

The Economic Impact of a Fully Utilized CSUSB Palm Desert Campus

Master Plan Phase 1 through Phase 5

February 2018

A STUDY
PREPARED
FOR:



TOURISM
ECONOMICS

AN OXFORD ECONOMICS COMPANY



Contents

1 Introduction	3
2 Key Findings	6
3 Palm Desert Campus Master Plan	9
4 Economic Impact Methodology	13
5 Direct Impacts	15
6 Summary One-Time Economic & Fiscal Impacts	22
7 Summary Annual Economic & Fiscal Impacts	26
Appendix A: Detailed One-Time Phase 2 Impacts	31
Appendix B: Detailed Annual Phase 2 Impacts	38

1 | Introduction

1 | INTRODUCTION

The Palm Desert Campus (PDC) at California State University San Bernardino is entering the second phase of its master plan. The PDC Master Plan, originally implemented in 2016, envisions “a series of buildings and other improvements that will be developed incrementally over a long period of time in response to enrollment growth and campus functional needs. Each of the major projects will necessarily depend on the ability of the campus to fund its development either through the limited funds from the State or through local fundraising which has been the hallmark of the PDC campus in its development to date.”

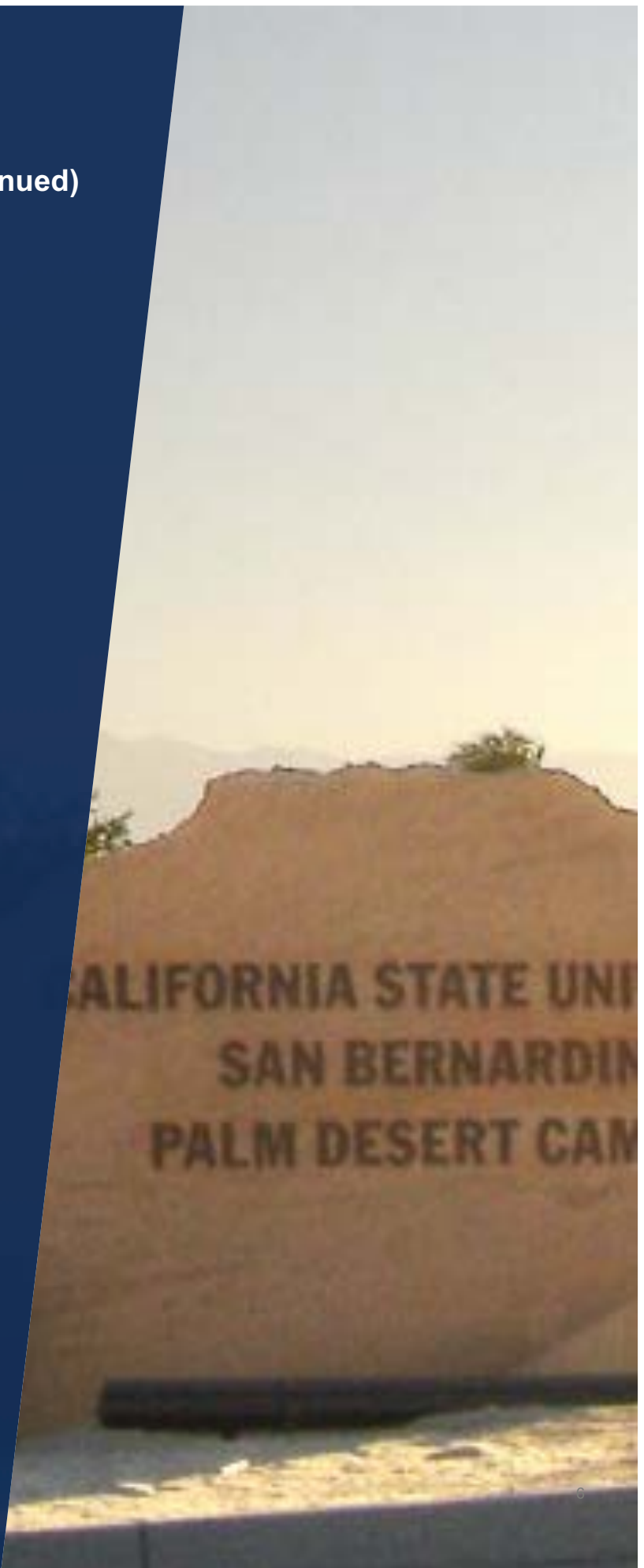
The five phases of the master plan will generate significant economic benefits in the local economy as PDC spends money on the development of buildings, student support services, administration resources, and other programs. This study specifically analyzes the potential economic benefits that the PDC’s master plan would generate in Greater Palm Springs in terms of economic and fiscal impacts, including total economic output, labor income, jobs, and taxes generated.



1 | INTRODUCTION (Continued)

The remainder of the report is organized as follows:

- ❑ Details on PDC's Master Plan
- ❑ Economic impact methodology
- ❑ Direct economic impacts of the five phases of PDC's Master Plan, including development costs, annual university operational expenditures, and annual off-campus student spending
- ❑ One-time economic and fiscal (tax) impacts attributable to development costs
- ❑ Annual economic and fiscal (tax) impacts attributable to operational expenditures & off-campus student spending



2) Key Findings

Key elements of all five phases of
PDC's master plan include:

**6,600 new
students**

The addition of 6,600 new
students, bringing enrollment to
8,000 students

74,400 sq.ft.

Student union building and
CEL building

105,000 sq.ft.

Physical education center

72,600 sq.ft.

Academic building

\$710 million

Nearly \$710 million in total
project costs

One-time impacts of PDC Master Plan's five phases on Greater Palm Springs

Development/construction costs	\$710 million
Total economic impact	\$1,016 million
Job impact	8,380 jobs
Labor income impact	\$343 million
Tax impact	\$100 million
State & Local	\$24 million
Federal	\$76 million

Source: Tourism Economics

Annual impacts of PDC Master Plan on Greater Palm Springs by Phase 5

Operational expenditures & off-campus student spending	\$189 million
Total economic impact	\$286 million
Job impact	2,635 jobs
Labor income impact	\$88 million
Tax impact	\$26 million
State & Local	\$10 million
Federal	\$16 million

Source: Tourism Economics

3 | Palm Desert Campus Master Plan

Palm Desert Campus Master Plan

The Implementation and Phasing Plan of the Master Plan informs three major elements that address campus needs, campus layout and functional issues, and funding dimensions of a rational capital improvement effort. The three elements include:

- 1. Near term needs and priorities:** Based on existing academic space, the current physical capacity of the campus is approximately 2,500 FTE, suggesting that there is room to accommodate additional enrollment with little or no new space requirements. However, until those academic spaces are mandated by new enrollment, the campus has other important functional needs that will be critical if the campus is to continue to grow. These include library and Informational resource functions, student study areas (as a commuter campus these are essential), food service, student housing, childcare, facilities maintenance and in the longer term, athletic and recreational functions.
- 2. Spatial grouping of related projects:** Each phase responds to projected student needs and priorities, beginning with an emphasis on student support services and creating a new central plaza to establish the direction for future growth towards the east and southwest to the intersection of Cook and Sinatra. Each subsequent phase addresses infill priorities to meet future academic needs, add appropriate student athletic facilities, parking and other support facilities necessary for a complete campus to eventually serve 8,000 students. Please see the following page for a map depicting the proposed master plan phasing.
- 3. Near term needs and priorities:** The 2016 PDC Master Plan provides a roadmap for future development of the campus and will allow the University leadership to implement its strategic plan and establish strategies for funding. The unique history of local leadership and generosity in the funding of the first buildings at the Palm Desert Campus suggests potential opportunities for the financing of specific projects outlined in the 2016 PDC Master Plan. In light of the limited funding available through the California State University system (CSU), this is a unique chance for the campus to realize some of the early priority projects in the near term.

Palm Desert Campus Master Plan: Phasing

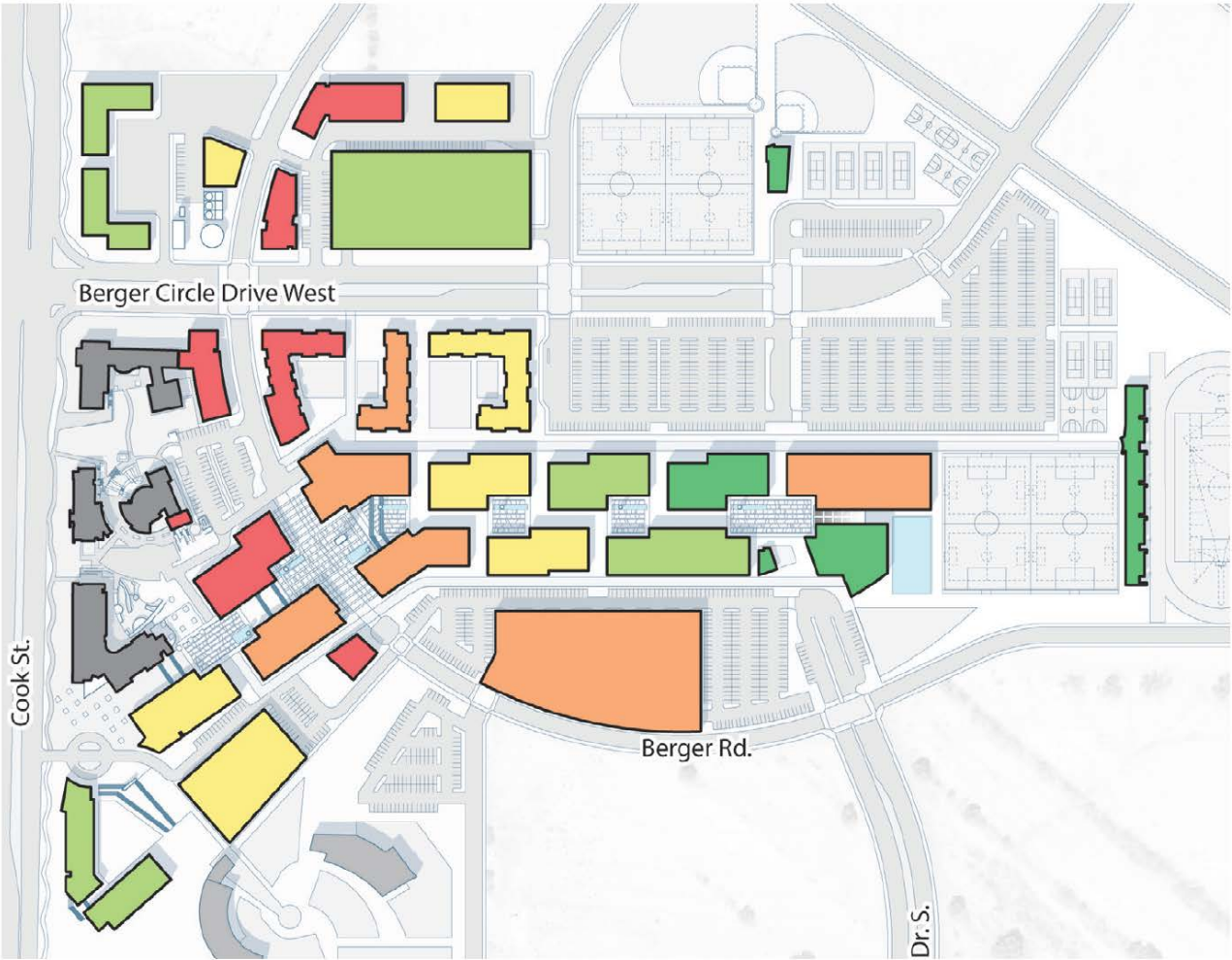
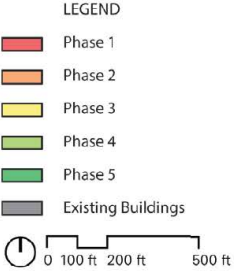


FIGURE 1-1: PHASING



Palm Desert Campus master plan (continued)

The 2016 PDC Master Plan prioritizes initial development of student amenities and support services in order to create an attractive campus environment in support of student and faculty recruitment. The initial priority would focus on a Library/ Media Center in order to provide study areas, computer lounges, information resources, food service, meeting rooms, faculty and student offices and other functions that will improve the quality of life on the campus. A shared academic building is also proposed to support the emerging Hospitality Program and a first phase of student housing. Providing student housing can help to establish a 24/7 setting that encourages students to spend more time on campus, collaborating, learning, and living. A new childcare facility is also proposed that could be shared with the community.

“The initial priority of the master plan would focus on a library/media center that will improve the quality of life on campus.”

Future phases emphasize infill development along the new pedestrian promenade to the east (The Palm Canyon Walk) which terminates with the new Student Athletic Center. The timing of the academic buildings will, of course, depend upon student enrollment growth and funding, however functions such as the Athletic Center which has potential for shared use with the community could generate near term donor interest and/or opportunities for public or private partnerships for funding.

4 | Economic Impact Methodology

Main components of economic impact analysis

There are three main components of economic impact:

- Direct impacts
- Indirect impacts
- Induced impacts

Direct Impacts include the university's one-time development expenditures, annual university operational expenditures, and annual off-campus spending by new students enrolled over the five phases of the Master Plan.

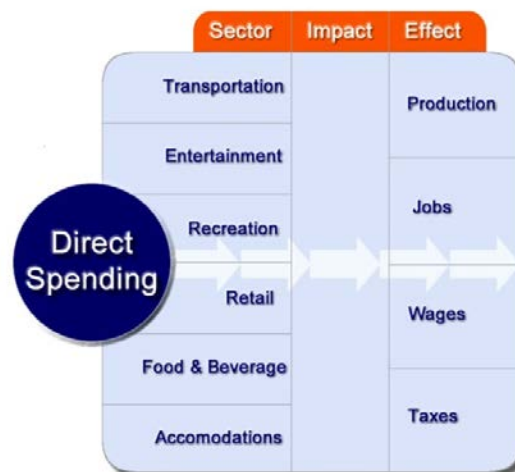
Indirect Impacts include local downstream supplier industry impacts. For example, the university might hire a third-party cleaning service, food and equipment delivery service, or legal services based in Greater Palm Springs during construction projects over the five phases of the Master Plan.

Induced Impacts arise as employees spend their wages in the local economy. For example, university employees, as well as employees at local restaurants where students dine, will spend money on rent, transportation, food & beverage, and entertainment within the local economy.

An input output (I-O) model represents a profile of an economy by measuring the relationships among industries and consumers.

For example, an I-O model tracks the flow of a student's restaurant expenditures to wages, profits, capital, taxes and suppliers. The supplier chain is also traced to food wholesalers, to farmers, and so on. In this way, the I-O model allows for the measurement of the direct and indirect sales generated by a restaurant meal.

The model also calculates the induced impacts of development expenditures and operational expenditures. These induced impacts represent benefits to the economy as employees of impacted sectors spend their wages in the local economy, generating additional output, jobs, taxes, and wages.



5 | Direct Impacts

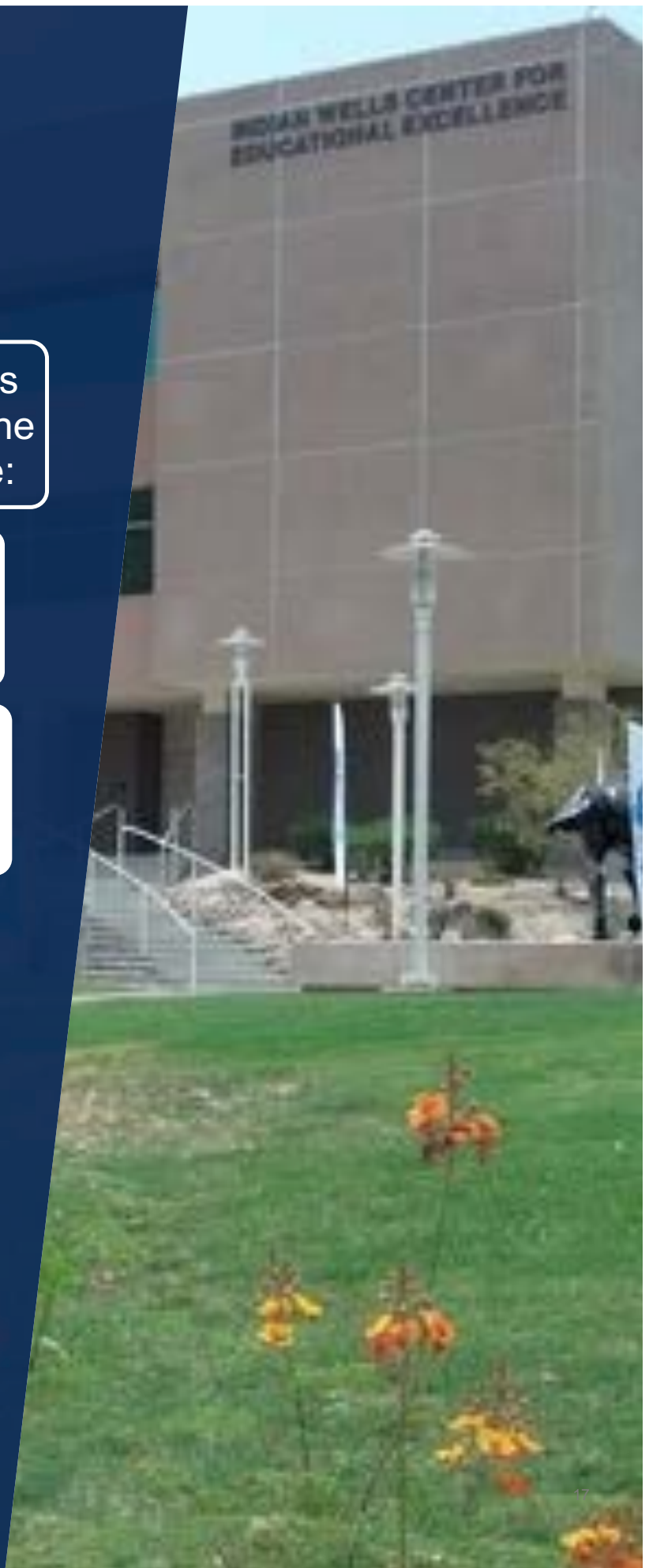
5 | DIRECT IMPACTS

Direct economic impacts over the five phases of the Master Plan will include:

One-time development expenditures associated with construction projects during the five phases of the Master Plan

Increased annual university operational expenditures to meet increased student enrollment

Increased off-campus spending by new students enrolled through Phase 5



Palm Desert Campus Master Plan: estimated summary development costs

The 2016 PDC Master Plan estimates that total development costs will amount to nearly \$710 million, including approximately \$96 million for Phase I, \$199 million for Phase 2, \$140 million for Phase 3, \$111 million for Phase 4, \$94 million for Phase 5, and \$69 million for other projects.

The five phases of the PDC Master Plan will include the development of more than 1,000,000 gross square feet (GSF).

“Total development costs for the five phases of the master plan amount to an estimated \$710 million.”

2016 Palm Desert Campus master plan cost estimation, by phase (\$ millions)

Phase 1	\$96.0
Phase 2	\$198.5
Phase 3	\$140.3
Phase 4	\$110.9
Phase 5	\$94.4
Other projects	\$69.5
Total development costs	\$709.6

Source: Palm Desert Campus Master Plan (2016)

Development yield in gross square footage, by master plan phase (square feet)

Phase	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Total
Library & Collaborative	27,675	111,450	135,075	85,725	48,150	408,075
Physical Education	66,025	37,150	45,025	28,575	16,050	192,825
Student Support	10,400	105,000	-	-	8,630	124,030
Administration	27,100	74,400	-	-	50,500	152,000
Other Spaces	8,400	-	-	74,860	-	83,260
Physical Plant	17,800	-	19,800	3,940	-	41,540
Total	157,400	328,000	199,900	193,100	123,330	1,001,730

Source: Palm Desert Campus Master Plan (2016)

One-time development expenditures (detailed)

Building and site work costs amount to \$525.6 million, while soft costs amount to \$184.0 million, resulting in \$709.6 million in total project costs over the five phases of the Master Plan.

Palm Desert Campus master plan detailed cost estimation, by phase (\$ millions)

Description	Sq Ft	Building & Site Work	Soft Costs	Total Project Costs
Phase 1		\$71.1	\$24.9	\$96.0
Classroom expansion wing	36,900	\$15.9	\$5.6	\$21.5
Library & media center	70,000	\$34.0	\$11.9	\$45.8
Childcare center	10,400	\$4.5	\$1.6	\$6.1
Police & transportation office	20,000	\$9.2	\$3.2	\$12.4
Facilities 1 maintenance building	17,800	\$6.2	\$2.2	\$8.4
Theater building expansion	1,300	\$1.4	\$0.5	\$1.9
Phase 2		\$147.0	\$51.5	\$198.5
Student union building	74,400	\$35.8	\$12.5	\$48.3
CEL building	76,000	\$32.4	\$11.3	\$43.7
Physical education center	105,000	\$47.2	\$16.5	\$63.8
Academic building	72,600	\$31.6	\$11.1	\$42.7
Phase 3		\$103.9	\$36.4	\$140.3
Western signature lab building	59,200	\$34.8	\$12.2	\$47.0
Academic building	64,200	\$27.7	\$9.7	\$37.4
Academic building	56,700	\$24.7	\$8.6	\$33.3
Facilities 2 maintenance building	12,600	\$4.9	\$1.7	\$6.6
Plant building	7,200	\$11.9	\$4.1	\$16.0
Phase 4		\$82.1	\$28.7	\$110.9
Administration building	78,800	\$29.9	\$10.5	\$40.3
Academic building	64,200	\$28.0	\$9.8	\$37.8
Production classroom building	33,600	\$15.1	\$5.3	\$20.4
Production studio building	16,500	\$9.1	\$3.2	\$12.3
Phase 5		\$69.9	\$24.5	\$94.4
Production classroom building	64,200	\$28.0	\$9.8	\$37.8
Student amenity (café)	4,600	\$1.4	\$0.5	\$1.8
Recreation Center	48,900	\$24.0	\$8.4	\$32.4
Community athletic building	8,630	\$4.7	\$1.7	\$6.4
Other Projects		\$51.5	\$18.0	\$69.5
Sitework & other projects	NA	\$51.5	\$18.0	\$69.5
Total, All Phases & Projects		\$525.6	\$184.0	\$709.6

Source: Palm Desert Campus Master Plan (2016)

Increased student enrollment & off-campus spending

Over the five phases of PDC's Master Plan, the campus will add an additional 6,600 students, increasing its enrollment from its current base of 1,400 students to an estimated 8,000 total students.

In addition to tuition expenses, these new students enrolled at PDC will spend money on and off campus, generating positive impacts within the local economy. Examples of student spending may include spending on off-campus housing, meals at local restaurants, purchases at local retail stores, and spending on entertainment and recreation activities.

“Total enrollment will include 8,000 students at the conclusion of Phase 5 of the PDC Master Plan.”

We conservatively estimate that students enrolled in the program will spend an average of \$15,000 for off-campus purchases each year, including \$10,000 in annual housing costs and \$5,000 on other expenses, including purchases for food, entertainment, and retail goods.

The 6,600 new students enrolled during Phase 2 of the master plan will spend a total of \$99.0 million on off-campus expenditures each year.

Estimated PDC enrollment before and after Phase 5 of Master Plan

Current student enrollment	1,400
Increased enrollment by Phase 5	6,600
Total enrollment after Phase 5	8,000

Source: Palm Desert Campus, Palm Desert Campus Master Plan (2016)

Increased annual off-campus spending by new students enrolled through Phase 5 of Master Plan

Increased enrollment by Phase 5	6,600
Average off-campus spending per student	\$15,000
Annual increased off-campus spending	\$99,000,000

Source: Palm Desert Campus Master Plan (2016), Tourism Economics

Increased university operational expenditures

Based on actual current operating budget data at comparable CSU campuses, annual operational expenditures at Palm Desert Campus will amount to \$90 million once enrollment reaches 8,000 students by the end of Phase 5.

“Annual operational expenditures will amount to an estimated \$90 million with 8,000 total students.”

Annual operational expenditures will include \$50 million for academic affairs, \$3 million for advancement, \$20 million for business and financial affairs, \$3 million for the Office of the President, \$5 million for student affairs, and \$9 million for technology and innovation.

Estimated annual university operational expenditures with 8,000 enrolled students

Academic Affairs	\$50.0
Advancement	\$3.0
Business & Financial Affairs	\$20.0
Office of the President	\$3.0
Student Affairs	\$5.0
Technology & Innovation	\$9.0
Total annual university operational expenditures	\$90.0

Source: Palm Desert Campus, Tourism Economics

Summary One-Time & Annual Direct Impacts

Direct impacts attributable to all five phases of PDC's Master Plan include one-time direct impacts of nearly \$710 million in development and construction expenditures.

Once enrollment reaches 8,000 students by Phase 5 of the Master Plan, annual direct impacts will amount to \$189 million, including \$90 million in university operational expenditures and \$99 million in off-campus student spending.

Summary direct impacts attributable to all five phases of Master Plan (\$ millions)

One-time direct impacts	\$709.6
Phase 1	\$96.0
Phase 2	\$198.5
Phase 3	\$140.3
Phase 4	\$110.9
Phase 5	\$94.4
Other projects	\$69.5
Annual direct impacts	\$189.0
University operational expenditures by Phase 5	\$90.0
Off-campus spending by new students enrolled through Phase 5	\$99.0

Source: Palm Desert Campus Master Plan (2016), Tourism Economics

6 | Summary One-Time Economic & Fiscal Impacts

6 | ONE-TIME ECONOMIC IMPACTS

\$710 million in development and construction expenditures through all five phases of PDC's Master Plan will generate the following summary one-time economic impacts in Greater Palm Springs:

Phases 1 through 5 development & construction expenditures	\$709.6 million
Total economic impact	\$1,015.5 million
Total labor income	\$342.7 million
Total jobs	8,380 jobs
Total taxes	\$100.1 million
State & local	\$24.4 million
Federal	\$75.7 million

Source: Tourism Economics



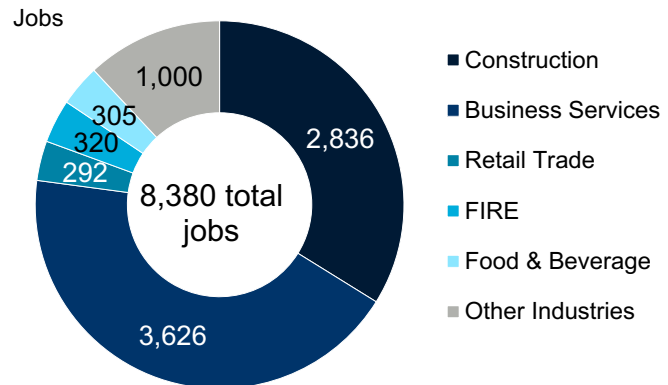
One-Time Economic Impacts

We estimate that \$709.6 million in development expenditures through all five phases of the Master Plan will generate \$305.9 million in indirect and induced expenditures, resulting in a one-time economic impact of \$1,015.5 million in Greater Palm Springs, which in turn supports the following impacts over the course of the five phases:

- **\$342.7 million in total labor income**
- **8,380 total jobs**
- **\$24.4 million in state and local taxes**
- **\$75.7 million in federal taxes**

The resulting output multiplier is 1.43, implying that each \$1.00 in direct development expenditures generates an additional \$0.43 in indirect and induced expenditures in the economy of Greater Palm Springs during the five phases of the Master Plan.

One-Time job impacts attributable to development & construction expenditures, Phases 1 through 5



Source: Tourism Economics
FIRE: Finance, Insurance, Real Estate

The one-time economic impacts of development & construction expenditures on Greater Palm Springs, Phases 1 through 5

Dollar amounts in 2018 dollars

Development & construction expenditures, Phases 1 through 5 (\$ Millions)	
Building & site work	\$525.6
Soft costs	\$184.0
Total one-time Phase 2 development costs	\$709.6
Impacts on Greater Palm Springs (\$ Millions & Jobs)	
Total economic output	\$1,015.5
Direct expenditures	\$709.6
Indirect and induced business sales	\$305.9
Total labor income	\$342.7
Direct labor income	\$244.4
Indirect and induced labor income	\$98.3
Total jobs	8,380
Direct jobs	5,896
Indirect and induced jobs	2,484
State and local tax revenue	\$24.4
Sales	\$9.2
Personal Income	\$10.2
Other	\$5.0
Federal tax revenue	\$75.7
Personal Income	\$20.9
Social Insurance	\$26.3
Other	\$28.5

Source: Tourism Economics

One-Time Fiscal (Tax) Impacts

The economic impacts attributable to one-time development expenditures will also generate considerable fiscal (tax) impacts as they cycle through the economy of Greater Palm Springs through the five phases of the Master Plan.

One-time federal tax revenues will amount to nearly \$75.7 million, while one-time total state and local tax impacts will amount to approximately \$24.4 million.

One-time fiscal (tax) impacts generated through all five phases of Master Plan (\$ Millions)	
	Total
Federal	\$75.7
Personal Income	\$29.2
Corporate	\$6.3
Indirect business	\$2.4
Social insurance	\$37.7
State and Local	\$24.4
Sales	\$9.2
Bed Tax	\$0.2
Personal Income	\$10.2
Corporate	\$1.0
Social insurance	\$1.2
Excise and Fees	\$2.4
Property	\$0.3
TOTAL	\$100.1

Source: Tourism Economics

7 | Summary Annual Economic & Fiscal Impacts

7 | ANNUAL ECONOMIC IMPACTS

\$189.0 million in university operational expenditures and off-campus spending by newly enrolled students through Phase 5 of the Master Plan will generate the following summary annual economic impacts:

University operational expenditures & off-campus student spending	\$189.0 million
Total economic impact	\$286.2 million
Total labor income	\$87.7 million
Total jobs	2,635 jobs
Total taxes	\$25.8 million
State & local	\$9.9 million
Federal	\$15.9 million

Source: Tourism Economics

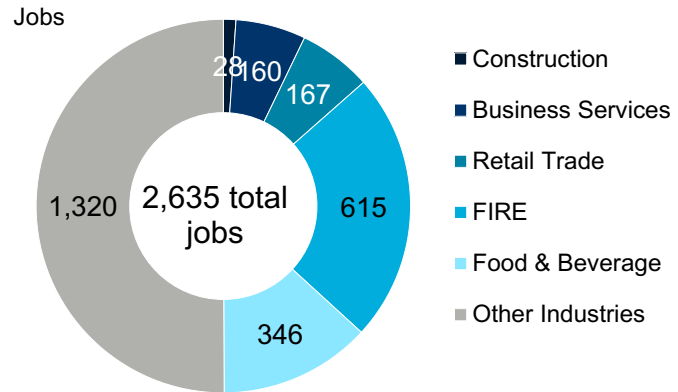
Annual economic impacts of university operational expenditures & new off-campus spending

We estimate that \$189.0 million in university operational expenditures and off-campus student spending will generate \$97.2 million in indirect and induced expenditures, resulting in an annual economic impact of \$286.2 million in Greater Palm Springs, which in turn supports the following impacts:

- **\$87.7 million in total labor income**
- **2,635 total jobs**
- **\$9.9 million in state and local taxes**
- **\$15.9 million in federal taxes**

The resulting output multiplier is 1.51, implying that each \$1.00 in direct off-campus student spending generates an additional \$0.51 in indirect and induced expenditures in the economy of Greater Palm Springs.

Annual job impacts attributable to university operational expenditures & off-campus student spending



Source: Tourism Economics
FIRE: Finance, Insurance, Real Estate

The annual economic impacts of university operational expenditures & off-campus student spending by Phase 5 of Master Plan

Dollar amounts in 2018 dollars

Annual direct impacts by Phase 5 (\$ Millions)	
University operational expenditures	\$90.0
Off-campus spending by new students	\$99.0
Total annual direct impacts	\$189.0
Impacts on Greater Palm Springs (\$ Millions & Jobs)	
Total economic output	\$286.2
Direct expenditures	\$189.0
Indirect and induced business sales	\$97.2
Total labor income	\$87.7
Direct labor income	\$60.2
Indirect and induced labor income	\$27.5
Total jobs	2,635
Direct jobs	1,901
Indirect and induced jobs	734
State and local tax revenue	\$9.9
Sales	\$3.7
Personal Income	\$1.8
Other	\$4.4
Federal tax revenue	\$15.9
Personal Income	\$5.8
Social Insurance	\$7.4
Other	\$2.7

Source: Tourism Economics

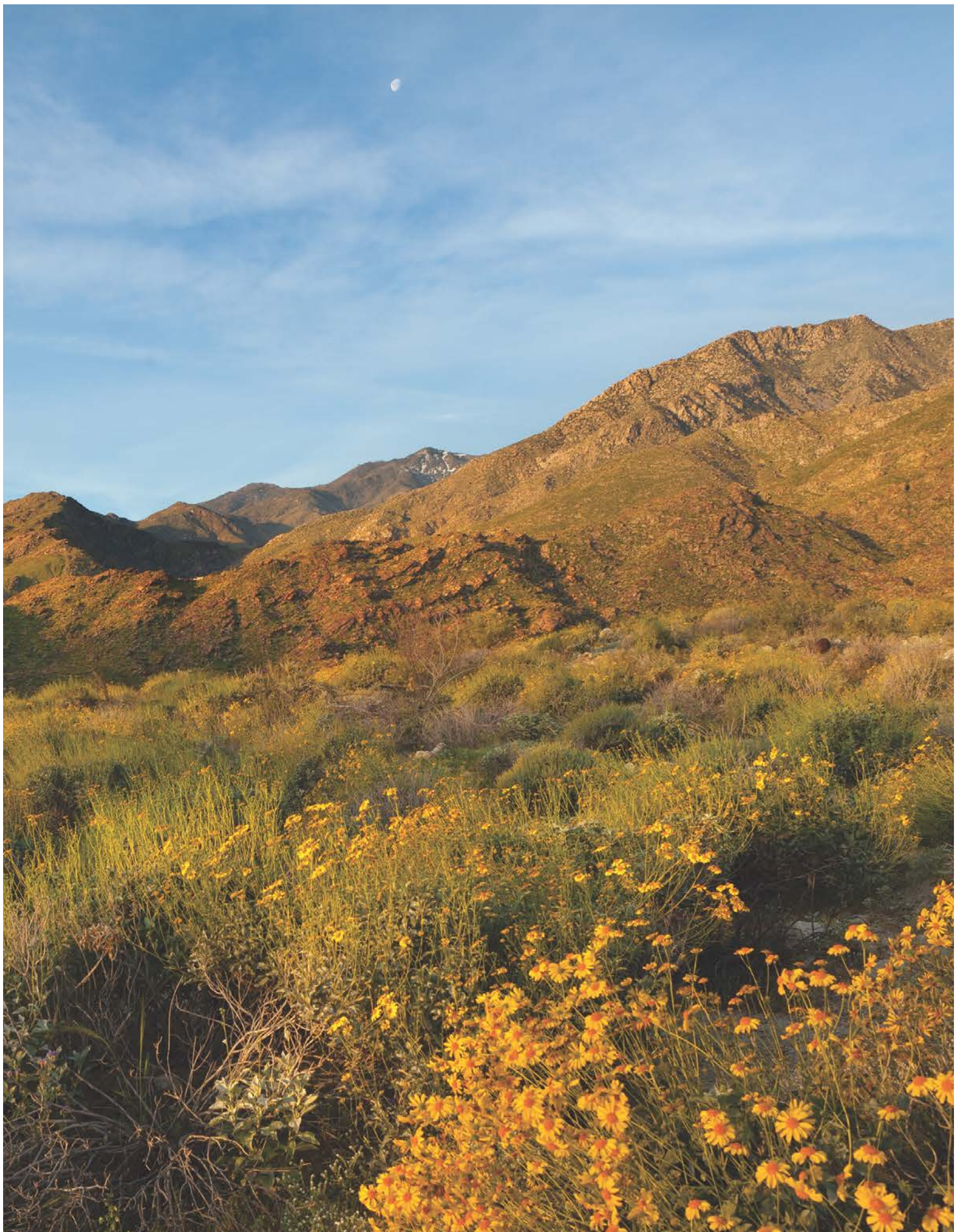
Annual fiscal (tax) impacts

The economic impacts attributable to annual university operational expenditures and off-campus spending by newly enrolled students during through Phase 5 will also generate considerable fiscal (tax) impacts as they cycle through the economy of Greater Palm Springs.

Annual federal tax revenue will amount to nearly \$15.9 million, while state and local tax impacts will amount to approximately \$9.9 million.

Annual (tax) impacts generated by operational expenditures & off-campus student spending (\$ Millions)	
	Total
Federal	\$15.9
Personal Income	\$5.3
Corporate	\$2.1
Indirect business	\$0.8
Social insurance	\$7.7
State and Local	\$9.9
Sales	\$3.7
Bed Tax	\$0.1
Personal Income	\$1.8
Corporate	\$0.3
Social insurance	\$0.3
Excise and Fees	\$1.2
Property	\$2.5
TOTAL	\$25.8

Source: Tourism Economics



Appendix A:
Detailed one-time economic & fiscal
impacts of development and construction
expenditures, Phases 1 through 5

One-time impact of development & construction expenditures on business sales over all five phases (1 of 2)

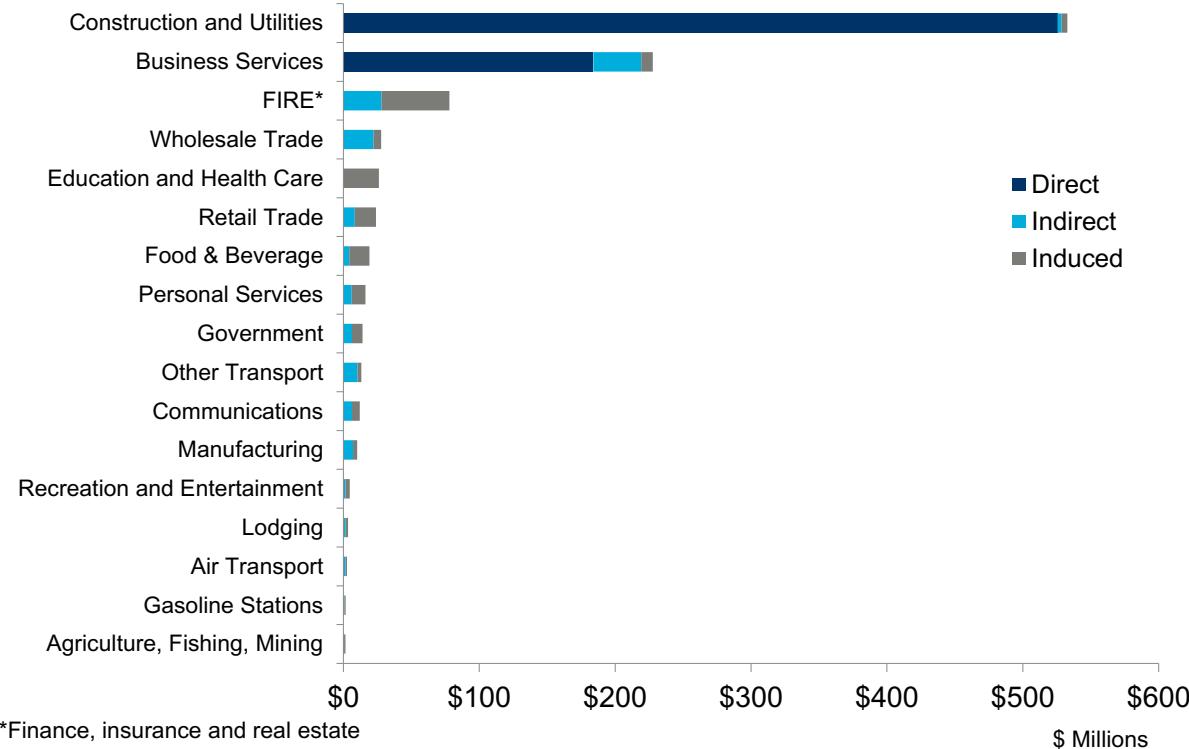
“All five phases generate \$709.6 million in direct development costs and \$1,015.5 million in total business sales when indirect and induced impacts are considered.”

One-time business sales generated by development and construction through Phase 5 (\$ Millions)				
	Direct	Indirect	Induced	Total
Agriculture, Fishing, Mining	-	\$0.5	\$1.1	\$1.6
Construction and Utilities	\$525.6	\$2.8	\$4.3	\$532.7
Manufacturing	-	\$7.1	\$3.0	\$10.1
Wholesale Trade	-	\$22.3	\$5.5	\$27.7
Air Transport	-	\$1.6	\$1.1	\$2.7
Other Transport	-	\$10.4	\$2.8	\$13.2
Retail Trade	-	\$8.4	\$15.6	\$24.0
Gasoline Stations	-	\$0.7	\$0.9	\$1.6
Communications	-	\$6.3	\$5.8	\$12.1
Finance, Insurance and Real Estate	-	\$28.1	\$50.0	\$78.1
Business Services	\$184.0	\$35.2	\$8.5	\$227.7
Education and Health Care	-	\$0.0	\$26.1	\$26.1
Recreation and Entertainment	-	\$1.6	\$3.2	\$4.7
Lodging	-	\$1.5	\$1.8	\$3.4
Food & Beverage	-	\$4.4	\$14.9	\$19.2
Personal Services	-	\$6.1	\$10.1	\$16.2
Government	-	\$6.4	\$7.7	\$14.1
TOTAL	\$709.6	\$143.3	\$162.6	\$1,015.5

Source: Tourism Economics

One-time impact of development & construction expenditures on business sales over all five phases (2 of 2)

One-time business sales generated by development & construction (All five phases)



One-time impact of development & construction expenditures on labor income over all five phases (1 of 2)

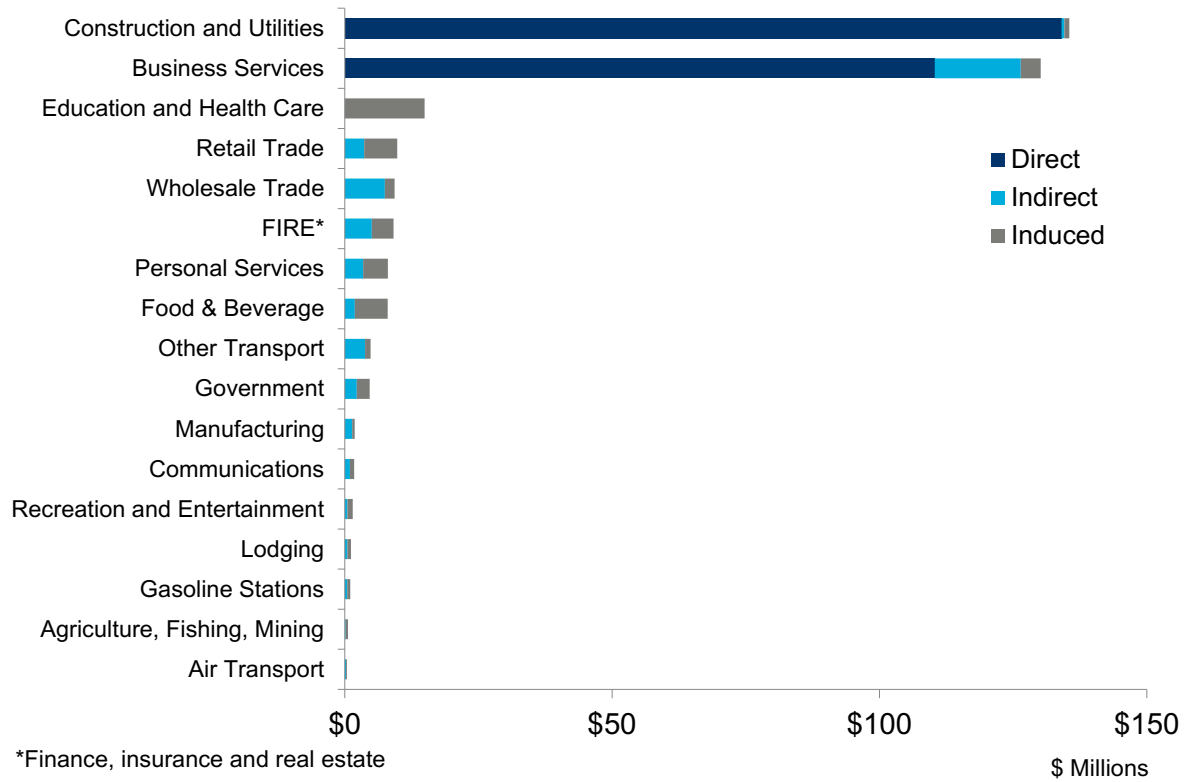
“Development and construction over all five phases directly generate \$244.4 million in direct income and \$342.7 million when indirect and induced impacts are considered.”

One-time labor income generated by development & construction through Phase 5 (\$ Millions)				
	Direct	Indirect	Induced	Total
Agriculture, Fishing, Mining	-	\$0.2	\$0.4	\$0.6
Construction and Utilities	\$134.1	\$0.5	\$0.9	\$135.5
Manufacturing	-	\$1.4	\$0.5	\$1.9
Wholesale Trade	-	\$7.5	\$1.8	\$9.3
Air Transport	-	\$0.2	\$0.2	\$0.4
Other Transport	-	\$3.8	\$1.0	\$4.8
Retail Trade	-	\$3.6	\$6.2	\$9.8
Gasoline Stations	-	\$0.5	\$0.6	\$1.0
Communications	-	\$1.0	\$0.8	\$1.8
Finance, Insurance and Real Estate	-	\$5.1	\$4.1	\$9.1
Business Services	\$110.4	\$16.1	\$3.7	\$130.2
Education and Health Care	-	\$0.0	\$14.9	\$14.9
Recreation and Entertainment	-	\$0.5	\$1.0	\$1.5
Lodging	-	\$0.5	\$0.6	\$1.1
Food & Beverage	-	\$1.9	\$6.1	\$8.0
Personal Services	-	\$3.4	\$4.6	\$8.1
Government	-	\$2.3	\$2.4	\$4.7
TOTAL	\$244.4	\$48.5	\$49.8	\$342.7

Source: Tourism Economics

One-time impact of development & construction expenditures on labor income over all five phases (2 of 2)

One-time wages generated by development & construction (all five phases)



One-time impact of development & construction expenditures on employment over all five phases (1 of 2)

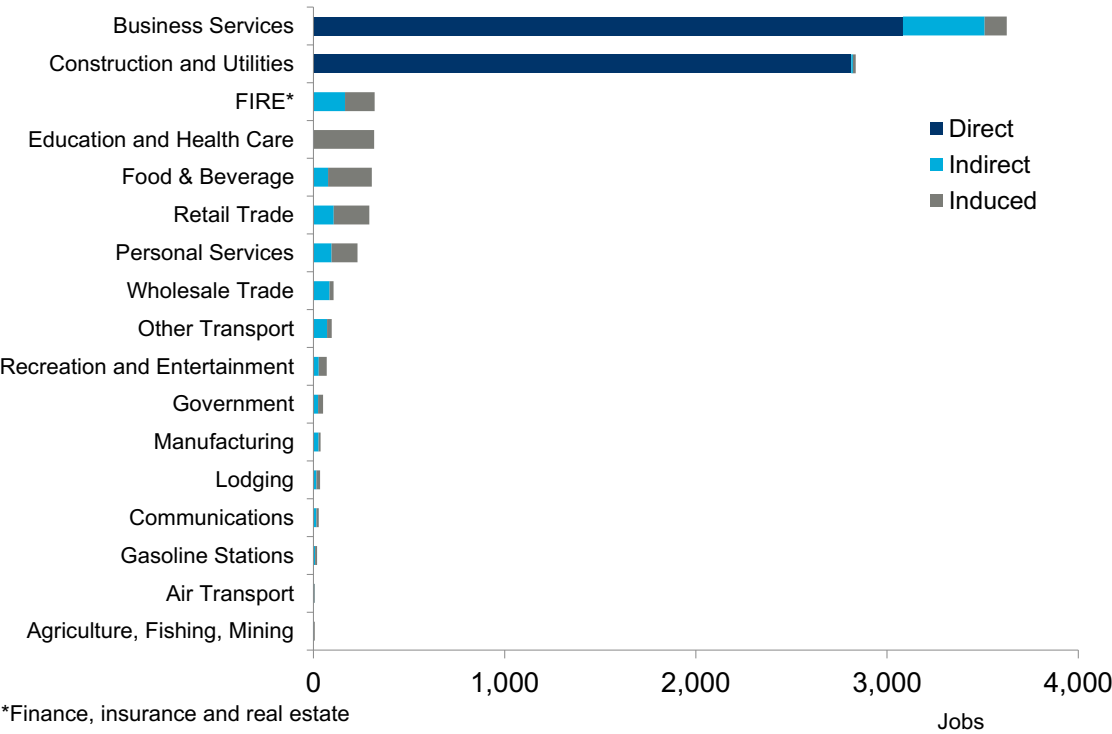
“All five phases directly generate 5,896 jobs and 8,380 jobs over the development and construction period when indirect and induced impacts are considered.”

One-time employment generated by development & construction through Phase 5 (Total jobs)				
	Direct	Indirect	Induced	Total
Agriculture, Fishing, Mining	0	3	5	7
Construction and Utilities	2,813	8	15	2,836
Manufacturing	0	27	11	38
Wholesale Trade	0	85	21	105
Air Transport	0	4	3	7
Other Transport	0	72	24	95
Retail Trade	0	106	187	292
Gasoline Stations	0	8	10	19
Communications	0	15	13	28
Finance, Insurance and Real Estate	0	165	155	320
Business Services	3,083	427	116	3,626
Education and Health Care	0	0	317	317
Recreation and Entertainment	0	27	42	69
Lodging	0	15	19	34
Food & Beverage	0	76	229	305
Personal Services	0	94	136	231
Government	0	24	26	50
TOTAL	5,896	1,157	1,326	8,380

Source: Tourism Economics

One-time impact of development & construction expenditures on employment over all five phases (2 of 2)

One-time employment generated by development & construction (all five phases)



Appendix B:
Detailed annual economic & fiscal impacts
of university operational expenditures &
off-campus spending by new students
enrolled through Phase 5

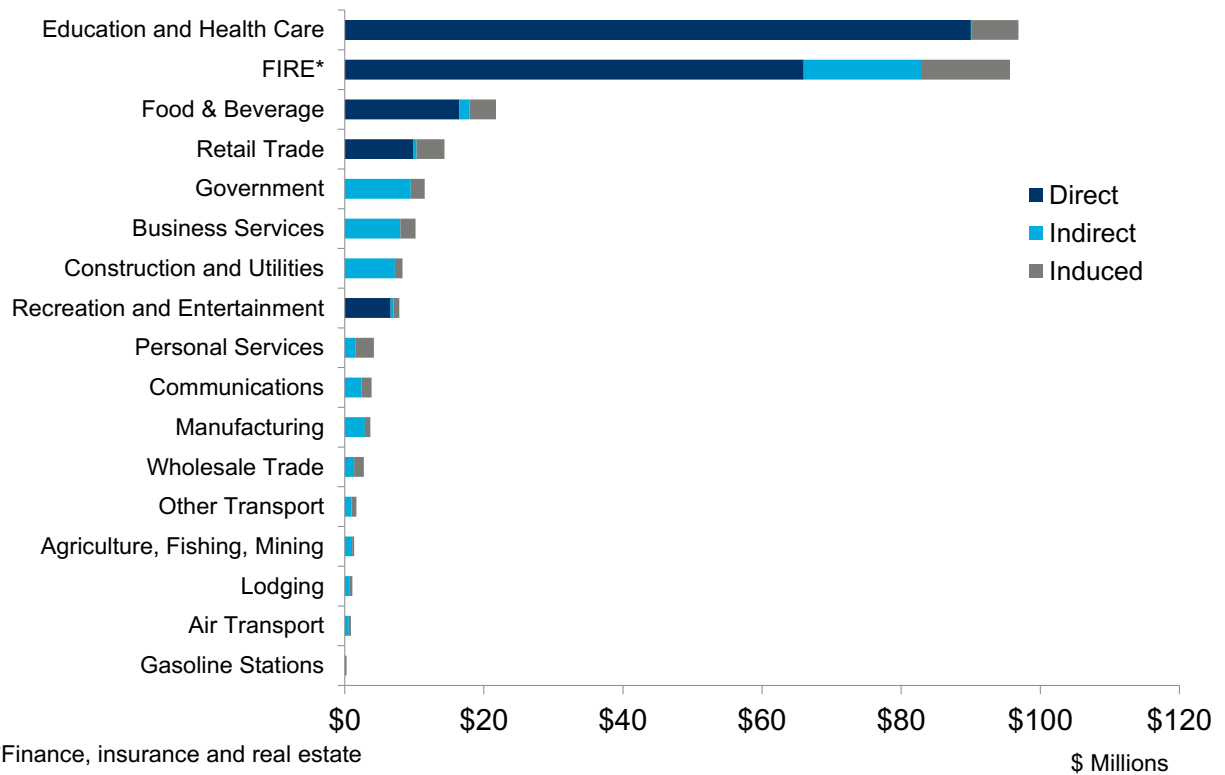
Annual impact on business sales by Phase 5 (1 of 2)

“By phase 5, PDC will generate \$189.0 million in direct impacts and \$286.2 million in total business sales when indirect and induced impacts are considered.”

Annual business sales generated by operational expenditures & off-campus student spending through Phase 5 (\$ Millions)				
	Direct	Indirect	Induced	Total
Agriculture, Fishing, Mining	-	\$1.1	\$0.3	\$1.3
Construction and Utilities	-	\$7.2	\$1.1	\$8.3
Manufacturing	-	\$2.9	\$0.8	\$3.7
Wholesale Trade	-	\$1.3	\$1.4	\$2.8
Air Transport	-	\$0.6	\$0.3	\$0.9
Other Transport	-	\$1.0	\$0.7	\$1.7
Retail Trade	\$9.9	\$0.4	\$4.0	\$14.3
Gasoline Stations	-	\$0.0	\$0.2	\$0.3
Communications	-	\$2.4	\$1.5	\$3.9
Finance, Insurance and Real Estate	\$66.0	\$16.9	\$12.8	\$95.7
Business Services	-	\$8.0	\$2.2	\$10.2
Education and Health Care	\$90.0	\$0.2	\$6.7	\$96.9
Recreation and Entertainment	\$6.6	\$0.4	\$0.8	\$7.8
Lodging	-	\$0.6	\$0.5	\$1.1
Food & Beverage	\$16.5	\$1.4	\$3.8	\$21.7
Personal Services	-	\$1.6	\$2.6	\$4.2
Government	-	\$9.5	\$2.0	\$11.5
TOTAL	\$189.0	\$55.6	\$41.6	\$286.2

Annual impact on business sales by Phase 5 (2 of 2)

Annual business sales generated by operational expenditures & student spending



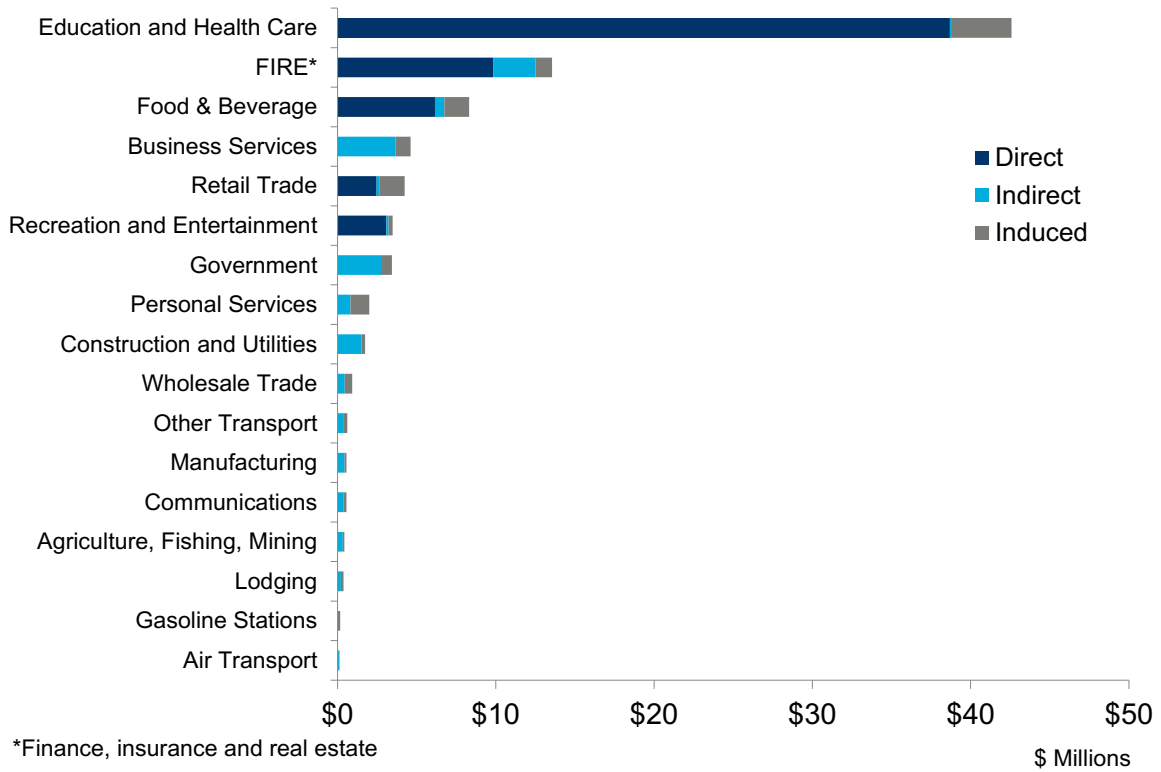
Annual impact of labor income by Phase 5 (1 of 2)

“University operational expenditures and off-campus student spending by Phase 5 directly generate \$60.2 million in direct income and \$87.7 million when indirect and induced impacts are considered.”

Annual labor income generated by operational expenditures & off-campus student spending through Phase 5 (\$ Millions)				
	Direct	Indirect	Induced	Total
Agriculture, Fishing, Mining	-	\$0.3	\$0.1	\$0.4
Construction and Utilities	-	\$1.5	\$0.2	\$1.7
Manufacturing	-	\$0.4	\$0.1	\$0.6
Wholesale Trade	-	\$0.5	\$0.5	\$0.9
Air Transport	-	\$0.1	\$0.0	\$0.1
Other Transport	-	\$0.4	\$0.3	\$0.6
Retail Trade	\$2.5	\$0.2	\$1.6	\$4.2
Gasoline Stations	-	\$0.0	\$0.1	\$0.2
Communications	-	\$0.4	\$0.2	\$0.6
Finance, Insurance and Real Estate	\$9.8	\$2.7	\$1.0	\$13.6
Business Services	-	\$3.7	\$1.0	\$4.6
Education and Health Care	\$38.7	\$0.1	\$3.8	\$42.6
Recreation and Entertainment	\$3.1	\$0.1	\$0.3	\$3.5
Lodging	-	\$0.2	\$0.2	\$0.4
Food & Beverage	\$6.2	\$0.6	\$1.6	\$8.3
Personal Services	-	\$0.8	\$1.2	\$2.0
Government	-	\$2.8	\$0.6	\$3.4
TOTAL	\$60.2	\$14.8	\$12.8	\$87.7

Annual impact on labor income by Phase 5 (2 of 2)

Annual wages generated by operational expenditures & student spending



Annual impact on employment by Phase 5 (1 of 2)

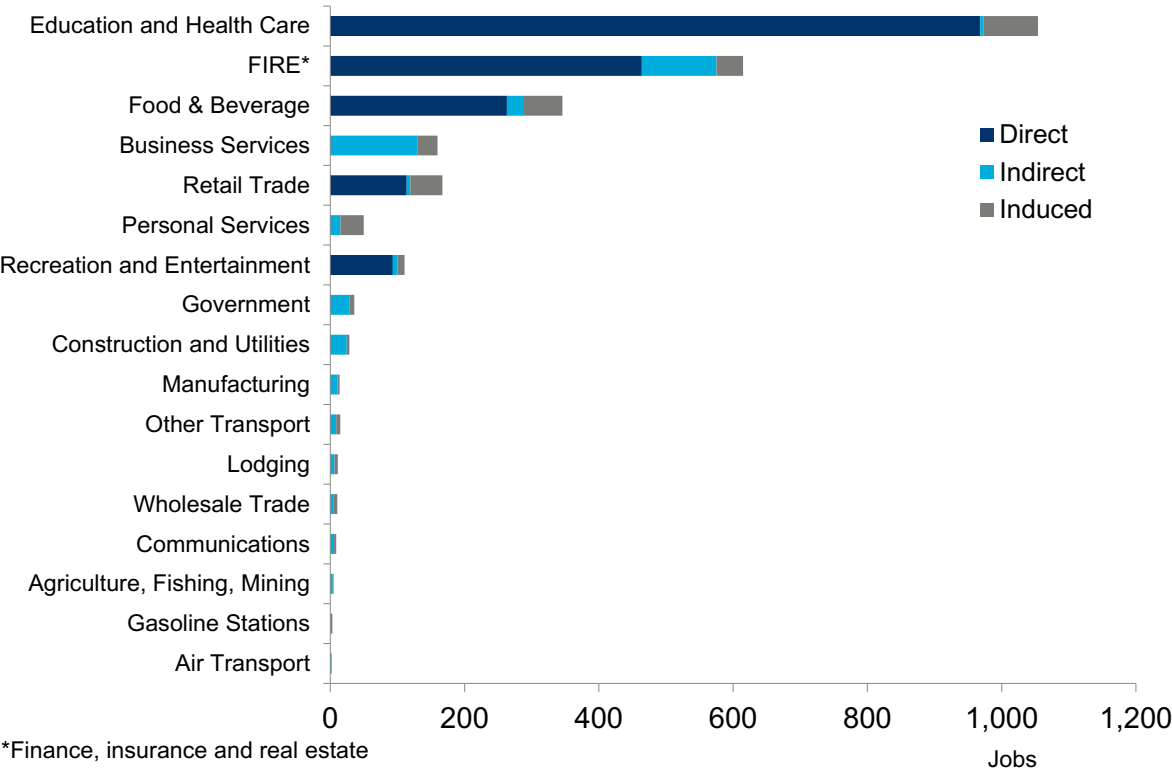
“University operational expenditures and off-campus student spending by Phase 5 directly generate 1,901 jobs and 2,635 jobs when indirect and induced impacts are considered.”

Annual jobs generated by operational expenditures & off-campus student spending through Phase 5 (Total Jobs)				
	Direct	Indirect	Induced	Total
Agriculture, Fishing, Mining	0	4	1	5
Construction and Utilities	0	25	4	28
Manufacturing	0	11	3	14
Wholesale Trade	0	5	5	10
Air Transport	0	2	1	2
Other Transport	0	9	6	15
Retail Trade	114	6	48	167
Gasoline Stations	0	0	3	3
Communications	0	6	3	9
Finance, Insurance and Real Estate	464	111	40	615
Business Services	0	130	30	160
Education and Health Care	968	5	81	1,054
Recreation and Entertainment	93	7	11	111
Lodging	0	6	5	11
Food & Beverage	263	24	59	346
Personal Services	0	15	35	50
Government	0	29	7	36
TOTAL	1,901	395	339	2,635

Source: Tourism Economics

Annual impact on employment by Phase 5 (2 of 2)

Annual employment generated by operational expenditures & student spending



About Tourism Economics

Tourism Economics is an Oxford Economics company with a singular objective: combine an understanding of tourism dynamics with rigorous economics in order to answer the most important questions facing destinations, developers, and strategic planners. By combining quantitative methods with industry knowledge, Tourism Economics designs custom market strategies, destination recovery plans, tourism forecasting models, tourism policy analysis, and economic impact studies.

With over four decades of experience of our principal consultants, it is our passion to work as partners with our clients to achieve a destination's full potential.

Oxford Economics is one of the world's leading providers of economic analysis, forecasts and consulting advice. Founded in 1981 as a joint venture with Oxford University's business college, Oxford Economics enjoys a reputation for high quality, quantitative analysis and evidence-based advice. For this, it draws on its own staff of more than 120 professional economists; a dedicated data analysis team; global modeling tools, and a range of partner institutions in Europe, the US and in the United Nations Project Link. Oxford Economics has offices in London, Oxford, Dubai, Philadelphia, and Belfast.

For more information:

info@tourismeconomics.com







TOURISM ECONOMICS

AN OXFORD ECONOMICS COMPANY

Global headquarters

Oxford Economics Ltd
Abbey House
121 St Aldates
Oxford, OX1 1HB
UK
Tel: +44 (0)1865 268900

London

Broadwall House
21 Broadwall
London, SE1 9PL
UK
Tel: +44 (0)20 7803 1400

New York

5 Hanover Square, 8th Floor
New York, NY 10004
USA
Tel: +1 (646) 786 1879

Singapore

6 Battery Road
#38-05
Singapore 049909
Tel: +65 6850 0110

Belfast

Tel: + 44 (0)2892 635400

Paarl

Tel: +27(0)21 863-6200

Frankfurt

Tel: +49 69 95 925 280

Paris

Tel: +33 (0)1 78 91 50 52

Milan

Tel: +39 02 9406 1054

Dubai

Tel: +971 56 396 7998

Philadelphia

Tel: +1 (610) 995 9600

Mexico City

Tel: +52 (55) 52503252

Boston

Tel: +1 (617) 206 6112

Chicago

Tel: +1 (773) 372-5762

Los Angeles

Tel: +1 (424) 238-4331

Florida

Tel: +1 (954) 916 5373

Toronto

Tel: +1 (905) 361 6573

Hong Kong

Tel: +852 3103 1096

Tokyo

Tel: +81 3 6870 7175

Sydney

Tel: +61 (0)2 8458 4200

Melbourne

Tel: +61 (0)3 8679 7300