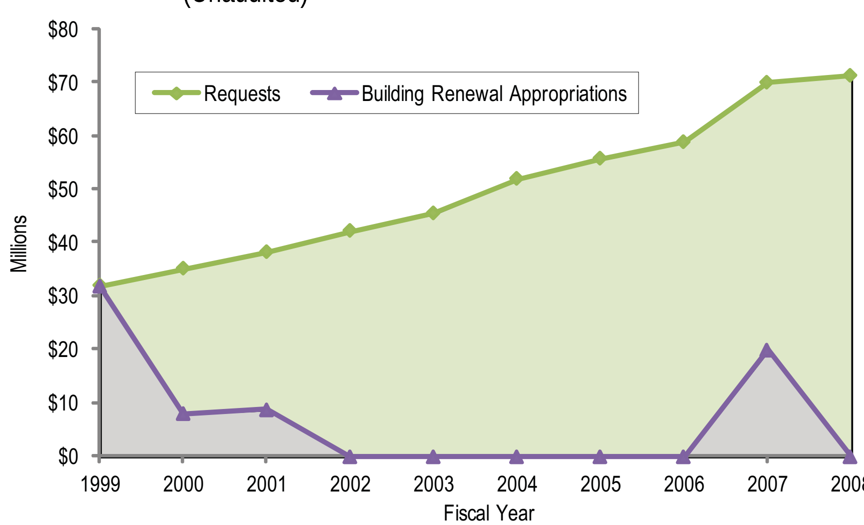
As part of the Arizona Board of Regents' (Board) building system, each university calculates its annual building renewal request and submits the request to the Board through its capital improvement plan. The universities are required to use the Board's guidelines and other instructions for estimating building replacement values and applying the formula. According to the Board's instructions, auxiliary enterprise facilities and leased space are not eligible for building renewal monies and are excluded from the calculations.[1] For facilities that have a mix of auxiliary and nonauxiliary space, the universities base the calculations on the facilities' nonauxiliary portions. The Board reviews the capital improvement plans and forwards the plans to the Governor's Office of Strategic Planning and Budgeting. Building renewal appropriations to the Board come from the State General Fund. The Board allocates appropriated monies to the universities in proportion to their requests.

State has not fully funded building renewal requests

Between fiscal years 1999 and 2008, the universities have received approximately 14 percent of their total building renewal appropriations requests.

Because of competition for General Fund monies, the universities have rarely received 100 percent funding of their building renewal requests. According to Joint Legislative Budget Committee (JLBC) staff, the universities have only received the full formula amount once, in fiscal year 1999, since the JCCR adopted the formula in 1986. Between fiscal years 1999 and 2008, the universities have received approximately 14 percent of their total requests, as shown in Figure 1. During this 10-

Figure 1: Comparison of the Universities' Building Renewal Requests And Building Renewal Appropriations Fiscal Years 1999 through 2008 (Unaudited)



Source: Auditor General staff analysis of information reported on the JLBC Web site: Joint Legislative Budget Committee. *Building Renewal Funding History*. Phoenix, AZ: Joint Legislative Budget Committee, 2007.

1 Auxiliary enterprises are essentially self-supporting activities such as bookstores, intercollegiate athletics, residence halls, and parking.

year period, the universities requested over $502 million, but received approximately $69 million—a difference of $433 million. For 6 of these years, the universities received no funding at all.

Universities have relied on debt to address some building renewal needs

Because of limited building renewal appropriations, the universities have used debt proceeds from revenue bonds and certificates of participation to address some of their building renewal needs. The universities reported that they allocated nearly $94.3 million in debt proceeds between fiscal years 2003 and 2007 for building renewal projects that were eligible for state funding. The debt includes more than $79 million in revenue bond proceeds and more than $15 million in certificate of participation proceeds, as shown in Table 2. Arizona State University (ASU) has used bond proceeds, while the University of Arizona (UA) and Northern Arizona University (NAU) have used bond and certificate of participation proceeds. The universities used debt for various renovation, repair, maintenance, system replacement, and life safety projects across their campuses. For example, UA used bond proceeds to install fire systems and upgrade elevators and electrical systems. The universities have also used local monies to address some building renewal needs. These local monies can include tuition, gifts, auxiliary revenues, and indirect costs.

Table 2: Portion of Revenue Bonds and Certificates of Participation (COPs) Allocated for Building Renewal Projects
Fiscal Years 2003 through 2007[1]
(In Millions)
(Unaudited)

University	Bonds	COPs	Total
ASU	$44.1		$44.1
UA	27.8	$ 12.2	40.0
NAU	7.2	3.0	10.2
Total	$79.1	$15.2	$94.3

1 This table includes only those revenue bonds and COPs issued during fiscal years 2003 through 2007.

Source: Auditor General staff analysis of information provided by the universities regarding the portion of revenue bonds and certificates of participation proceeds allocated to building renewal projects.

Insufficient building renewal funding has contributed to deferred maintenance

Despite using debt and local monies, the universities have substantial unmet building renewal needs. According to university officials, insufficient building renewal funding has contributed to a backlog of deferred maintenance. As of June 30, 2007, the universities reported an estimated $419 million in outstanding deferred maintenance for academic and support facilities (see textbox, page 40).[1]

Deferred maintenance—facility condition deficiencies identified through physical inspections where deterioration and/or life safety concerns are evident and affect the proper functioning of the facility. Deferred maintenance does not include routine maintenance needs.

Source: Arizona Board of Regents' Policy.

1 Deferred maintenance estimates include the cost of labor, materials, and indirect expenses such as architectural services. They do not include routine maintenance needs, although failure to adequately fund routine maintenance may add to the deferred maintenance backlog.

Deferred Maintenance Estimates for Academic and Support Facilities (As of June 30, 2007) (Unaudited)

ASU	$226 million
UA	$ 60 million
NAU	$133 million
Total	$419 million

Source: Auditor General staff analysis of deferred maintenance data reported in the universities' fiscal years 2009-2011 capital improvement plans.

Typical deferred maintenance issues include deficiencies in heating, ventilation, and air conditioning components; roofs, flooring, walls, and ceilings; and lighting, electrical, and plumbing systems. For example, NAU's Babbitt Academic Annex has several broken and boarded-up windows (see Photo 5), and exterior walls in the Capital Assets Building are cracked and crumbling (see Photo 6). UA's Centennial Hall, built in 1936, still uses its original water lines, which have deteriorated and require frequent repairs (see Photos 7 and 8). Frequent water leaks have damaged parts of the ceiling in the building (see Photos 9 and 10). According to university officials, the longer maintenance is deferred, the more expensive it becomes to address because of additional wear and rising construction costs.

Photo 5: Broken and boarded-up windows at NAU's Babbitt Academic Annex

Source: Arizona Office of the Auditor General.

Photo 6: Cracked and crumbling exterior walls at NAU's Capital Assets Building

Source: Courtesy of NAU.

Photo 7: Deteriorated water lines at UA's Centennial Hall

Source: Courtesy of UA.

Photo 8: Repaired water lines at UA's Centennial Hall

Source: Courtesy of UA.

Photo 9: Water damage to a ceiling at UA's Centennial Hall

Source: Courtesy of UA.

Photo 10: Water damage to a ceiling at UA's Centennial Hall

Source: Courtesy of UA.

According to university officials, the universities identify deferred maintenance through annual inspections, performance of routine maintenance, input from building users, or other means. A.R.S. §41-793(E) requires building systems to assess the condition, maintenance, and utilization of each building at least once every 4 years. ASU and NAU inspect approximately 25 percent of their buildings each year to comply with this statute. However, UA discontinued its inspection program in fiscal year 2003 because of budget shortfalls. In lieu of annual inspections, UA uses a computer model to estimate deferred maintenance by subtracting known improvements from previous inspection data and adjusting the remainder for cost escalation and wear.

A.R.S. §41-793(E) requires the universities to assess the condition, maintenance, and utilization of each building at least once every 4 years.

In light of their outstanding deferred maintenance, the universities must prioritize their building renewal needs. According to university officials, facilities management/capital assets personnel recommend building renewal projects and priorities, which senior management subsequently reviews and approves or modifies. According to university officials, life safety is the most important criteria in prioritizing projects. However, university officials also consider other criteria, including economic loss, alignment with strategic plans and initiatives, research needs, facility conditions, and the potential for a building to be shut down. Even though the universities prioritize projects, because of limited building renewal monies, some needs may not be immediately addressed, which can increase the long-term costs of deferred maintenance or contribute to life safety issues. For example:

- In December 2007, a water pipe in NAU's Physical Sciences Building burst because of fatigue. The burst caused flood damage to a second-floor classroom and several first-floor offices, and displaced classes and faculty during final exam week. In addition to inconveniencing faculty and students, the repairs cost $7,749, according to a university official.

- ASU officials said a lack of funding had prevented ASU from installing fire sprinklers throughout its Memorial Union, which was damaged by a fire in November 2007 (see Photos 11 and 12). According to a university official, not all of ASU's buildings have fire sprinklers, and the university installed them in the residence halls first. In 2002, ASU planned to use debt proceeds to renovate the Memorial Union, which included upgrading the fire alarm/sprinkler system throughout the building, but the project was limited to the food court/restaurant

Photo 11: Damage caused by the November 2007 fire at ASU's Memorial Union

Source: Courtesy of ASU.

Photo 12: Damage caused by the November 2007 fire at ASU's Memorial Union

Source: Courtesy of ASU.

area of the first floor when the student fee that was to repay the debt did not pass a student referendum. ASU allocated some of its 2007 building renewal appropriation—the only appropriation since 2001—for installing additional sprinklers in the Memorial Union. According to ASU officials, the project was in the design stage at the time of the fire and was to be completed in December 2007. ASU reports that the total cost to repair and renovate the facility since the fire will not exceed $53 million. ASU anticipates using $40 million in estimated insurance reimbursements and $13 million in bond proceeds to pay for the project. In addition, an ASU official reported an estimated $1.5 million revenue loss from business interruption because of the fire.

The backlog of deferred maintenance is not unique to Arizona.

The backlog of deferred maintenance is not unique to Arizona. A 1995 survey conducted by APPA, the National Association of College and University Business Officers (NACUBO), and Sallie Mae reported a backlog of at least $26 billion in deferred maintenance in U.S. higher education facilities, $5.7 billion of which was for urgent needs.[1] More recent research indicates that deferred maintenance continues to be a significant issue in universities across the nation.[2]

1 Kaiser, Harvey H., and Jerry S. Davis. *A Foundation to Uphold: A Study of Facilities Conditions at U.S. Colleges and Universities*. Alexandria, VA: APPA, The Association of Higher Education Facilities Officers, 1996.

2 Manns, Derrick A., and Stephen G. Katsinas. Capital Budgeting Practices in Public Higher Education. *Facilities Manager* 22, No. 1 (January/February 2006): 36-42.

APPENDIX

Table 3: University Capital Projects with Approved Budgets of at Least $10 Million And Which Had Expenditures between July 1, 2004 and June 30, 2007[1] (Unaudited)

Project Name	Description	Status As of March 2008	Primary Funding	Approved Budget
ASU Downtown Phoenix				
Cronkite/KAET Downtown Furniture, Fixtures, and Equipment	Academic building	Procurement	Local monies[2]	$ 15,000,000
ASU Polytechnic				
Interdisciplinary Science and Technology Building III	Research building	Completed	COPs[3]	$ 12,000,000
Polytechnic Academic Complex	Academic building	Construction	COPs	$103,000,000
ASU Tempe				
ASU Police Department Facility	ASU Police building	Completed	Revenue bonds	$ 12,500,000
Biodesign Institute Building A	Research building	Completed	Revenue bonds	$ 72,800,000
Biodesign Institute Building B	Research building	Completed	COPs	$ 78,500,000
Hassayampa Academic Village	Residential and academic buildings	Completed	Component unit revenue bonds	$131,729,190
Interdisciplinary Science and Technology Building I	Research building	Completed	COPs	$ 74,000,000
Interdisciplinary Science and Technology Building II	Research building	Completed	COPs	$ 18,000,000
Interdisciplinary Science and Technology Building IV	Research building	Planning	Revenue bonds	$185,000,000
Lattie F. Coor Hall	Academic building	Completed	Revenue bonds	$ 58,700,000
Parking Structure VII	Parking structure	Completed	Revenue bonds	$ 16,300,000
Sun Devil Stadium Upgrades Phase I	Stadium renovations	Completed	Local monies	$ 10,000,000
University Services Building	Support building	Completed	COPs	$ 11,200,000
ASU West				
Classroom Laboratory/Computer Classroom (CLCC) II Building	Academic building	Completed	COPs	$ 20,855,000
Phoenix Biomedical Campus				
Arizona Biomedical Collaborative Building 1[4]	Research building	Completed	COPs	$ 30,200,000
UA				
Chemistry Building Expansion	Research building	Completed	COPs	$ 46,100,000
Family and Consumer Sciences Building	Academic building	Construction	Gifts and other	$ 22,000,000
Finish Shell Space Phase II	Various shell space projects	Completed	COPs and federal monies	$ 13,100,000
Highland Avenue Parking Structure	Parking structure	Completed	COPs and local monies	$ 18,000,000
Highland Commons	Health services building	Completed	COPs and local monies	$ 19,130,000
Highland District Residence Hall	Residential buildings	Completed	COPs	$ 39,700,000
Infrastructure Phase VI	Infrastructure upgrades	Completed	COPs and gifts	$ 30,800,000
Intercollegiate Athletics Facility Additions and Renovations	Athletics facility additions and renovations	Construction	Revenue bonds and gifts	$ 20,000,000
Law Commons	Academic building	Construction	Revenue bonds and gifts	$ 21,000,000
Medical Research Building	Research building	Completed	COPs	$ 54,350,000
Meinel Optical Sciences Building Expansion	Research building	Completed	COPs	$ 17,200,000

Table 3: University Capital Projects with Approved Budgets of at Least $10 Million And Which Had Expenditures between July 1, 2004 and June 30, 2007[1] (Unaudited) (Concluded)

Project Name	Description	Status As of March 2008	Primary Funding	Approved Budget
UA (cont'd)				
Residence Life Building Renewal Phase III	Residential building renewal	Planning	Revenue bonds	$ 17,700,000
Roy P. Drachman Hall	Academic building	Completed	Revenue bonds and gifts	$ 30,000,000
Sixth Street Parking Garage and Office Building	Parking structure and office building	Completed	COPs and local monies	$ 18,500,000
Sixth Street Residence Halls	Residential buildings	Planning	Revenue bonds	$158,000,000
Student Recreation Center Expansion	Recreation center expansion	Planning	Revenue bonds	$ 27,559,000
Thomas W. Keating Bioresearch Building	Research building	Completed	COPs, federal monies, and gifts	$ 65,652,000
UA Science Center and Arizona State Museum	Science center and museum	Planning	City of Tucson tax increment financing	$130,000,000
NAU				
Applied Research and Development Facility	Research building	Completed	COPs	$ 25,575,000
Campus Infrastructure Upgrades	Infrastructure upgrades	Completed	Revenue bonds	$ 17,600,000
College of Engineering and Natural Sciences Renovations	Research building renovations	Completed	COPs	$ 16,500,000
Communications Building Renovations	Academic building renovations	Completed	Revenue bonds	$ 15,060,065
High Country Conference Center Complex	Conference center, hotel, and parking structure	Construction	Component unit revenue bonds, gifts, and local monies	$ 20,034,850
New College of Business Administration	Academic building	Completed	Revenue bonds	$ 24,075,000
New Laboratory Facility	Research building	Completed	COPs	$ 37,325,000
New Parking Structure (P-14)	Parking structure	Completed	Revenue bonds	$ 15,000,000
New Residence Hall	Residential building	Construction	Revenue bonds and local monies	$ 30,399,448
New Residence Hall-McKay Village	Residential buildings	Completed	Component unit revenue bonds	$ 30,000,000

1 The information presented in this table is current as of March 31, 2008.

2 Local monies are university monies which can include tuition, gifts, auxiliary, revenues, and other sources.

3 Certificates of participation (COPs) are a form of lease-purchase financing.

4 Arizona Biomedical Collaborative Building 1 was a joint ASU-UA project. The universities funded their portions through separate COPs. ASU's portion of the project budget was $13 million and UA's portion was $17.2 million.

Source: Auditor General staff compilation and analysis of information from the universities' 2007-2009, 2008-2010, and 2009-2011 capital improvement plans, which report capital project expenditures for fiscal years 2005 through 2007; the universities' quarterly capital project status reports for fiscal years 2005 through 2007; the universities' capital project databases; the fiscal year 2008 Joint Legislative Budget Committee appropriations report; and other sources, as well as input from university officials and staff.

Table 4: Debt Service Requirements to Maturity for Revenue Bonds And Certificates of Participation[1]
As of June 30, 2007
(In Thousands)

		Revenue Bonds			Certificates of Participation		
University	**Fiscal Year**	**Principal**	**Interest**	**Total**	**Principal**	**Interest**	**Total**
ASU	2008	$ 17,125	$ 21,339	$ 38,464	$ 15,745	$ 14,776	$ 30,521
	2009	19,135	18,958	38,093	14,825	14,263	29,088
	2010	21,555	17,909	39,464	15,300	13,641	28,941
	2011	22,705	16,832	39,537	10,420	13,243	23,663
	2012	23,895	15,726	39,621	10,375	12,854	23,229
	2013-17	129,545	60,082	189,627	59,390	56,200	115,590
	2018-22	75,225	37,104	112,329	75,265	39,668	114,933
	2023-27	68,845	21,148	89,993	74,145	20,738	94,883
	2028-32	41,550	9,003	50,553	52,370	4,393	56,763
	2033-37	29,405	1,660	31,065			
	Total	448,985	219,761	668,746	327,835	189,776	517,611
UA	2008	21,130	14,763	35,893	13,470	24,385	37,855
	2009	22,310	13,599	35,909	14,060	23,434	37,494
	2010	23,385	12,498	35,883	14,625	22,800	37,425
	2011	24,245	11,353	35,598	15,705	22,180	37,885
	2012	12,365	10,139	22,504	21,852	21,913	43,765
	2013-17	78,330	38,791	117,121	129,499	92,421	221,920
	2018-22	55,925	20,873	76,798	164,546	57,234	221,780
	2023-27	32,710	10,345	43,055	89,450	23,702	113,152
	2028-32	24,050	3,793	27,843	53,800	6,349	60,149
	2033-34	2,565	194	2,759			
	Total	297,015	136,348	433,363	517,007	294,418	811,425
NAU	2008	9,610	5,642	15,252	2,255	3,995	6,250
	2009	4,770	5,287	10,057	2,325	3,923	6,248
	2010	4,880	5,042	9,922	2,390	3,847	6,237
	2011	5,085	4,793	9,878	2,480	3,764	6,244
	2012	5,300	4,602	9,902	2,575	3,666	6,241
	2013-17	30,270	19,040	49,310	14,490	16,672	31,162
	2018-22	14,675	13,321	27,996	18,035	13,043	31,078
	2023-27	16,160	9,581	25,741	22,945	8,028	30,973
	2028-32	18,600	5,628	24,228	22,790	1,919	24,709
	2033-37	10,770	1,599	12,369			
	2038-40	2,445	244	2,689			
	Total	122,565	74,779	197,344	90,285	58,857	149,142
University System Totals	2008	47,865	41,744	89,609	31,470	43,156	74,626
	2009	46,215	37,844	84,059	31,210	41,620	72,830
	2010	49,820	35,449	85,269	32,315	40,288	72,603
	2011	52,035	32,978	85,013	28,605	39,187	67,792
	2012	41,560	30,467	72,027	34,802	38,433	73,235
	2013-17	238,145	117,913	356,058	203,379	165,293	368,672
	2018-22	145,825	71,298	217,123	257,846	109,945	367,791
	2023-27	117,715	41,074	158,789	186,540	52,468	239,008
	2028-32	84,200	18,424	102,624	128,960	12,661	141,621
	2033-37	42,740	3,453	46,193			
	2038-40	2,445	244	2,689			
	Total	$868,565	$430,888	$1,299,453	$935,127	$543,051	$1,478,178

1 Includes debt service requirements of revenue bonds and certificates of participation that were issued to advance refund other debt. The debt service requirements for the refunded debt are not presented in this schedule.

Source: Auditor General staff analysis of the ASU, UA, and NAU audited financial statements for fiscal year 2007.

Table 5: Universities' Third-Party Capital Finance Arrangements 2002 through 2007

	Capital Project	Description	Partners
Nonprofit Corporation Financing			
ASU Downtown Phoenix	Taylor Place	Student housing	Downtown Phoenix Student Housing, LLC and Capstone Development Corporation
ASU Tempe	Adelphi II Hassayampa Academic Village	Student housing	Arizona Capital Facilities Finance Corporation (ACFFC)
	Energy Management Services Heat and Power Facility	Utilities projects	ACFFC and Northwind, a subsidiary of Arizona Public Service (APS) Energy Services
	ASU Foundation Brickyard ASU Fulton Center+	Real estate projects located in downtown Tempe primarily for ASU academic and administrative purposes	ASU Foundation
ASU Polytechnic	Polytechnic Central Plant[1]	Utilities projects	ACFFC and APS Energy Services
ASU Research Park	Flexible Display Center	Research Facility	ACFFC, sole source purchase from Motorola
ASU West	Las Casas+	Student housing	ACFFC
NAU	Pine Ridge Village+ McKay Village	Student housing	Northern Arizona Capital Facilities Finance Corporation (NACFFC)
UA	La Aldea+	Student housing	Southern Arizona Capital Facility Finance Corporation
University/Government Financing			
ASU Downtown Phoenix	Relocation of several major ASU Tempe academic programs to downtown Phoenix, which involves both new construction and other capital improvements financed by City of Phoenix general obligation bonds+	Relocation of the College of Nursing and Health Care Innovations and College of Public Programs occurred in 2006; the Walter Cronkite School of Journalism and Mass Communication and KAET/Eight public television station are scheduled to relocate in 2008	City of Phoenix
University/For-Profit Corporation Financing			
ASU Tempe	ASU Barrett Honors College+	Mixed-use academic, classroom, student housing, and retail space	American Campus Communities
	Vista del Sol+	Mixed-use student housing and retail space	
University/Government/Private Sector Financing			
NAU	High Country Conference Center+	Private hotel, conference center, and parking garage located on Flagstaff campus	NACFFC, City of Flagstaff, Drury Hotels, and Sodexho Conferencing
UA	UA College of Medicine—Phoenix in partnership with ASU+	Redevelopment of historic Phoenix Union High School using federal New Markets Tax Credits	City of Phoenix, Phoenix Bioscience Development Company, LLC, The DESCO Group, Inc., and DAZ 4-PUHS, LLC (managed by the DESCO Group, Inc.)

1 As of June 30, 2007, ACFFC had not yet issued revenue bonds to finance this project.

+Included in auditors' judgmental sample for in-depth review.

Source: Auditor General staff analysis of the universities' responses to the Joint Legislative Budget Committee's April 2007 information request for its Strategic Program Area Review on debt and third-party financing, university financial reports, and other university-provided documentation.

Table 6: Universities' Bond Ratings and Bond Rating Definitions
As of July 2007

	Moody's Investors Service[1]	Standard & Poor's[1]
Universities' Bond Ratings		
Arizona State University	Aa3	AA
University of Arizona	Aa3	AA
Northern Arizona University	A2	A+
Bond Rating Definitions for Investment Grade Debt		
Highest rating assigned, minimal credit risk.	Aaa	AAA
Very strong rating with very low credit risk.	Aa	AA
Upper-medium grade obligation. Slightly more susceptible to adverse financial and economic developments. Low credit risk.	A	A
Adequate capacity to secure debt. Adverse financial and economic developments more likely to affect ability to meet obligation. Medium-grade obligation with moderate credit risk.	Baa	BBB

1 Moody's adds numerical modifiers 1, 2, and 3 to rating classifications to indicate relative standing within rating categories. Standard & Poor's adds a plus (+) or minus (-) sign to indicate relative standing within rating categories.

Source: Universities' bond ratings: Moody's Investors Service, *Special Comment: Public College and University Medians 2007*; Standard & Poor's, *Public Finance: Arizona Board of Regents, Arizona State University*; Standard & Poor's, *Ratings Direct: Northern Arizona University*; and, Standard & Poor's, *Ratings Direct: University of Arizona*. Bond rating definitions: Auditor General staff analysis of Moody's Investors Service, *Moody's Rating Symbols & Definitions;* Standard & Poor's, *Standard & Poor's Public Finance Criteria 2007*; and, Joseph, James C., *Debt Issuance and Management: A Guide for Smaller Governments*.

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AGENCY RESPONSE

ARIZONA STATE UNIVERSITY

May 19, 2008

Debbie Davenport
Auditor General
Office of the Auditor General
2910 North 44th Street, Suite 410
Phoenix, AZ 85018

Dear Ms. Davenport:

On behalf of Arizona State University (ASU), we acknowledge receipt of your performance audit for ASU on Capital Project Financing. We are most pleased with your report and conclusions that ASU is following nationally recommended practices and that there are no recommendations for ASU. My staff and I wish to thank you and your staff for the professional manner in which this audit was performed.

Sincerely,

Michael M. Crow
President

MMC:dq
/c

c: Carol Campbell, Executive Vice President and CFO
Gerald Snyder, Associate Vice President for Finance and Treasurer

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May 27, 2008

Debra K. Davenport, CPA
Auditor General
Office of the Auditor General
2910 North 44th Street, Suite 410
Phoenix, Arizona 85018

Re: The University of Arizona – Capital Project Financing

Dear Ms. Davenport:

Please find a formal response from The University of Arizona to the recommendation offered in the revised preliminary report draft on capital project financing at the three state universities.

For that recommendation, the finding of the Auditor General is agreed to and the audit recommendation will be implemented.

Best regards,

Robert N. Shelton
President

RNS/fr
Enclosures

c: Joel D. Valdez, Senior Vice President for Business Affairs
Floyd Roman, Assistant Comptroller

University of Arizona
Capital Project Financing

Finding #1 Recommendation:

The University of Arizona should include provisions for monitoring compliance with IRS private use requirements in its debt management policy, as recommended by literature, and then finalize and implement it.

Response:

The finding of the Auditor General is agreed to and the audit recommendation will be implemented. The University's buildings and facilities are primarily utilized for student services, administration, teaching and basic research. In order to ensure compliance with IRS regulations on private use of buildings and facilities financed by tax exempt bonds, the Financial Services Office will coordinate with the Office of the Vice President for Research, Office of Technology Transfer, and Real Estate Administration to develop a system for monitoring any private use of those buildings and facilities. The system, once completed will be incorporated into the University debt management policy. The University anticipates finalizing its debt policy including provisions for monitoring IRS private use regulations by December 31, 2008.

NORTHERN
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UNIVERSITY

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May 22, 2008

Ms. Debra Davenport
Auditor General
State of Arizona
2910 North 44th Street, Suite 410
Phoenix, AZ 85018

Dear Ms. Davenport:

We have received the Auditor General's report on capital project financing at the three state universities. Northern Arizona University has no significant issues or concerns with the report.

Attached is Northern Arizona University's response. We have agreed to implement your recommendation.

Sincerely,

John D. Haeger
President

Northern Arizona University
Auditor General's Performance Audit
Capital Project Financing
May 2008

Finding 2: Universities follow good debt management practices

Recommendation:
NAU should develop and implement a debt management policy or formal guidelines that include the elements recommended in literature.

Response:
The finding of the Auditor General is agreed to and the audit recommendation will be implemented. A policy is currently being drafted. It will be presented to university leadership for review and comment by July 2008 and implemented during Fall Semester 2008.

Arizona Board of Regents
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Arizona State University *Northern Arizona University* *University of Arizona*

May 23, 2008

Ms. Debra Davenport, Auditor General
State of Arizona
2910 North 44th Street, Suite 410
Phoenix, AZ 85018

Dear Ms. Davenport:

Thank you for the opportunity to comment on the performance audit of capital project financing at the three state universities.

We appreciate the efforts of your audit team in developing their understanding of the university capital process and conducting this outside review. The experience has been helpful to us as we continue to look for ways to improve our processes.

We believe the report will be a useful reference document on the status, practices and oversight of the financing component of the university capital development process. In particular, we appreciate the findings related to debt management and third-party financing practices, as well as the building renewal funding history.

While the report did not have any recommendations for the Arizona Board of Regents, we will work with the universities to address the recommendations related to debt management policies and guidelines.

Thank you again for the opportunity to comment.

Sincerely,

Joel Sideman
Executive Director

c:
Regent Fred Boice
Sandra Woodley
Lorenzo Martinez
Rick Gfeller

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