
**Economic and Fiscal Impact of the Proposed
Arizona State University
Capital Center Campus**

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EXECUTIVE SUMMARY

Economic and Fiscal Impact of the Proposed Arizona State University Capital Center Campus

Background

Elliott D. Pollack and Company has been retained to perform an economic and fiscal impact study of the construction and operation of a campus extension in Downtown Phoenix (hereinafter referred to as the "Capital Center Campus").

As initially conceived, the Capital Center Campus will accommodate 15,000 students and employ 1,800 faculty and support staff. The site will consist of 1.5 million square feet of academic space, and another 900,000 square feet of space intended for private development. Student housing will add another 1.5 million square feet of living quarters for 4,000 students. The total construction cost, inclusive of academic and support space, parking, student housing, retail, and office, is estimated to reach \$948 million. All values in this report are expressed in constant 2004 dollars.

Impact Summary

This study focuses on the economic and fiscal impacts of 1) construction of the campus site, 2) University operations once the project is completed, and 3) private sector operations once the project is completed. *The economic impacts associated with these three distinct project components total nearly \$1.7 billion in construction related economic output over the 10-year construction phase and nearly \$570 million in on-going, annual operations output.* Approximately 1,300 construction and construction related jobs will be supported annually during the 10-year construction phase and over 7,700 permanent academic, retail, and office jobs will be supported annually from on-going operations.

Construction Impact (one-time impact)				
	10 year Impact	Annually		
Jobs	13,103	1,310		
Wages (\$ mil)	\$550.3	\$55.0		
Economic Output (\$ mil)	\$1,668.2	\$166.8		
Operations Impact (On-going Annual Impact)				
	University Operations	Retail Operations	Office Operations	Total Operations
Jobs	2,751	1,762	3,198	7,711
Wages (\$ mil)	\$106.7	\$54.2	\$120.2	\$281.1
Economic Output (\$ mil)	\$215.6	\$118.8	\$235.1	\$569.5

Source: IMPLAN; Arizona State University; Elliott D. Pollack & Company

The economic activity related to construction and on-going operations will also provide the State of Arizona, Maricopa County, and the City of Phoenix with a significant fiscal impact. The construction portion of the project will generate \$52.1 million in tax revenue for the State of Arizona, \$15.3 million for Maricopa County, and \$16.7 million for the City of Phoenix over the 10-year construction phase. Related to on-going operations, the State would collect \$18.7 million annually from faculty and staff spending, private retail and office operations, and the spending of the 15,000 Capital Center Campus students. Maricopa County would collect \$8.0 million annually, and the City of Phoenix would collect \$7.3 million annually.

Table B
**ASU Capital Center Campus
Fiscal Impact Summary**

Construction Impact (one-time impact)					
	10 year Impact		Annually		
Revenues (\$ mil)					
State of Arizona Revenues	\$52.1		\$5.21		
Maricopa County Revenues	\$15.3		\$1.53		
City of Phoenix Revenues	\$16.7		\$1.67		
Operations Impact (On-going Annual Impact)					
	University Operations	Retail Operations	Office Operations	Student Spending	Total Operations
Revenues (\$ mil)					
State of Arizona Revenues	\$4.0	\$5.40	\$4.24	\$5.07	\$18.7
Maricopa County Revenues	\$1.4	\$1.89	\$2.31	\$2.39	\$8.0
City of Phoenix Revenues	\$0.9	\$2.29	\$1.65	\$2.49	\$7.3

Source: Elliott D. Pollack & Company; IMPLAN; Arizona Department of Revenue; Arizona Tax Research Association.

Analysis Detail

Economic impact analysis examines the regional implications of an activity in terms of three basic measures: sales or output, earnings, and job creation. Fiscal impact analysis, on the other hand, evaluates the public revenues and costs created by a particular activity. In fiscal impact analysis, the primary revenue sources of a city, county or state government are analyzed to determine how the activity may financially affect them.

The economic and fiscal impact estimates provided in this report are "gross" impact numbers. In other words, the numbers represent activity produced by the planned campus site and do not consider whether or not the economic activity is supplanting economic activity from other parts of the community. However, the campus expansion project was partly devised as a strategy to relieve congestion at Arizona State University's main campus site, thereby allowing the University to further expand any remaining programs. Because the expansion plan will allow for additional growth through this means, the project will ultimately yield "net new" economic activity within the region. However, calculating the extent of this net new economic activity within the region is beyond the scope of this analysis. Furthermore, this analysis is based on

assumptions provided by Arizona State University. This report does not specifically address the viability of the project.

Construction Impact

The economic impact from the construction of the proposed Capital Center Campus is based on the projected \$948 million cost of both public and private buildings. Construction is expected to take about 10 years to complete. However, in this report the economic impacts are expressed on a cumulative basis. When completed, the construction portion of the project will have generated approximately 13,103 direct, indirect and induced person-years of employment. On an annual basis, this would equate to about 1,310 jobs per year for the ten-year period.

Ongoing University Operations Impact

Economic activity directly attributable to university operations will be significant. The estimated 1,800 faculty and staff expected to be employed at the Capital Center Campus will generate \$106.7 million in wages and \$215.6 million in economic output (including the indirect and induced impacts). Total tax collections from these university-based staff will amount to \$4.0 million for the State, \$1.4 million for Maricopa County, and \$892,000 for the City of Phoenix. These fiscal revenues will be generated from income taxes, sales taxes, utility taxes, property taxes, and lease taxes.

Perhaps more importantly, the estimated 1,800 university employees and 15,000 students occupying the academic space throughout the year will create demand for additional business endeavors, including both retail and office related operations. The University's development plan includes 900,000 square feet for retail and office purposes, or an additional 60% of the Capital Center Campus academic space. The impacts related to the student and faculty spending is captured in the following retail analysis.

Ongoing Private Operations Impact

In addition to the economic activity related to the university operations, there will exist significant private sector operations. As previously noted, private activity that is anticipated to occur at the Capital Center Campus includes privately developed student housing, retail space, and office space. Estimates are provided for income taxes, retail sales taxes, utility taxes, property taxes, and lease taxes.

Private Retail

Of the 900,000 square feet of private space planned for the Capital Center Campus, 375,000 square feet will be dedicated for private retail purposes. Assuming all 375,000 square feet of retail space is absorbed, retail activity at the site will provide an estimated 1,762 jobs, and more than \$54 million in total wages for the direct and supporting employees. Total economic activity associated with the retail operations will exceed \$118.8 million per year.

The fiscal activity related to the planned retail space at the site will also generate, on an annual basis, over \$5.4 million in tax revenue for the State, nearly \$1.9 million for Maricopa County, and over \$2.3 million for the City of Phoenix.

Private Office

Similarly, the Capital Center Plan allows for 525,000 square feet of office space. Assuming average stabilized vacancy rates and an average employee density, as many as 2,100 office employees could be located at the Capital Center Campus. These 2,100 office worker jobs would also yield \$78.6 million in direct wages. The "ripple effect" of these jobs will create an additional 1,098 jobs in the local economy with total wages of \$41.6 million and economic activity of \$102.5 million.

Overall, the State would collect more than \$4.2 million annually from the impact of office operations. Maricopa County would collect an additional \$2.3 million in taxes attributable to this office activity. The City of Phoenix would collect both commercial lease taxes and building property taxes of \$236,000 and \$382,000 annually, respectively. In total, the City of Phoenix would collect \$1.6 million from office operations.

Student Spending on Housing and Retail

The inclusion of 1.5 million square feet of privately financed and operated student housing will generate sales taxes, ongoing utility taxes, property taxes, and lease taxes. As previously referenced, the 15,000 students of the Capital Center Campus will spend throughout the community and campus, providing annual taxable expenditures of \$145.5 million. A large portion of the estimated student retail spending will occur at the Capital Center Campus, thereby supporting retail operations at the site, and a portion of the retail spending will occur elsewhere. For the 4,000 students living on-campus, it is assumed that 50% of their spending occurs on-site. For the students living elsewhere, it is assumed that only 10% of their taxable spending occurs on the Capital Center Campus. Thus, the total off-site spending is \$115.5 million annually.

Assuming full occupancy of the 4,000 student housing units, over \$5.1 million in combined taxes will be generated for the State, nearly \$2.4 million will be generated for Maricopa County, and nearly \$2.5 million will be generated for the City of Phoenix.

These figures exclude on-site student spending to avoid double counting from the impact of total retail operations presented in Section 5.2 of this report.

1.0 Introduction

Elliott D. Pollack and Company has been retained to perform an economic and fiscal impact study of the construction and operation of a campus extension in Downtown Phoenix (herein after referred to as "Capital Center Campus"). This study focuses on the economic and fiscal impacts of the following:

- (1) Construction of the campus site.
- (2) University operations once the project is completed.
- (3) Private sector operations once the project is completed.

Economic impact analysis examines the regional implications of an activity in terms of three basic measures: sales or output, earnings, and job creation. Fiscal impact analysis, on the other hand, evaluates the public revenues and costs created by a particular activity. In fiscal impact analysis, the primary revenue sources of a city, county or state government are analyzed to determine how the activity may financially affect them.

As initially conceived, the Capital Center Campus will accommodate 15,000 students and utilize 1,800 faculty and support staff. The site will consist of 1.5 million square feet of academic space, and another 900,000 square feet of space intended for private development and maintenance. Student housing will add another 1.5 million square feet of space for 4,000 students living near the campus.

The total construction cost, inclusive of academic and support space, parking, student housing, retail, and office, is estimated to reach \$948 million.

2.0 Methodology & Assumptions

2.1 Project Assumptions

The assumptions used to estimate the economic and fiscal impacts of the ASU Capital Center Campus project are outlined below. The primary inputs are based on supplied ASU assumptions regarding project scale and composition. Preliminary planning and programming studies are currently being conducted by the University and its consulting team.

Assumptions related to lease rates, retail sales, and employment counts, are representative of what could be found in the marketplace at the time of preparation of this analysis. Commuting patterns were utilized to determine where certain employees would originate, and the Consumer Expenditure Survey was utilized to determine spending patterns of related individuals. All values are expressed in constant 2004 dollars. An inflation factor has not been included in this analysis.

<i>University Operations</i>	
Faculty & staff	1,800
Capital Campus students	15,000
Students living on-site	4,000
Students living off-site	11,000
<i>Project Design</i>	
Academic & support space (square feet)	1,500,000
Parking spaces	4,000
Student housing (square feet)	1,500,000
Private commercial space (square feet)	900,000
<i>Construction Value</i>	
Academic & Support	\$375,000,000
Parking	\$48,000,000
Housing	\$300,000,000
Private commercial	\$225,000,000
TOTAL	\$948,000,000
<i>Private Sector Operations</i>	
Retail Space (square feet)	375,000
Office Space (square feet)	525,000
Retail Sales per square foot	\$200
Total retail sales	\$75,000,000
Office square feet per employee	250
Number of office employees	2,100
Office lease rate per square foot	\$25
Office lease value	\$13,125,000
Retail lease rate per square foot	\$20
Retail lease value	\$7,500,000
Student Housing monthly rent per student	\$580
Student housing lease value	\$27,840,000

Source: ASU; Elliott D. Pollack & Company; Urban Land Institute

As initially conceived, the Capital Center Campus will accommodate 15,000 students and employ 1,800 faculty and support staff. The site will consist of 1.5 million square feet of academic space, 1.5 million square feet for student housing, and another 900,000 square feet of space intended for privately funded development. The total construction cost, inclusive of academic and support space, parking, student housing, retail, and office, is estimated to reach \$948 million.

2.2 Economic Impact Methodology

Economic impact analysis examines the economic implications of an activity in terms of sales or output, earnings, and employment. For this study, the analysis focuses on three separate impacts:

- (1) Construction of the campus site.
- (2) University operations once the project is completed.
- (3) Private sector operations once the project is completed.

The different types of economic impacts are known as direct, indirect, and induced, according to the manner in which the impacts are generated. For instance, direct employment consists of permanent jobs held by the project employees. Indirect employment is those jobs created by businesses that provide goods and services essential to the operation or construction of the project. These businesses range from manufacturers (who make goods) to wholesalers (who deliver goods) to janitorial firms (who clean the buildings). Finally, the spending of the wages and salaries of the direct and indirect employees on items such as food, housing, transportation and medical services creates induced employment in all sectors of the economy, throughout the metropolitan area. These secondary effects are captured in the analysis conducted in this study.

Multipliers have been developed to estimate the indirect and induced impacts of various direct economic activities. The Minnesota IMPLAN Group developed the multipliers used in this study. The economic impact is categorized into four types of impacts:

- (1) Employment Impact – the total wage and salary and self employed jobs in a region. Jobs include both part time and full time workers.
- (2) Population Impact – the number of individuals in the region impacted or supported by company operations based on historical relationships of jobs and population.
- (3) Earnings Impact – the personal income, earnings or wages, of the direct, indirect and induced employees. Earnings include total wage and salary payments as well as benefits of health and life insurance, retirement payments and any other non-cash compensation.
- (4) Economic Output – the economic output, also referred to as sales or activity, relates to the gross receipts for goods or services generated by the project's operations.

Economic impacts are by their nature regional in character. Such impacts cannot be assigned to a specific city or locality, although clearly the primary impact of job creation will be on the City

of Phoenix. However, many other communities in the metro Phoenix region will also benefit from the construction and operation of the project. People working on campus will commute to Phoenix from their homes in all parts of the Valley. Therefore, the economic impact of the project is expressed in this report as a countywide benefit.

All dollar figures, unless otherwise stated, are expressed in current dollars.

2.2 Fiscal Impact Methodology

Fiscal impact analysis studies the public revenues associated with a particular economic activity. The primary revenue sources of local, county, and state governments (i.e. taxes) are analyzed to determine how an activity may affect the various jurisdictions. This section will only evaluate the impact of the Capital Center Campus project on the primary governmental entities of the City of Phoenix, Maricopa County and the State of Arizona, excluding special districts or other tax entities.

The fiscal impact figures cited in this report have been generated from information provided by a variety of sources including the U.S. Bureau of the Census; the U.S. Department of Labor; the Internal Revenue Service; the City of Phoenix; the State of Arizona; the Arizona Tax Research Association; and the U.S. Consumer Expenditure Survey.

Elliott D. Pollack and Company has relied upon ASU and its consultants for estimates of construction cost and operating revenues. Unless otherwise stated, all dollar values are expressed in 2004 dollars.

Fiscal impacts are categorized by type in this study, similar to economic impact analysis. The major sources of revenue generation for governmental entities are related to construction of the project, on-going operations once construction is completed and from private sector operations.

Construction impacts relate to the revenues generated from construction of the project and include the state and local sales taxes levied on construction materials. These are the "primary" revenues generated from the project. In addition, the direct, indirect and induced employees supported by the construction activity also generate revenues to local and state governments. For instance, they will spend part of their salaries on retail goods (thereby paying sales taxes), pay property taxes and contribute to the other revenue sources that are shared by the State with local cities. In addition, part of the State's collection of sales taxes on construction materials is also shared with local cities. All these revenues create benefits for local cities. They are referred to in this report as "secondary" impacts.

The on-going operations of a real estate project also create beneficial fiscal effects for a community. In addition to sales taxes collected directly from the project (in the form retail sales taxes), building owners will pay property taxes on their properties and sales taxes on the rents they collect. Owners of residential property will pay property taxes on their residence. These are revenues to governmental entities that can be calculated from the assumptions of the study.

In addition to the above revenues, faculty, staff and students will spend part of their salaries on local goods and services and pay taxes on the homes they occupy. Employees of the private commercial portion of the project will also spend part of their incomes in the local economy. This spending will contribute to revenues collected by the State that are ultimately shared with local governments.

Following is a description of the applicable revenue sources of the various jurisdictions that will be considered for this analysis.

- Construction Sales Tax

The State, County and City of Phoenix levy a sales tax on materials used in the construction of buildings or development of land improvements. That tax is calculated by State law under the assumption that 65% of the construction cost of the facility and its land improvements are related to construction materials with the remaining 35% devoted to labor. The sales tax rate is then applied to the 65% materials figure. The sales tax on construction materials is a one-time collection by the governmental entity. Construction sales tax is generated during any new building construction as well as from improvements.

The State currently levies a 5.6% sales tax on construction activity. Maricopa County levies a sales tax of 0.7%. The City of Phoenix construction sales tax rate is 1.8%.

- Sales Tax

The State, counties and local cities charge sales tax on retail goods and services. The sales tax rate for the State is 5.6%; 0.7% for Maricopa County and for the City of Phoenix is 1.8%. These tax rates are applied to direct sales at the private retail establishments. Likewise, sales taxes are collected on the spending of direct, indirect and induced faculty, staff, students and employees.

- State Income Tax

The State of Arizona collects taxes on personal income. The tax rate used in the analysis averages about 1.6% for earnings. These percentages are based on the most recently available income tax data from the State and the projected wage levels of jobs created by the construction and operations impact. This tax is applied to the wages and earnings of direct, indirect and induced employment. Portions of this tax are redistributed through revenue sharing to cities throughout Arizona based on population.

- State Unemployment Tax

Unemployment insurance tax for employees is 2.7% on the first \$7,000 of earned income. This factor is applied to the projected wages and earnings of direct and indirect employees.

- HURF Tax

The State of Arizona Highway User Revenue Fund collects a motor vehicle fuel tax of \$0.18 per gallon. The tax revenue is calculated based on a vehicle traveling 12,000 miles per year at 20 miles per gallon. These factors are applied to the projected direct and indirect

employee count. Portions of this tax are distributed to cities and counties throughout Arizona based on a formula that includes population and the origin of gasoline sales.

- Vehicle License Tax

The vehicle license tax is a personal property tax placed on vehicles at the time of annual registration. This factor is applied to the projected direct, indirect and induced employee count. The average tax used in this analysis is \$148 and funds are shared between the cities, county and state in accordance with population-based formulas.

- State Shared Revenues

Each city in Arizona receives a portion of State revenues from four different sources - State sales tax, State income tax, vehicle license tax and highway user tax. The formulas for allocating these revenues are primarily based on population. Counties also share in the revenue sources of the State, with the exception of income tax.

- Property Taxes

Employees supported by the construction and operation of the Capital Center Campus will pay property taxes on the homes they occupy. In order to estimate property taxes, the value of a typical Maricopa County housing unit has been calculated at approximately \$129,000. This value assumes that employees will occupy units in a pattern similar to the current inventory of housing in the Valley. In Maricopa County single family homes account for 66.3% of the housing stock, townhouses 8.0%, and apartments 25.7%.

- Lease Taxes

The City of Phoenix levies a tax of 1.8% on all commercial leases. The private housing, retail and office space associated with the Capital Center Campus will contribute to this tax.

The above tax categories represent the largest sources of revenues that will be generated to city, county and State governments.

Revenues are categorized in this analysis as either primary or secondary, depending on their source and how they flow through the economy into city tax accounts. For instance, some revenues, such as construction sales taxes, are straightforward calculations based on the cost of construction. The State of Arizona, Maricopa County and the City of Phoenix collect the construction sales tax directly from contractors and others on the project. These revenues are described in this study as primary revenues.

Secondary revenues, on the other hand, flow from the wages of those direct, indirect and induced employees who are supported by the project. Estimates of revenue generation to governmental entities are more speculative and based on typical wages of the employees working on the project, their spending patterns, projections of where they might live, and other assumptions outlined in this report.

3.0 Impact of Construction

This section of the report outlines the economic and fiscal impact of the construction of the ASU Capital Center Campus. Construction phase impacts are generally short-term effects related to on-site and off-site construction employment and other industries that support the construction. The long-term consequences of a project are the operational phase impacts that are described in Sections 4.0 and 5.0.

The 1.5 million square feet of academic and support space is projected to cost \$375 million to construct. An additional 1.5 million square feet of housing and 900,000 square feet of private commercial space are estimated to cost \$525 million. An additional \$48 million in construction cost is attributed to the parking structure for a total value of construction of \$948 million. All values are stated in constant 2004 dollars. No inflation factor has been included in the analysis.

This figure includes professional fees, site work, furniture, fixtures and equipment, systems, operating supplies, and other miscellaneous fees. The actual "hard construction cost" for the site work, superstructure and interior build-out is about 65% of the total cost. The remaining are fees, furniture, equipment and supplies.

For the purposes of this report, the impacts related to construction activity are displayed as a single cumulative impact rather than a series of impacts over a multi-year period. The economic and fiscal impacts related to ongoing operations are based on maximum capacity of operations beginning once the project is completed. Construction is expected to take about 10 years to complete.

3.1 Economic Impact of Construction

The economic impact of the construction of the proposed Capital Center Campus project is outlined in Table 2 based on the \$948 million cost for the entire construction period.

In summary, the project will generate 5,634 direct jobs. About \$255.2 million in direct wages will be generated based on the total construction activity of \$948 million. Another 7,469 indirect and induced jobs will be created annually in the local economy. Annual wages for these indirect and induced employees is about \$295.0 million. Altogether, the project will create approximately 13,103 person-years of employment during the 10-year construction timeframe, generating \$550.3 million in wages and \$1.7 billion in economic activity. This is based on construction build-out. Assuming that construction proceeds in equal phases, approximately 1,310 jobs will be supported on an annual basis.

Table 2 ASU Capital Center Campus Economic Impact of Construction Maricopa County			
Impact Type	Jobs	Personal Income	Output
Direct			
Academic & support	2,228	\$100,968,750	\$375,000,000
Parking	285	\$12,924,000	\$48,000,000
Student housing	1,783	\$80,775,000	\$300,000,000
Private Commercial	1,337	\$60,581,250	\$225,000,000
Total Direct	5,634	\$255,249,000	\$948,000,000
Indirect			
Academic & support	1,594	\$67,895,250	\$160,664,625
Parking	204	\$8,690,592	\$20,565,072
Student housing	1,275	\$54,316,200	\$128,531,700
Private Commercial	957	\$40,737,150	\$96,398,775
Total Indirect	4,030	\$171,639,200	\$406,160,200
Induced			
Academic & support	1,360	\$48,824,625	\$124,230,375
Parking	174	\$6,249,552	\$15,901,488
Student housing	1,088	\$39,059,700	\$99,384,300
Private Commercial	816	\$29,294,775	\$74,538,225
Total Induced	3,439	\$123,428,700	\$314,054,400
Total			
Academic & support	5,183	\$217,688,625	\$659,895,000
Parking	663	\$27,864,144	\$84,466,560
Student housing	4,146	\$174,150,900	\$527,916,000
Private Commercial	3,110	\$130,613,175	\$395,937,000
Total	13,103	\$550,316,900	\$1,668,214,600
NOTES			
1 The total may not equal the sum of the impacts due to rounding.			
2 Construction of the project is expected to take upto 10 years to complete.			
3 All dollar figures are in 2004 dollars. Inflation has not been included in these figures.			
Source: Elliott D. Pollack & Company; IMPLAN.			

3.2 Fiscal Impact of Construction

The following table outlines the fiscal impact of the construction of the Capital Center Campus on the State of Arizona, Maricopa County and the City of Phoenix. The table included in this section summarizes the revenues that will ultimately flow to the State of Arizona, Maricopa County and the City of Phoenix over the entire construction timeframe and are expressed in 2004 dollars.

Fiscal Impact on the State of Arizona

The revenues from construction sales taxes that accrue to the State total more than \$30.5 million during the 10-year construction process. This figure represents the total dollars that would be collected and retained by the State during the construction of the project. It does not include the portion of construction sales taxes that are shared with, and distributed to, Arizona's counties and cities. These are referenced in this report as primary revenues.

The remainder of the revenues generated from construction relate to the spending of construction employees on retail goods, vehicle registration, gasoline taxes, and similar items. These are referenced as secondary revenues. Also included is an estimate of income taxes that would accrue to the State from employees supported by the construction activity. Revenue estimates are provided for indirect and induced employment generated from the project. These revenues total nearly \$21.6 million from the spending of wages by employees.

Overall, the State would collect about \$52.0 million in revenue that is attributable to the construction of the proposed Capital Center Campus project.

Fiscal Impact on Maricopa County

Revenues generated from construction activity for Maricopa County would total \$15.3 million. This includes \$4.3 million in direct construction sales taxes (primary) and an additional \$11.0 million in employee impacts (secondary).

Fiscal Impact on the City of Phoenix

The City of Phoenix would collect \$11.1 million in primary revenues, or revenues that are directly related to construction activity.

Secondary revenues are generated from direct, indirect and induced employees who are supported by the construction activity. These secondary revenue estimates related to the City of Phoenix have been developed based on the distribution of population throughout the metro area and employee commuting patterns. While many of the employees will live in Phoenix, a significant number will also live in surrounding communities. The construction project will, therefore, provide benefits to many cities throughout the Valley. Revenues from employee spending sales taxes, property taxes from the homes they occupy, and state shared revenues, are projected to total \$5.7 million during the construction period.

Table 3
ASU Capital Center Campus
Fiscal Impact of Construction

State of Arizona							
Impact Type	Construction Sales Tax	Employees Spending Sales Tax	Income Tax	Vehicle License Tax	Unemp. Tax	HURF Tax	Total Revenues
Direct Revenues	\$30,469,800	\$3,436,400	\$4,722,100	\$184,800	\$1,064,700	\$409,700	\$40,287,500
Indirect Revenues	N/A	\$2,390,000	\$3,175,300	\$132,200	\$761,700	\$293,100	\$6,752,300
Induced Revenues	N/A	\$1,895,500	\$2,123,000	\$112,800	\$649,900	\$250,100	\$5,031,300
Total Revenues	\$30,469,800	\$7,721,900	\$10,020,400	\$429,800	\$2,476,300	\$952,900	\$52,071,100

Maricopa County					
Impact Type	Construction Sales Tax	Employees Spending Sales Tax	Property Tax	State Shared Revenues	Total Revenues
Direct Revenues	\$4,313,400	\$651,100	\$2,672,300	\$2,370,000	\$10,006,800
Indirect Revenues	N/A	\$453,800	\$1,911,800	\$535,400	\$2,901,000
Induced Revenues	N/A	\$362,000	\$1,631,200	\$439,300	\$2,432,500
Total Revenues	\$4,313,400	\$1,466,900	\$6,215,300	\$3,344,700	\$15,340,300

City of Phoenix					
Impact Type	Construction Sales Tax	Employees Spending Sales Tax	Property Tax	State Shared Revenues	Total Revenues
Direct Revenues	\$11,091,600	\$912,000	\$739,800	\$1,114,000	\$13,857,400
Indirect Revenues	N/A	\$635,700	\$529,300	\$427,300	\$1,592,300
Induced Revenues	N/A	\$507,100	\$451,600	\$338,800	\$1,297,500
Total Revenues	\$11,091,600	\$2,054,800	\$1,720,700	\$1,880,100	\$16,747,200

NOTES

1. The total may not equal the sum of the impacts due to rounding.
2. Construction of the project is expected to take up to 10 years to complete.
3. All dollar figures are in 2004 dollars. Inflation has not been included in these figures.
4. The figures for the State of Arizona do not include revenues distributed to counties, cities, and towns.
5. All of the above figures are representative of the major revenue sources for the State of Arizona, Maricopa County and the City of Phoenix. The figures are intended only as a general guideline as to how the State, County, and the City could be impacted by the ASU Capital Center Campus.
6. The above figures are based on the current economic structure and tax rates of the State of Arizona, Maricopa County and the City of Phoenix.

Source: Elliott D. Pollack & Company; MPT, AN; Arizona Department of Revenue; Arizona Tax Research Association.

4.0 Impact of University Operations

Once the ASU Capital Center Campus is completed, the university operations impact will be significant. Perhaps more importantly, the estimated 1,800 university employees and 15,000 students occupying the academic space throughout the year will create demand for additional business endeavors, including both retail and office related operations in Downtown Phoenix. The University's development plan includes a potential of 900,000 square feet for retail and office purposes.

Thus, there will be an economic and fiscal impact from both the university operations as well as the operations of the private commercial space (retail and office). In addition, there will be an impact from student spending. This section of the report will provide the economic and fiscal impact of the university operations. Section 5.0 will include the impact from the operations of the private sector, including student housing and student spending within the developed retail establishments.

4.1 Economic Impact of University Operations

Based on information provided by the University, the estimated 1,800 faculty and staff expected to be employed at the Capital Center Campus will generate \$66 million in wages and \$115.3 million annually in economic output (2004 dollars). In turn, these employees will create the demand for additional indirect and induced jobs.

Impact Type	Jobs	Population	Personal Income	Output
Direct	1,800	3,778	\$66,060,000	\$115,311,000
Indirect	354	743	\$16,769,000	\$39,643,000
Induced	598	1,254	\$23,830,000	\$60,634,000
Total	2,751	5,774	\$106,659,000	\$215,588,000

NOTES

- The total may not equal the sum of the impacts due to rounding.
- All dollar figures are in 2004 dollars. Inflation has not been included in these figures.

Source: Elliott D. Pollack & Company; DMPLAN.

A portion of the indirect and induced economic activity from university operations is already captured in the direct impact of the private office and retail commercial operations (see Section 5.0). The analysis of university operation impacts takes this into account and reduces the indirect and induced impact to avoid double counting. The indirect and induced impact of the university operations creates an additional 952 jobs with total annual wages of \$40.6 million and an economic output of \$100.3 million. In total, 2,751 jobs, \$106.7 million in wages, and 216.5 million in output, will be supported.

4.2 Fiscal Impact of University Operations

The fiscal impact of university operations includes only secondary impacts created from the spending of the employees. Primary revenues such as property taxes and sales taxes are excluded because the university is exempt.

Total tax collections from these university based staff will amount to \$4.0 million annually for the State, \$1.4 million for Maricopa County, and \$892,000 annually for the City of Phoenix. These fiscal revenues will be generated from income taxes, sales taxes, utility taxes, property taxes, and lease taxes.

Table 5
**ASU Capital Center Campus
Fiscal Impact of Faculty & Staff**

State of Arizona						
Impact Type	Sales Tax	Income Tax	Vehicle License Tax	Unemp. Tax	HURF Tax	Total Revenues
Direct	\$1,001,257	\$965,800	\$59,000	\$340,200	\$130,900	\$2,497,157
Indirect	\$220,444	\$263,700	\$11,600	\$66,900	\$25,700	\$588,344
Induced	\$344,236	\$348,400	\$19,600	\$112,900	\$43,500	\$868,636
Total	\$1,565,937	\$1,577,900	\$90,200	\$520,000	\$200,100	\$3,954,137
Maricopa County						
Impact Type	Sales Tax	Property Tax	State Shared Revenues			Total Revenues
Direct	\$191,094	\$487,396	\$231,000			\$909,490
Indirect	\$41,706	\$95,818	\$48,300			\$185,824
Induced	\$65,515	\$161,793	\$78,100			\$305,407
Total	\$298,314	\$745,007	\$357,400			\$1,400,721
City of Phoenix						
Impact Type	Sales Tax	Property Tax	State Shared Revenues			Total Revenues
Direct	\$267,661	\$127,748	\$178,600			\$574,009
Indirect	\$58,417	\$25,114	\$39,000			\$122,531
Induced	\$91,765	\$42,406	\$60,900			\$195,071
Total	\$417,843	\$195,269	\$278,500			\$891,612

NOTES

- The total may not equal the sum of the impacts due to rounding.
- All dollar figures are in 2004 dollars. Inflation has not been included in these figures.
- All of the above figures are representative of the major revenue sources for the State of Arizona, Maricopa County and the City of Phoenix. The figures are intended only as a general guideline as to how they could be impacted by the Capital Center Campus.

Source: Elliott D. Pollack & Company; IMPLAN; Arizona Department of Revenue; Arizona Tax Research Association.

5.0 Impact of Private Operations

As previously noted, private real estate development activity that is anticipated to occur at the Capital Center Campus includes privately developed student housing, retail space, and office space.

5.1 Economic Impact of Retail Operations

Of the 900,000 square feet of private space planned for the Capital Center Campus, 375,000 square feet will be dedicated for private retail purposes. Assuming all 375,000 square feet of retail space is absorbed, retail activity at the site will provide an estimated 1,762 direct, indirect, and induced jobs, and more than \$54 million in total wages for the direct and supporting employees. Total economic activity associated with the retail operations will exceed \$118 million per year.

Impact Type	Jobs	Population	Personal Income	Output
Direct	1,294	2,715	\$36,775,000	\$75,000,000
Indirect	130	274	\$5,324,000	\$12,970,000
Induced	338	709	\$12,127,000	\$30,857,000
Total	1,762	3,697	\$54,226,000	\$118,827,000

NOTES

- 1 The total may not equal the sum of the impacts due to rounding.
- 2 All dollar figures are in 2004 dollars. Inflation has not been included in these figures.

Source: Elliott D. Pollack & Company; IMPLAN; ASU

5.2 Fiscal Impact of Retail Operations

The additional economic activity related to retail operations will provide for additional taxable spending that will benefit the State, Maricopa County, and the City of Phoenix. Both students and faculty will provide much of this spending. The fiscal activity related to the planned retail space at the site will generate, on an annual basis, over \$5.4 million in sales tax revenue for the State, nearly \$1.9 million for Maricopa County, and over \$2.2 million for the City of Phoenix.

Table 7
**ASU Capital Center Campus
Fiscal Impact of Retail Operations**

State of Arizona		Primary Revenues			Secondary Revenues					Total Revenues
		Direct Sales Tax	Commercial Lease Tax	Building Property Tax	Employee Spending Sales Tax	Income Tax	Vehicle License Tax	Unemp. Tax	HURF Tax	
Impact Type										
Direct	\$3,217,193	N/A	N/A	\$652,768	\$490,800	\$42,400	\$244,500	\$94,100		\$4,741,761
Indirect	N/A	N/A	N/A	\$75,874	\$83,700	\$4,300	\$24,600	\$9,500		\$197,974
Induced	N/A	N/A	N/A	\$186,238	\$177,300	\$11,100	\$63,900	\$24,600		\$463,138
Total	\$3,217,193	N/A	N/A	\$914,881	\$751,800	\$57,800	\$333,000	\$128,200		\$5,402,873
Maricopa County										
Impact Type	Direct Sales Tax	Commercial Lease Tax	Building Property Tax	Employee Spending Sales Tax	Property Tax	State Shared Revenues				Total Revenues
Direct	\$525,000	N/A	\$492,825	\$125,619	\$350,256	\$157,900				\$1,651,601
Indirect	N/A	N/A	N/A	\$14,429	\$35,292	\$17,100				\$66,820
Induced	N/A	N/A	N/A	\$35,571	\$91,487	\$43,200				\$170,257
Total	\$525,000	N/A	\$492,825	\$175,619	\$477,035	\$218,200				\$1,888,679
City of Phoenix										
Impact Type	Direct Sales Tax	Commercial Lease Tax	Building Property Tax	Employee Spending Sales Tax	Property Tax	State Shared Revenues				Total Revenues
Direct	\$1,350,000	\$135,000	\$273,000	\$175,953	\$91,803	\$117,500				\$2,143,256
Indirect	N/A	N/A	N/A	\$20,210	\$9,250	\$13,600				\$43,060
Induced	N/A	N/A	N/A	\$49,823	\$23,979	\$33,300				\$107,102
Total	\$1,350,000	\$135,000	\$273,000	\$245,986	\$125,032	\$164,400				\$2,293,418

NOTES

- The total may not equal the sum of the impacts due to rounding.
- All dollar figures are in 2004 dollars. Inflation has not been included in these figures.
- All of the above figures are representative of the major revenue sources for the State of Arizona, Maricopa County and the City of Phoenix. The figures are intended only as a general guideline as to how they could be impacted by the Capital Center Campus.

Source: Elliott D. Pollack & Company; IMPLAN; Arizona Department of Revenue; Arizona Tax Research Association.

5.3 Economic Impact of Office Operations

This study assumes that the Capital Center Campus project will include 525,000 square feet of privately-financed office space. Assuming average stabilized vacancy rates and an average employee density of 250 square feet per employee, as many as 2,100 office employees could be located at the Capital Center Campus. These 2,100 office jobs would also yield \$78.6 million in direct wages. The "ripple effect" of these jobs will create an additional 1,098 jobs in the local economy with total wages of \$41.6 million and economic activity of \$102.5 million. Overall, the annual economic impact of the office operations will support nearly 3,200 jobs with wages of \$120.2 million and support economic activity of more than \$235.0 million annually.

Impact Type	Jobs	Population	Personal Income	Output
Direct	2,100	4,407	\$78,578,000	\$132,556,000
Indirect	347	729	\$14,701,000	\$34,007,000
Induced	750	1,574	\$26,927,000	\$68,515,000
Total	3,198	6,710	\$120,206,000	\$235,078,000

NOTES

- 1 The total may not equal the sum of the impacts due to rounding.
- 2 All dollar figures are in 2004 dollars. Inflation has not been included in these figures.

Source: Elliott D. Pollack & Company; IMPLAN; ASU

5.4 Fiscal Impact of Office Operations

The State would collect \$1.1 million annually in direct income taxes from the estimated 2,100 employees that would occupy the 525,000 square feet of office space. The employees would also spend their wages on retail sales; pay vehicle license taxes on cars they own and contribute to the unemployment tax and Highway User Revenue Fund tax collections. Overall, the State would collect more than \$4.2 million annually from the impact of office operations.

Furthermore, Maricopa County would collect an additional \$2.3 million in taxes attributable to this office activity. This includes nearly \$700,000 in property taxes that would be paid by the owners of the office space. The City of Phoenix would annually collect both commercial lease taxes and building property taxes of \$236,000 and \$382,000, respectively. In total, the City of Phoenix would collect \$1.6 million from office operations.

Table 9
**ASU Capital Center Campus
 Fiscal Impact of Office Operations**

State of Arizona	Primary Revenues		Secondary Revenues				Total Revenues	
	Commercial Lease Tax	Building Property Tax	Employee Spending Sales Tax	Income Tax	Vehicle License Tax	Unemp. Tax		HURF Tax
Direct	N/A	N/A	\$1,177,545	\$1,148,800	\$68,900	\$244,500	\$152,700	\$2,792,445
Indirect	N/A	N/A	\$205,412	\$231,200	\$11,400	\$24,600	\$25,300	\$497,912
Induced	N/A	N/A	\$413,528	\$393,700	\$24,600	\$63,900	\$54,600	\$950,328
Total	N/A	N/A	\$1,796,485	\$1,773,700	\$104,900	\$333,000	\$232,600	\$4,240,685
Maricopa County								
Impact Type	Commercial Lease Tax	Building Property Tax	Employee Spending Sales Tax	Property Tax	State Shared Revenues			Total Revenues
Direct	N/A	\$689,955	\$224,593	\$568,629	\$270,700			\$1,753,877
Indirect	N/A	N/A	\$39,015	\$94,060	\$46,100			\$179,174
Induced	N/A	N/A	\$78,982	\$203,139	\$95,800			\$377,921
Total	N/A	\$689,955	\$342,589	\$865,828	\$412,600			\$2,310,972
City of Phoenix								
Impact Type	Commercial Lease Tax	Building Property Tax	Employee Spending Sales Tax	Property Tax	State Shared Revenues			Total Revenues
Direct	\$236,250	\$382,200	\$314,583	\$149,039	\$209,600			\$1,291,672
Indirect	N/A	N/A	\$54,647	\$24,653	\$36,700			\$116,000
Induced	N/A	N/A	\$110,629	\$53,243	\$73,900			\$237,772
Total	\$236,250	\$382,200	\$479,859	\$226,936	\$320,200			\$1,645,445

NOTES

- The total may not equal the sum of the impacts due to rounding.
- All dollar figures are in 2004 dollars. Inflation has not been included in these figures.
- All of the above figures are representative of the major revenue sources for the State of Arizona, Maricopa County and the City of Phoenix. The figures are intended only as a general guideline as to how they could be impacted by the Capital Center Campus.

Source: Effron D. Pollack & Company; IMPLAN; Arizona Department of Revenue; Arizona Tax Research Association.

5.5 Impact from Student Housing and Spending

The Capital Center Campus is expected to accommodate a total of 15,000 students. On-site housing will be available to 4,000 students and the remaining 11,000 students will live off campus within Maricopa County.

Based on information from surveys conducted by ASU, students spend an estimated \$9,703 per year in taxable sales; \$4,900 on housing; and an additional \$4,600 on car payments, insurance, medical services and charity. In order to estimate the impact on taxable collections from the Capital Center Campus (on-site), this study assumes that the 4,000 students that live on campus would spend 50% of their taxable expenditures on-site. In addition, the 11,000 students living off campus are assumed to make 10% of their taxable purchases on-site.

Overall, the 15,000 students of the Capital Center Campus will have annual taxable expenditures of \$145.5 million. The total off-site spending is \$115.5 million annually.

Table 10 Annual Student Expenditures	
<i>Number of Students</i>	
Students living in student housing (on-site)	4,000
Students living off-site	11,000
Total ASU Capital Center Campus Students	<u>15,000</u>
<i>Annual Expenditures per Student</i>	
Taxable Sales	\$9,703
Housing	\$4,866
Other	\$4,580
Total Annual Expenditures per students	<u>\$19,149</u>
<i>Total On-Site and Off-Site Spending</i>	
On-site taxable spending	\$30,079,155
4,000 students living on-site	\$19,405,907
11,000 students living off-site	\$10,673,249
Off-site taxable spending	\$115,465,144
4,000 students living on-site	\$19,405,907
11,000 students living off-site	<u>\$96,059,237</u>
Total taxable spending	\$145,544,299
4,000 students living on-site	\$38,811,813
11,000 students living off-site	\$106,732,486
NOTE: Housing includes utilities; "Other" includes car payments; medical services and charitable contributions.	
Source: Arizona State University; Elliott D. Pollack & Company	

Assuming full occupancy of the 4,000 student housing units, over \$5.1 million in combined taxes will be generated for the State, nearly \$2.4 million will be generated for Maricopa County, and nearly \$2.5 million will be generated for the City of Phoenix.

The on-site student spending has been excluded from this analysis to avoid double counting from the impact of retail operations presented in Section 5.2 of this report. However, many students that live near the campus, or elsewhere in Phoenix, would indeed spend their income on taxable goods at the site.

Table 11
**ASU Capital Center Campus
 Fiscal Impact of Student Housing**

State of Arizona			
Building Utility Tax	Off-site Student Spending Sales Tax		Total Revenues
\$115,920	\$4,952,982		\$5,068,902
Maricopa County			
Building Property Tax	Off-site Student Spending Sales Tax		Total Revenues
\$1,577,040	\$808,256		\$2,385,296
City of Phoenix			
Building Property Tax	Off-site Student Spending Sales Tax	Commercial Lease Tax	Total Revenues
\$873,600	\$1,112,220	\$501,120	\$2,486,940

NOTES

- 1 The total may not equal the sum of the impacts due to rounding.
- 2 All dollar figures are in 2004 dollars. Inflation has not been included in these figures.
- 3 All of the above figures are representative of the major revenue sources for the State, County and City.
 The figures are intended only as a general guideline as to how they could be impacted by the Capital Center Campus.

Source: Elliott D. Pollack & Company; IMPLAN; Arizona Department of Revenue; Arizona Tax Research Association.

6.0 Summary of Impacts

The development of the planned Capital Center Campus will provide a significant economic impact for the State of Arizona, Maricopa County, and City of Phoenix, particularly Downtown Phoenix. In addition to the economic impact, the fiscal impact from both the one-time construction of the project on the on-going operations of the Capital Center Campus is significant.

6.1 Economic Impact Summary

During the construction phase, an average of 1,300 jobs will be created annually with an economic output of \$166.8 million. Once the project achieves build-out and is in full operation, the project is expected to create 7,700 jobs with economic activity of \$569.5 million annually. See the following page for a summary table.

Table 12
**ASU Capital Center Campus
Economic Impact Summary**

Construction Impact (one-time impact)				
	10 year Impact	Annually		
Jobs				
Direct	5,634	563		
Indirect	4,030	403		
Induced	3,439	344		
Total	13,103	1,310		
Wages (\$ mil)				
Direct	\$255.2	\$25.5		
Indirect	\$171.6	\$17.2		
Induced	\$123.4	\$12.3		
Total	\$550.3	\$55.0		
Economic Output (\$ mil)				
Direct	\$948.0	\$94.8		
Indirect	\$406.2	\$40.6		
Induced	\$314.1	\$31.4		
Total	\$1,668.2	\$166.8		
Operations Impact (On-going Annual Impact)				
	University Operations	Retail Operations	Office Operations	Total Operations
Jobs				
Direct	1,800	1,294	2,100	5,194
Indirect	354	130	347	832
Induced	598	338	750	1,686
Total	2,751	1,762	3,198	7,711
Wages (\$ mil)				
Direct	\$66.1	\$36.8	\$78.6	\$181.4
Indirect	\$16.8	\$5.3	\$14.7	\$36.8
Induced	\$23.8	\$12.1	\$26.9	\$62.9
Total	\$106.7	\$54.2	\$120.2	\$281.1
Economic Output (\$ mil)				
Direct	\$115.3	\$75.0	\$132.6	\$322.9
Indirect	\$39.6	\$13.0	\$34.0	\$86.6
Induced	\$60.6	\$30.9	\$68.5	\$160.0
Total	\$215.6	\$118.8	\$235.1	\$569.5

Source: IMPLAN; Arizona State University; Elliott D. Pollack & Company

6.2 Fiscal Impact Summary

During the construction phase of the Capital Center Campus project, the State of Arizona would collect an average of \$5.2 million annually in taxes and fees. Revenues for Maricopa County and the City of Phoenix would reach \$1.5 million and \$1.7 million, respectively.

The operation phase impact are considered on-going annual impacts. The State would collect \$18.7 million annually from spending of the faculty and staff, private retail and office operations and the spending of the 15,000 Capital Center Campus students. Maricopa County would collect \$8.0 million annually while the City of Phoenix would collect \$7.3 million annually.

Table 13
**ASU Capital Center Campus
Fiscal Impact Summary**

Construction Impact (one-time impact)					
	10 year Impact	Annually			
Revenues (\$ mil)					
State of Arizona Revenues	\$52.1	\$5.21			
Maricopa County Revenues	\$15.3	\$1.53			
City of Phoenix Revenues	\$16.7	\$1.67			
Operations Impact (On-going Annual Impact)					
	University Operations	Retail Operations	Office Operations	Student Spending	Total Operations
Revenues (\$ mil)					
State of Arizona Revenues	\$4.0	\$5.40	\$4.24	\$5.07	\$18.7
Maricopa County Revenues	\$1.4	\$1.89	\$2.31	\$2.39	\$8.0
City of Phoenix Revenues	\$0.9	\$2.29	\$1.65	\$2.49	\$7.3

Source: Elliott D. Pollack & Company; IMPLAN; Arizona Department of Revenue; Arizona Tax Research Association.