

STATE OF ARIZONA

Joint Legislative Budget Committee

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JOINT JLBC/JCCR SUBCOMMITTEE ON PHOENIX MEDICAL CAMPUS

Thursday, September 15, 2005

1:00 p.m.

House Hearing Room 4

MEETING NOTICE

- Call to Order
- 1. [ARIZONA BOARD OF REGENTS – Possible Recommendations to the Joint Legislative Budget Committee Concerning its Review of the University of Arizona - Phoenix Medical Campus.](#)
- 2. Public Testimony/Committee Questions

MEMBERS:

Representative Russell Pearce, Chairman
Representative Pamela Gorman
Representative Phil Lopes

Senator Bob Burns, Chairman
Senator Robert Cannell
Senator Karen Johnson

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

09/09/05

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DATE: September 12, 2005

TO: Senator Bob Burns, Chairman and Representative Russell Pearce, Chairman
Members, Joint JLBC/JCCR Subcommittee on Phoenix Medical Campus

THRU: Richard Stavneak, Director

FROM: Shelli Carol, Fiscal Analyst

SUBJECT: Arizona Board of Regents – Possible Recommendations on Phoenix Medical Campus

Summary

The FY 2006 Higher Education Budget Reconciliation Bill (Laws 2005, Chapter 330) directs the University of Arizona (UA), based in Tucson, to establish a medical campus of its Health Sciences Center (AHSC) at the former site of Phoenix Union High School (PUHS). To support the Phoenix Medical Campus (PMC), Chapter 330 appropriates \$6 million from the General Fund to AHSC, as well as \$1 million from the General Fund to create the Arizona State University (ASU) Department of Biomedical Informatics. Of the \$7 million appropriation for the new campus, Chapter 330 provided only \$3.5 million on July 1, 2005. The remaining \$3.5 million will become available upon Joint Legislative Budget Committee (JLBC) review of the PMC plans, but no later than October 5, 2005.

At its July 2005 meeting, the JLBC received an initial report on PMC and generated preliminary questions. Pursuant to Chapter 330, the Arizona Board of Regents (ABOR) submitted for Committee review detailed operational and capital plans for PMC, including 20-year budget projections, on September 1. ABOR also submitted answers to the preliminary questions on September 7. *(To receive additional copies of these submissions, please contact JLBC Staff.)*

This agenda item provides a summary allowing the Joint Subcommittee to conduct more scrutiny of the plan details than is possible during a regular Committee meeting. Joint Subcommittee deliberations do not constitute review, but will be reported to the full JLBC prior to its statutorily required review on September 28.

The highlights of the current PMC plan are as follows:

- Chapter 330 limited PMC to one class of 24 students, at an annual operating expense of \$7 million. UA will use \$2.9 million to purchase equipment, \$1.9 million to hire PMC faculty, and \$1.2 million to fund staff and operational expenses, while ASU will use the remaining \$1 million to hire faculty and staff for its Department of Biomedical Informatics. UA budgeted faculty and staff salaries for a full year, although it is unclear that all personnel were in place at the beginning of FY 2006. Therefore, part of the appropriation may remain unused at the end of the fiscal year.

(Continued)

- The first class will begin in fall 2007, housed in 90,000 square feet of 3 renovated buildings on a 4.8 acre campus. UA will finance the \$19 million renovations through lease payments of \$1.5 million per year, of which the Chapter 330 General Fund appropriation will pay \$1.0 million.
- The universities continue to hope for Legislative support to expand PMC, explaining that private support would not precede state support. By FY 2009, the universities propose housing 128 medical students, 204 science graduate students, and 30 bioinformatics students at a General Fund cost of \$15.5 million. By FY 2025, the universities plan for 680 medical students, 1,660 science students, and 140 bioinformatics students at a General Fund cost of \$49 million.
- In the last year of Level I and every year thereafter, science graduate students supporting the PMC research mission would outnumber medical students.
- PMC growth would eventually require construction of 10 new structures, of at least 1.2 million square feet, costing over \$460 million. The universities have not identified the land or funding sources for many of these projects.
- A national healthcare consulting firm states that the most likely growth scenario for PMC could provide \$15.4 million in new state revenues and 6,400 new jobs by FY 2010 and \$44.1 million in new state revenues and 14,600 new jobs by FY 2025. JLBC Staff has not had sufficient opportunity to analyze these results.
- If a physician shortage exists or will exist in Arizona, it is most likely to affect rural areas. The correlation between increases in medical school graduates and increases in Arizona physicians, especially in rural areas, is unclear and merits further study. Where Arizona medical school graduates choose to practice in-state, residencies must be available for them. Of currently practicing Arizona physicians, 30% completed residencies here, suggesting a need to increase positions, which has not occurred substantially in over a decade.
- According to a UA-retained global management consultant, PMC would likely require an on-site hospital to reach excellence. Whether or not UA chooses to construct this hospital, the consultant believes existing Phoenix hospitals would probably perceive continuing growth of PMC as a threat, would lobby against it, and would not provide opportunities for its students.

PMC Justification

Physician Shortage

UA claims that a physician shortage exists in Arizona and that PMC can alleviate some of this shortage. Various industry experts are predicting nationwide physician shortages, although such estimates have proven highly unreliable in the past. However, medical industry trends, including an aging overall population, an aging population of physicians (44% of Arizona physicians are over 50 years old), growing demand for healthcare beyond life-sustenance as a lifestyle-enhancing product, an increase in lifestyle-related illnesses (such as diabetes and heart disease), and an increase in the number of treatable diseases, may well point to future physician shortages. If such shortages are on the horizon, physician training requires a 5 to 13-year lead time, depending on specialization.

According to a physician workforce study, conducted primarily by the ASU W.P. Carey School of Business, Arizona has 207 physicians per 100,000 people, compared to 283 nationally. This comparison may not be straightforward, as population characteristics and medical productivity vary the needs for physicians in different areas. More importantly, while Arizona's urban counties are closer to the national average, 6 rural counties have ratios lower than 100 and 5 more have ratios lower than 200, with Apache County possessing only 48 physicians per 100,000 people.

Historically, 92% of UA medical graduates enter practice. The next largest employment category is government, which claims 5% of graduates. Past trends indicate that fewer than 1% of graduates would enter academia. In the past 5 years, 42% of UA medical graduates chose residencies in primary care. However, because medical graduates choose their specialty only through their residency, UA has little influence on these decisions.

(Continued)

UA does have 3 programs in place to encourage practice in rural areas. The Arizona Area Health Education Centers program has earned national recognition for recruiting students from underserved communities. Additionally, the Rural Health Professions Program currently sends 15 students per Tucson class to annual summer practica at one of 34 rural sites. Furthermore, UA plans a telemedicine supplemental curriculum for PMC, providing new clinical experiences through video conferencing at over 130 clinics in a wide variety of settings around the state.

The correlation between medical school growth and physician ratios is less clear. The state relies heavily on attracting physicians from elsewhere. Among the state’s allopathic physicians, 89% graduated from medical schools outside the state, including 24% from outside the country. While the Board of Medical Student Loans has programs trading financial aid for practice in underserved areas, no other contractual arrangements exist to keep Arizona medical students in the state upon graduation. UA is willing to explore such arrangements if asked.

Residencies

Without increases in residency positions, PMC graduates would have few links to in-state practice. Residency location is somewhat more correlated with practice location, as 30% of all Arizona physicians completed their residencies here. Furthermore, nearly half of all state physicians cited professional opportunities as the primary reason they chose to practice here. Of UA graduates in the past 5 years, 46% chose residencies in the state. Meanwhile, graduates of 2 osteopathic schools in the Phoenix area have experienced difficulty finding in-state residencies.

For per capita residency positions, UA reports that Arizona ranks in the bottom 5th of states. The number of Arizona residency positions has increased only 6.5% in the past 12 years, compared to a greater than 50% increase in the number of practicing physicians. In Phoenix, the area’s 9 teaching hospitals sponsor all residencies. Residency training programs are expensive and hospitals have been unwilling or unable to fund growth. UA states it is willing to explore new funding methods for residencies.

Economic Development

According to a 2000 report by Tripp Umbach, a national healthcare consulting firm, utilizing an economic impact database of the nation’s 126 medical schools, biosciences accounted for 57% of total university research dollars, but 44% of those in Arizona. The National Institutes of Health (NIH) is one of the largest sources of academic health center funding. Half of all NIH grants go to academic health centers, and of those, the top 50 centers receive 81% of funds. Since larger institutions have more resources and more opportunities for research collaboration, academic health center rankings depend largely on an institution’s size. UA currently ranks 55th in NIH funding, although some specialties are more highly ranked.

The healthcare and life sciences sectors comprise 13% of the national economy. Tripp Umbach conducted an economic impact study for the PMC to FY 2025, the results of which are summarized in *Table 1*. Economic impacts include direct business volume, re-spending from those businesses, and research and development spin-offs. Indeed, a recent joint report by several public policy consultants in surrounding states shows that research and development entities are attracted by top universities, research centers, and a collaborative culture.

	Phoenix Medical Campus Economic Impact Study								
	<u>Government Revenue (\$ in M)</u>			<u>Economic Activity (\$ in B)</u>			<u>Employment (in thousands)</u>		
Scenario*	A	B	C	A	B	C	A	B	C
FY 2007	3.6	3.6	3.6	0.1	0.1	0.1	1.0	1.0	1.0
FY 2010	6.4	15.4	20.2	0.2	0.4	0.5	2.2	6.4	7.4
FY 2015	10.6	23.7	52.2	0.2	0.6	1.4	3.4	9.6	16.4
FY 2025	25.6	44.1	84.6	0.6	1.0	2.1	6.8	14.6	24.0

* Scenario A involves the PMC, the ASU Bioinformatics Department, and TGen. Scenario B adds research and outpatient functions. Scenario C adds a hospital.

(Continued)

Of the scenarios in *Table 1*, the current UA plan most resembles Scenario B. This circumstance could lead to \$15.4 million in new state revenues and 6,400 new jobs by FY 2010, as well as \$44.1 million in new state revenues and 14,600 new jobs by FY 2025. JLBC Staff has not had sufficient opportunity to analyze these results. Due to the face-to-face nature of medicine, any health jobs created in Arizona would be difficult to outsource overseas, or even to other states.

Location

UA believes any new medical campus should be located in Phoenix because it is the largest city in the country without an academic health center. PMC would have an immediate impact on Phoenix physician numbers through faculty recruitment, especially research and clinical faculty. In turn, the residents of Maricopa County would have better access to clinical trials.

Furthermore, Phoenix already possesses a growing biomedical community. UA has existing biomedical partnerships with the Translational Genomics Research Institute (TGen), the ASU Biodesign Institute, all the area's teaching and research hospitals, the City of Phoenix, and the Flinn Foundation. Collaboration between these institutions is an essential component of biomedical economic development. UA states that PMC would develop a unique curriculum to take advantage of these area-specific opportunities.

Class Size

The size of facilities at PUHS has limited initial class size to 24 students. However, for the fall 2005 Tucson class, UA believes it rejected around 50 applicants likely to be accepted given additional space. UA also states that it has based its class sizes in outlying years, up to a class size of 150 students, (*see Table 2 below*) on population growth and demand projections. It is uncertain how the opening of private medical schools in the area, at least 1 of which is in process, would affect this demand. Meanwhile, ASU derived the sizes of its biomedical informatics classes from the experiences of similar departments at other institutions.

PMC Proposed Growth

The Legislature, in Chapter 330, stated, "The Phoenix Medical Campus shall accommodate 24 first year medical students in instruction. The Phoenix Medical Campus shall continue to accommodate those 24 students through the remaining years of their instruction and clinical rotations." (Section 13.D) The Act also stated, "It is the intent of the Legislature that no more than \$7,000,000 from the state General Fund be appropriated for the Phoenix Medical Campus in any fiscal year." (Section 13.G)

However, UA continues to envision PMC expanding annually, through two levels. In Level I, enrollment and funding would grow, from FY 2007 to FY 2009, to fill all the space available at PUHS. This first level would eventually accommodate 128 medical students, 204 science students, and 30 bioinformatics students. Science students would enroll through existing UA graduate programs in various specialties of biology, biochemistry, anatomy, physiology, genetics, and medicine, but would choose classes in Phoenix. Level I would annually graduate 24 doctors at a General Fund expense of \$15.5 million, with the first class graduating in FY 2011.

Level II would begin in FY 2010, with 192 medical students, 346 science students, and 70 bioinformatics students at a General Fund expense of \$27.5 million. It would grow to serving 680 medical students, 1,660 science students, and 140 bioinformatics students in FY 2025 at a General Fund cost of \$49 million. By 2025, PMC would graduate 150 doctors per year.

Table 2 summarizes PMC proposed growth by students and General Fund operating expenses.

(Continued)

Table 2

**Phoenix Medical Campus
Proposed Growth – Students and GF Operating Budget**

Fiscal Year	University of Arizona			Arizona State University			Total	
	GF (M)	Medical Students ^{1/}	Science Students	GF (M)	Undergrad	Grad	GF (M)	Students
<i>Development</i>								
2006	\$ 6.0	0	0	\$ 1.0	0	0	\$ 7.0	0
<i>Level I</i>								
2007	6.0	80	0	2.0	0	10	8.0	90
2008	8.5	104	72	3.0	0	20	11.5	196
2009	12.0	128	204	3.5	0	30	15.5	362
<i>Level II</i>								
2010	23.5	192	346	4.0	20	50	27.5	608
2011	21.1	272	494	4.0	30	65	25.1	861
2012	24.1	352	642	4.0	35	80	28.1	1,109
2013	25.9	456	790	4.0	40	100	29.9	1,386
2014	26.0	536	938	4.0	40	100	30.0	1,614
2015	33.6	606	1,094	4.0	40	100	37.6	1,840
2025	45.0	680	1,660	4.0	40	100	49.0	2,480

^{1/} Medical students include 80 per year who complete their lower-division courses in Tucson, but choose clinical rotations in Phoenix.

Meanwhile, *Table 3* summarizes PMC proposed growth in FTE Positions and other university funds. Level I would, by FY 2009, employ 72 faculty and 131 staff. Appropriated tuition collections, locally-retained tuition, and non-appropriated funds such as grants and donations would contribute \$21.3 million to the PMC budget. For the purposes of planning, UA assumes it would raise PMC tuition 5% annually. Level II would begin in FY 2010, with 175 faculty and 465 staff, as well as other funds expenditures of \$60 million. It would grow to employing 568 faculty and 2,077 staff, with an other funds budget of \$185.5 million by FY 2025.

Table 3

**Phoenix Medical Campus
Proposed Growth – FTE Positions and University Funds Operating Budget ^{1/}**

Fiscal Year	University of Arizona			Arizona State University			Total	
	UF (M)	Faculty FTE	Staff FTE	UF (M) ^{2/}	Faculty FTE	Staff FTE	UF (M)	FTE
<i>Development</i>								
2006	\$ 2.6	10	29	\$ 0.5	2	2	\$ 3.1	43
<i>Level I</i>								
2007	8.5	22	64	0.9	4	6	9.4	96
2008	12.6	44	93	1.5	8	11	14.1	156
2009	18.0	60	118	3.3	12	13	21.3	203
<i>Level II</i>								
2010	54.7	161	455	5.3	14	13	60.0	643
2011	69.1	212	597	6.7	16	15	75.8	840
2012	86.7	263	742	7.5	16	15	94.2	1,036
2013	94.5	311	881	8.0	16	15	102.5	1,223
2014	121.6	361	1,020	8.0	16	15	129.6	1,412
2015	135.3	415	1,179	8.0	16	15	143.3	1,625
2025	173.5	552	2,062	12.0	16	15	185.5	2,645

^{1/} University funds include appropriated tuition collections, locally-retained tuition, and non-appropriated funds.
^{2/} Excludes \$2-3 million in private gifts expected between FY 2006 and FY 2010.

The general trend of these budgets over time reflects the realities of starting a new program. In initial years, PMC will be highly dependent upon General Fund appropriations. Administrative and fixed costs would be relatively high. In time, PMC would gain primary support from external sources, especially research grants. Faculty and operational expenses would outstrip administrative and fixed costs.

These distributions are similar to those at the Tucson campus of the UA College of Medicine, which graduates 110 doctors per year for an annual General Fund appropriation of around \$44 million. JLBC Staff has requested a more detailed budget of the Tucson campus in order to conduct a deeper analysis of the PMC projected expenses.

If the Legislature does not provide the General Funding proposed in *Table 2*, UA has no contingency plan beyond slowing the development of PMC. The university states it is unlikely that private entities would invest in a project where the state was not willing to invest. Additionally, UA explains that public institutions seldom receive private funding for operational expenses.

Table 4 summarizes the construction projects proposed for PMC. Level 1 requires the renovation of PUHS and a new Arizona Biomedical Collaborative Building, a total of 174,800 square feet, costing \$46.4 million. UA has already secured funding for these projects. Meanwhile, Level II would likely require 9 new structures, with at least 1.1 million square feet, costing in excess of \$430 million. At build-out, PMC would have similar square footage to the Tucson medical campus. The universities have not identified the land or funding sources for many of these projects

Table 4					
Phoenix Medical Campus Proposed Construction Projects					
<u>Project</u>	<u>Cost (M)</u>	<u>Sq Ft</u>	<u>Cost/Sq Ft</u>	<u>Start</u>	<u>Description</u>
<i>Level 1</i>					
PUHS Renovation	\$19.2	89,200	\$215	Apr 2005	3 buildings of 3 stories each; interactive classrooms, exam rooms, student services, student and faculty offices, conference center; City of Phoenix will retain property ownership
Arizona Biomedical Collaborative 1	\$27.2	85,600	\$318	Nov 2005	4 story research facility with wet and dry flexible labs, occupied 60% by UA and 40% by ASU; universities would lease-purchase underlying land
<i>Level 2</i>					
New Educational Facility	\$89.8	310,000	\$290	Jan 2008	Classrooms, laboratories, student services, business services
Arizona Biomedical Collaborative 2	\$73.0	160,000	\$456	?	
Imaging Laboratory	\$15.0	15,000	\$1,000	?	
New Basic Sciences Building	\$153.6	365,000	\$421	Post 2010	Laboratories, animal care facilities
New Clinical Sciences Building	\$48.2	145,000	\$332	Post 2010	Clinical laboratories, conference space
New Clinical Outpatient Facility	\$39.0	115,000	\$340	Post 2010	Patient facilities, diagnostic laboratories
Loading Dock	\$7.8	N/A	N/A	?	
Underground Infrastructure Parking Structure?	\$10.0?	N/A	N/A	?	
TOTAL	\$482.8	1,284,800	\$368		

(Continued)

Development Phase (FY 2003 – FY 2006)

Arizona University System expenditures to date on the PMC project total \$541,000. Between FY 2003 and FY 2005, ABOR spent \$224,000 mostly for site assessments and facilities design. Meanwhile, UA spent \$310,000 in FY 2005 for project management, consulting, and the previously mentioned economic impact study. ASU spent \$7,000 in FY 2005 researching departments of biomedical informatics at other universities. JLBC Staff has requested information concerning expenditures by other PMC partners.

Since no classes will run in FY 2006, the initial \$7 million General Fund appropriation will finance startup expenses. Equipment, including specialized telecommunications infrastructure necessary for extension of the AHSC accreditation, will cost \$2.9 million. UA will use another \$1.9 million to hire PMC faculty and \$1.2 million for staff and operational expenses. While personnel costs will not support a PMC class larger than 24 students per year, certain startup expenses, especially telecommunications infrastructure purchases, will. The nature of these fixed costs requires the same large up-front expenditure, whether serving 1 class or 4 classes of students.

Faculty and staff will pursue curriculum development and planning before students arrive. UA budgeted faculty and staff salaries for a full year, although it is unclear that all personnel were in place at the beginning of FY 2006. Therefore, part of the appropriation may remain unused at the end of the fiscal year.

ASU will use the remaining \$1 million to hire faculty and staff for its Department of Biomedical Informatics. Additionally, UA will redeploy \$2.6 million in existing university funds for other administrative and operational costs. UA also aims to raise \$2 million in private donations during this phase.

Level I Operations (FY 2007 – FY 2009)

Level I is now shorter than originally envisioned, at 3 years instead of 5. This level would involve curriculum refinement and the beginning of PMC research activity. In fall 2006 (FY 2007), 80 upper-division medical students, who completed their lower-division courses in Tucson, but chose clinical rotations in Phoenix, would relocate from their current location at 3rd Street and Indian School in Phoenix to PMC.

In fall 2007 (FY 2008), PMC would accept the first class of 24 medical and 72 science students. Science students would enroll through existing UA programs in various specialties of biology, biochemistry, anatomy, physiology, genetics, and medicine, but would choose classes in Phoenix. PMC would accept another 24 medical students and 132 science students in fall 2008. ASU would offer masters and doctoral programs to up to 30 bioinformatics students and provide all medical students one bioinformatics course during Level I.

Of the FY 2007 General Fund budget, \$1 million would finance lease costs, \$3.3 million would pay PMC faculty salaries, \$1.4 million would fund PMC staff salaries, \$0.3 million would cover general operating expenditures, and \$2 million would support the ASU Department of Biomedical Informatics. By FY 2009, a proposed \$15.5 million General Fund appropriation would support a \$1.0 million lease, a \$7.3 million faculty, a \$0.8 million staff, \$2.9 million in operations, and \$3.5 million for ASU Bioinformatics. UA and ASU also plan to collectively raise \$20 million in donations during Level I.

In developing these budgets, UA assumed that research faculty would recover 1/2 their salary and benefits from grants. UA realizes this is not possible immediately, because research requires setup time, and is seeking funding through its other partners. UA would not use state funds for research staff, but would seek to cover their expenses through grants. UA describes these goals as “aggressive” and it is not clear that they are practical. JLBC Staff has asked UA to provide a backup plan.

Level I Capital

PUHS is a 4.5-acre campus on the north side of Van Buren Street between 5th and 7th Streets in downtown Phoenix. The campus houses 3 buildings of 3 stories each, totaling 90,000 square feet. These facilities are undergoing a \$19.2 million renovation to accommodate PMC.

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UA will lease PUHS back from the renovating developer at an annual lease cost of \$1.5 million, which UA will pay with \$1.0 million from the PMC General Fund appropriation and \$0.5 million from locally retained tuition revenues. At the conclusion of the lease, the City of Phoenix will retain ownership of the buildings. JLBC Staff believes both the total renovation cost and the annual lease rate are reasonable.

However, the PUHS buildings are a very limited space. UA has indicated, if it is able to accept a second class of 24 students, it would hold gross anatomy classes elsewhere. Furthermore, PUHS cannot accommodate office needs moved from 3rd Street and Indian School. JLBC Staff has inquired into those situations and their expenses.

The UA College of Pharmacy will likely open a program at the Mercado, the current site of the ASU Downtown Center, just south of PUHS. Additionally, the ASU College of Nursing will relocate to a facility at the ASU Downtown Campus to the west. (*Please see Attachment A.*) The ASU College of Nutrition will relocate to the ASU East Campus in Mesa.

UA has indicated that clinical rotations during Level I will preserve the current dispersed model, with students commuting to the 9 area teaching hospitals. UA is also contemplating a small ambulatory primary care clinic. Furthermore, a nearby hotel would provide student housing for Level I until the university constructs permanent housing. JLBC Staff has inquired into the locations, situations, and expenses for those facilities.

During Level I, UA and ASU would also construct the Arizona Biomedical Collaborative Building 1, an 85,600 square foot research facility. The remaining research infrastructure appropriation from the 2 universities, set forth in Laws 2003, Chapter 267, would fund the building. Its anticipated per-square-foot expense of \$318 is cost-effective as compared to similar projects.

Level II Operations (FY 2010 onwards)

Level II would be characterized by the growth of facilities and the PMC research enterprise. The FY 2010 entering class would consist of 64 medical students. The FY 2010 proposed General Fund budget of \$27.5 million is higher than previous estimates due to the earlier beginning of Level II. That proposal includes \$4.7 million in one-time capital funds, \$11.4 million for faculty, \$1.7 million for staff, \$1 million for the PUHS lease, \$4.7 million for other operational expenses, and \$4 million for the ASU Department of Biomedical Informatics. By FY 2010, the universities would provide \$60 million of their own funds, including \$32.3 million in new grants.

In FY 2015, PMC would accept its first class of 150 medical students. By 2025, the entire UA College of Medicine would be graduating 260 doctors per year. The universities would match the proposed PMC General Fund budget of \$49.0 million with \$185.5 million in other funds, including \$87.1 million from new grants and \$31.2 million from new partnerships. For a budget comparable to the current UA Tucson program budget, with state support of around 20%, PMC would produce 40 more medical graduates annually than the Tucson campus, thanks to economies of scale between the two locations.

As UA adds clinical faculty, it expects 15% of their salary and benefits to come from the state, even though these positions spend close to 27% of their time teaching. UA believes it can secure another 67.5% from clinical activities and the remaining 17.5% from research. Again, UA describes these goals as “aggressive” and it is not clear that they are practical. ASU Bioinformatics expansions during Level II would provide undergraduate concentrations, joint degrees with the UA College of Medicine or the ASU College of Nursing, and a certificate program for current practitioners.

Level II Capital

Prior to accepting a class of 64 students, UA would need to complete construction of a new educational facility of around 310,000 square feet, likely to cost \$89.8 million. UA aims to raise half of this amount from private donors in exchange for name recognition. UA is considering requesting \$3.6 million from the General Fund to cover annual debt service for the rest of the expense. As a backup plan, UA might request assistance from the City of Phoenix. The anticipated per square foot cost of \$290 is among the highest for this type of building and would have to be more closely evaluated with the completed design.

(Continued)

UA has largely avoided committing to a hospital in Level II, suggesting that a dispersed model might continue to be sufficient. However, that model would require all 9 area teaching hospitals to expand their programs, something they have not done in over a decade. Furthermore, Kurt Salmon Associates, a global health care management consulting firm, which has been aiding UA in the PMC planning process, states that a full hospital is a key ingredient of the nation's best academic health centers and their contributions to state economic development. The Association of American Medical Colleges reports academic health center hospitals contribute an average of \$43 million annually to their associated colleges of medicine.

Kurt Salmon Associates reports that the highly-competitive Phoenix hospital market poses particular challenges to the likely need for a clinical facility. The consultant believes that area hospitals are unlikely to be able to work together in some kind of co-venture at PMC and would probably lobby extensively against any one hospital, even a UA-owned specialty hospital, at PMC. On the other hand, area hospitals are far from making any commitments to PMC, despite many months of discussions. According to Kurt Salmon Associates, these hospitals do not have the organization, resources, or programs to house Level II students, either for clinical rotations, research, or residencies. Even if UA largely succeeds with a dispersed model, it is probable that area hospitals would view patient treatments during research activities as a threat to their business.

Additional Requirements

Once the Committee completes its review on September 28, Chapter 330 requires ABOR to submit for Committee review, by December 31, 2005, a progress report on PMC. Thereafter, any significant changes to the operational plan must receive Committee review and any significant changes to the capital plan must receive JCCR review.

RS/SC:ss
Attachment

ASU at the Downtown Phoenix Campus Proposed Campus Site

