



APPLIED ECONOMICS

ECONOMIC IMPACTS OF THE NEW NORTHERN ARIZONA HEALTHCARE CAMPUS

PREPARED FOR:

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1200 N. Beaver Street
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1.0 INTRODUCTION

Applied Economics was retained by Northern Arizona Healthcare (NAH) to perform an economic impact analysis of the planned medical campus and wellness village in the City of Flagstaff. NAH provided data on the mix of uses, employment and payroll, construction costs and development timing. The buildout of this campus is anticipated to occur over approximately 25 years and would include a new hospital, ambulatory care, surgical and medical office facilities to replace the existing NAH facilities. An expansion of the new hospital, ambulatory care and medical offices is anticipated in 2044. The medical facilities would be surrounded by a wellness village that would include commercial, residential, hotels and research facilities. This analysis is intended to provide a framework for understanding the economic and revenue impacts that the campus buildout could generate in the City of Flagstaff through 2045.

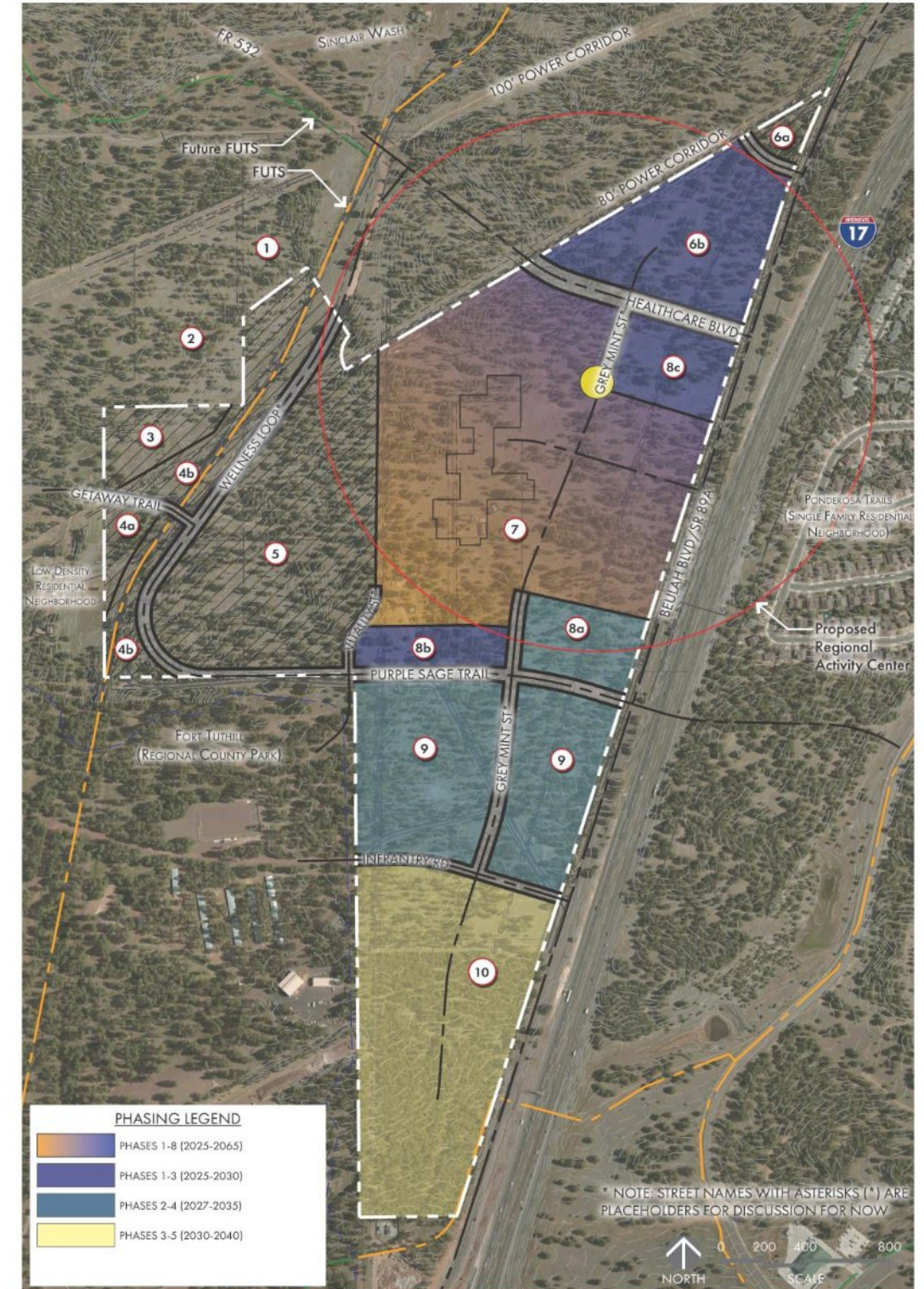
1.1 Project Description

The project area includes 172.6 gross acres on the west side of Interstate 17, just north of Highway 89A (Figure 1). Within the Activity Center, the proposed master plan includes 1.39 million square feet of medical facilities, two hotels totaling 240 rooms, 28,000 square feet of mixed use (retail, restaurant, services) and 315 residential units that would anchor the new NAH campus. It would be surrounded by 50,000 square feet of retail and services space, and 160,000 square feet of office space for clinical partners (Figure 2). In addition, there would be a Research and Innovation Center that would include 200,000 square feet of office space, 40,000 square feet of laboratory and R&D space and 10,000 square feet of classrooms.

Development of this campus is projected to occur in multiple phases between 2023 and 2044 with construction costs estimated at \$1.08 billion in current dollars. The mix of uses that are envisioned for the site will result in a high-quality development that will create a new focal point for the city for health-related research and training activities, as well as expanded healthcare options for are residents.

This analysis is not intended to be used as a feasibility study. It is simply an estimate of the economic impacts based on current development plans. The project parameters are likely to be refined as the project moves forward. However, even if the assumptions outlined in this report do occur, there will usually be differences between the estimates and the actual results because events and circumstances frequently do not occur as expected. In no way will Applied Economics be held responsible or have any liability or be subject to damages resulting from this analysis.

**FIGURE 1
PROPOSED PHASING PLAN**



NORTHERN AZ HEALTHCARE CAMPUS | PHASING PLAN
04/30/2021



FIGURE 2
PROJECTED DEVELOPMENT TIMING

Absorption	New Square Feet or Housing Units Added by Year of Construction																			
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	
Inside Activity Center																				
Residential (units)	0	0	315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hospital	0	0	0	724,578	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ambulatory & Surgery	0	197,576	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Medical Office	66,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Retail	0	0	0	0	0	0	0	10,000	0	0	0	0	2,320	0	0	0	0	0	0	0
Restaurant	0	0	0	0	0	9,520	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Service	0	0	0	0	0	6,160	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hotels	0	0	0	0	0	72,000	0	0	0	0	0	0	72,000	0	0	0	0	0	0	0
Outside Activity Center																				
Clinical Partners	0	0	0	0	80,000	0	80,000	0	0	0	0	0	0	0	0	0	0	0	0	0
Retail	0	0	0	0	0	15,000	0	0	0	0	0	0	15,000	0	0	0	0	0	0	0
Service	0	0	0	0	0	20,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Research & Innovation																				
Laboratory	0	0	0	0	0	0	0	10,000	0	0	0	0	0	0	0	0	0	0	0	0
R&D	0	0	0	0	0	0	0	30,000	0	0	0	0	0	0	0	0	0	0	0	0
Classrooms	0	0	0	0	0	0	0	10,000	0	0	0	0	0	0	0	0	0	0	0	0
Office	0	0	0	0	0	0	0	50,000	0	0	0	0	50,000	0	0	0	0	100,000	0	0

Figure 3 details the assumptions for each of the development components, including occupancy rate, employment, construction cost, taxable sales and lease rates. The businesses in the development could employ an estimated 1,985 people at buildout, including NAH employees and employees at other businesses within the NAH campus. This analysis assumes a long-term occupancy rate of 90 percent for most of the commercial and office space. In cases where there is a single user, such as the hospital, laboratory and R&D space, the occupancy rate is set at 100 percent. The occupancy rate of 65 percent for the hotels reflects room occupancy. While the average occupancy rate for all hotels in the region as reported by the Arizona Office of Tourism is above 70 percent, this analysis uses a more conservative estimate of occupancy.

Taxable retail sales per square foot are set at \$200 for general retail and \$500 for restaurants. Some of the mixed-use space is anticipated to be occupied by service establishments that do not generate sales tax. For the hotels, an average daily room rate (ADR) of \$193 (see lease rate/hotel ADR column in Figure 3) is assumed within the activity center based on current rates for the Drury Inn and Residence Inn in Flagstaff. Hotel room sales are distinct from other taxable sales and are captured separately in the analysis.

FIGURE 3
DEVELOPMENT CHARACTERISTICS
NORTHERN ARIZONA HEALTHCARE CAMPUS

Land Use	Total Square Feet	Occupancy	New Employees	Const Cost per Sq Ft	Taxable Retail Sales per Sq Ft	Lease rate/ Hotel ADR
Within Activity Center						
Hospital, Emergency, MOB	1,388,154	100%				na
Hospital	1,004,578	100%	370	\$736	\$0	na
Ambulatory and Surgery	277,576	100%	142	\$548	\$0	na
Medical Office	106,000	90%	57	\$415	\$0	\$24
Mixed Use						
Retail	12,320	90%	22	\$124	\$200	\$24
Service	6,160	90%	11	\$124	\$0	\$24
Restaurant	9,520	90%	57	\$213	\$500	\$24
Residential (315 units total)	346,500	88%	10	\$175	\$0	na
Hotels (240 rooms)	144,000	65%	60	\$190	\$0	\$193
Outside Activity Center						
Clinical Partners	160,000	100%	711	\$235	\$0	\$20
Retail	30,000	90%	54	\$124	\$200	\$24
Service	20,000	90%	45	\$197	\$0	\$24
Research and Innovation						
Laboratory	10,000	100%	20	\$196	\$0	\$15
R&D	30,000	100%	60	\$196	\$0	\$15
Classrooms	10,000	100%	7	\$168	\$0	\$15
Office	200,000	90%	360	\$235	\$0	\$20

Source: Northern Arizona Healthcare; Applied Economics; Gordian, Square Foot Costs, 2022.

2.0 IMPACT SUMMARY

This large-scale healthcare and mixed-use development would provide significant economic and revenue benefits to the City of Flagstaff and its residents. These benefits are contingent on the broad mix of uses that have been proposed, including the hospital and ambulatory care center, hotels, retail, restaurant, office, classroom, laboratory and R&D space. The project capitalizes on the development potential that exists in the freeway corridor in South Flagstaff and the accessibility of this site to the larger region.

- Projected construction expenditures of \$1.08 billion could support over 10,000 direct construction jobs and close to 3,200 additional indirect jobs in Flagstaff and Coconino County during the 23-year construction period. The total construction impact is estimated at \$1.55 billion with 75 percent of that impact occurring in the first eight years.
- Once development is complete in 2045, the project could generate an annual economic impact of \$387 million in the region, including direct and indirect operations impacts and off-site visitor spending related to the new hotels. This includes \$244 million in direct impacts in Flagstaff, plus \$142 million in indirect and induced impacts countywide, although given the proximity and the diversity of businesses in Flagstaff, it is likely that the majority of the indirect and induced impacts would be captured in the city.
- The hospital, ambulatory care, medical office, mixed use commercial, hotels, laboratory, classroom and research facilities in the development could directly employ an estimated 1,985 people at buildout. In addition, the development could support an estimated 1,100 indirect and induced jobs at other local businesses in Flagstaff and Coconino County. The indirect and induced jobs, labor income and output are the result of local purchases made by the businesses in the development, as well as local spending by their employees.
- An estimated \$113.0 million in direct labor income (or earnings) and \$159.0 million in total direct and indirect and induced labor income could be generated each year by the businesses in the Northern Arizona Healthcare Campus at buildout, creating the potential for significant local expenditures by employees and their families.
- In addition, the guests at the hotels would spend money in the community (outside of the development) on retail, restaurants, local transportation and entertainment. Annual off-site visitor spending is estimated at \$9.8 million by 2036. This spending could create an annual economic impact of \$15.6 million supporting an estimated 142 hospitality and related jobs, in addition to the annual operations impact of the businesses in the development.

- All total, the direct and indirect jobs generated by the Northern Arizona Healthcare Campus could support an estimated local population of about 2,600 people (in addition to the residents at the 315 housing units within the activity center). Based on current commuting patterns, approximately half of those workers and their families would likely live in Flagstaff.
- In terms of revenues to the city, school district and county, the project could directly generate an estimated \$39.1 million in sales tax, board and beverage tax, property taxes and state shared revenues to the City of Flagstaff over the next 23 years, including \$3.4 million in transit sales taxes and \$11.3 million in other roads and transportation sales taxes, plus \$31.8 million in sales taxes, property taxes and state shared revenues to the county, school district and other special districts. These figures include \$18.0 million in construction sales taxes to the city and county.
- Employee and visitor tax revenues to the city, county and school district are estimated at a total of \$31.7 million over the next 23 years, in addition to taxes generated directly by the development.

The Northern Arizona Healthcare Campus could directly create an estimated \$3.9 million in annual new tax revenues for local governments at buildout, as well as approximately 1,985 new direct jobs. In addition, it would provide a new hospital, ambulatory care, medical office, laboratory and research space, hotels, commercial development and housing options, creating a new focal point of economic activity and health services for the city.

3.0 ECONOMIC IMPACTS

The economic benefits resulting from the development of the Northern Arizona Healthcare Campus in Flagstaff include one-time construction impacts, on-going operations impacts and visitor impacts. These impacts are quantified in terms of direct and indirect/induced jobs, labor income and output that could be generated by the project. Indirect and induced impacts are the result of the multiplier effect and capture supported supplier and consumer businesses and employees in the region that would benefit from this new development.

3.1 Construction Impacts

The total increase in economic activity from new construction expenditures can be measured in terms of jobs, labor income and output. Although construction is a non-recurring impact, the construction activity for this project is anticipated to extend over a 23-year period. The dates below represent the year in which each phase will be completed. Construction impacts are shown in the year preceding completion.

- The ambulatory care and medical office are expected to open first in 2024, followed by the hospital and residential development in 2026 and 2027, and the first phase of clinical partner space in 2028 and mixed-use commercial in 2029.
- The second phase of the clinical partner space is projected to open in 2030 and the research and innovation center is anticipated to come on line beginning in 2031, with subsequent office development in 2036 and 2041.
- Buildout is projected for 2045, culminating with the completion of the hospital, ambulatory care and medical office expansion.

The development could result in estimated total construction expenditures of \$1.08 billion over 23 years. The multiplier effects of this level of construction spending on the region would result in an estimated total increase in economic activity of \$1.55 billion (Figure 4). The approximately 10,000 direct jobs and 3,200 indirect and induced jobs created by this construction project could result in nearly \$661.0 million in total labor income in Flagstaff and Coconino County over the 23-year construction period.

FIGURE 4
CONSTRUCTION IMPACTS OF NORTHERN ARIZONA HEALTHCARE CAMPUS
ON FLAGSTAFF AND COCONINO COUNTY

Year	Direct Impacts			Total Impacts		
	Construction Cost	Jobs	Labor Income	Output	Jobs	Labor Income
2023	\$27,365,580	244	\$12,668,029	\$38,947,044	322	\$16,226,389
2024	\$108,283,986	965	\$50,126,643	\$154,111,156	1,273	\$64,206,863
2025	\$60,618,096	815	\$40,616,191	\$92,817,189	1,043	\$50,791,759
2026	\$533,040,188	4,750	\$246,754,079	\$758,629,626	6,269	\$316,065,557
2027	\$18,782,720	187	\$9,104,945	\$27,256,195	244	\$11,693,608
2028	\$21,948,168	218	\$10,639,399	\$31,849,675	285	\$13,664,330
2029	\$18,782,720	187	\$9,104,945	\$27,256,195	244	\$11,693,608
2030	\$22,495,000	224	\$10,904,477	\$32,643,201	292	\$14,004,772
2031	\$0	0	\$0	\$0	0	\$0
2032	\$12,444,202	111	\$5,760,649	\$17,710,748	146	\$7,378,775
2033	\$0	0	\$0	\$0	0	\$0
2034	\$0	0	\$0	\$0	0	\$0
2035	\$27,539,417	274	\$13,349,764	\$39,963,312	357	\$17,145,289
2036	\$0	0	\$0	\$0	0	\$0
2037	\$6,747,152	60	\$3,123,380	\$9,602,633	79	\$4,000,716
2038	\$0	0	\$0	\$0	0	\$0
2039	\$0	0	\$0	\$0	0	\$0
2040	\$23,478,400	234	\$11,381,181	\$34,070,243	304	\$14,617,010
2041	\$0	0	\$0	\$0	0	\$0
2042	\$0	0	\$0	\$0	0	\$0
2043	\$0	0	\$0	\$0	0	\$0
2044	\$201,548,304	1,796	\$93,300,406	\$286,846,129	2,370	\$119,507,831
2045	\$0	0	\$0	\$0	0	\$0
Total	\$1,083,073,933	10,064	\$516,834,087	\$1,551,703,346	13,228	\$660,996,508

Note: All figures are in 2022 dollars.

3.2 Operations Impacts

The operations impacts capture the economic activity associated with the commercial, healthcare and hospitality businesses in the development. The results presented here are grouped into direct impacts of those businesses, hotel guest spending at establishments outside the development, and indirect and induced impacts at other local businesses. Direct impacts include employment, payroll and output for businesses within the Northern Arizona Healthcare Campus. These businesses will make some supplier purchases in the local area, and their employees will make local purchases that are captured in the indirect and induced impact estimates. In addition, off-site visitor spending by hotel guests will create direct and indirect impacts at local retail, restaurants, transportation services and entertainment businesses outside the development. The total impact includes both the direct impacts and the secondary or indirect and induced impacts created by other local businesses and their employees.

As different phases of the development are completed, they will begin to support new jobs and on-going economic impacts. Figure 5 shows annual impacts at five-year intervals beginning in 2025 and extending to 2045 when the campus will be built out. Although the ambulatory and surgical facilities, medical office and hospital will be constructed in the next five years, there will be no new employment associated with this component of the development. Existing NAH employees will be transferred to the new campus where the more efficient design of the new hospital will result in a decrease in employment at the hospital and a shifting of employees to the new ambulatory and surgical facilities. However, when the expansion of the healthcare facilities is completed in 2045, there could be an estimated 569 new jobs created.

In total, the nonresidential components of this development could support an estimated 890 direct jobs by 2030, increasing to an estimated 1,985 jobs at buildout in 2045. This translates into an estimated \$51.8 million in direct annual labor income or employee earnings in 2030, increasing to \$113.0 million per year by 2045 once the project is complete, based on the phasing assumptions used in this analysis. On average, the income from these direct jobs will be about \$57,000 per employee at buildout. Wages from retail and hotel uses tend to be lower, but the health care, office and R&D uses tend to generate higher wage jobs.

The multiplier effect of this increase in jobs and labor income in the city and county could result in a total annual output impact of \$386.6 million at buildout. This \$386.6 million represents the annual gross revenues created by the businesses within the project, plus the increase in purchases from local suppliers and local purchases by employees. The businesses in the Northern Arizona Healthcare Campus could directly and indirectly support close to 3,100 jobs and \$159.0 million in annual labor income. *Note that impacts of off-site visitor spending by guests at the hotels are in addition to these impacts and are quantified in section 3.3.*

The differences between direct and total impacts are called multiplier effects. Multiplier effects are a way of representing the larger economic effects on the local economy. The multiplier effects translate an increase in output (loosely defined as gross sales, less inventory and transportation costs) into a corresponding increase in jobs and labor income. In essence, the multiplier effect represents the recycling of local spending. This recycling process creates new business opportunities.

Multipliers measure the degree to which the various businesses and households in an economy are interrelated. They quantify the impact of a given external change, such as a new investment, operations of a new business or new household spending, on total economic activity in a given region through the re-spending of new dollars within that economy.

FIGURE 5
ANNUAL ECONOMIC IMPACTS OF NORTHERN ARIZONA HEALTHCARE CAMPUS
2025 TO 2045

Project Component	Direct Impacts			Total Impacts		
	Output	Jobs	Labor Income	Output	Jobs	Labor Income
2025	\$3,967,905	10	\$237,223	\$4,340,568	12	\$351,341
Hospital, Emergency, MOB	\$0	0	\$0	\$0	0	\$0
Retail/Service/Restaurant	\$0	0	\$0	\$0	0	\$0
Hotels	\$0	0	\$0	\$0	0	\$0
Clinical Partners	\$0	0	\$0	\$0	0	\$0
Lab/R&D/Office/Classroom	\$0	0	\$0	\$0	0	\$0
Residential	\$3,967,905	10	\$237,223	\$4,340,568	12	\$351,341
2030	\$92,527,741	890	\$51,790,871	\$156,522,466	1,368	\$70,997,212
Hospital, Emergency, MOB	\$0	0	\$0	\$0	0	\$0
Retail/Service/Restaurant	\$8,517,383	140	\$3,949,388	\$13,320,053	173	\$5,337,764
Hotels	\$3,025,792	30	\$944,703	\$4,447,970	40	\$1,427,496
Clinical Partners	\$77,016,661	710	\$46,659,556	\$134,413,875	1,143	\$63,880,611
Lab/R&D/Office/Classroom	\$0	0	\$0	\$0	0	\$0
Residential	\$3,967,905	10	\$237,223	\$4,340,568	12	\$351,341
2035	\$118,062,960	1,085	\$61,486,345	\$197,370,295	1,672	\$85,332,841
Hospital, Emergency, MOB	\$0	0	\$0	\$0	0	\$0
Retail/Service/Restaurant	\$9,579,966	158	\$4,395,031	\$15,026,857	195	\$5,967,410
Hotels	\$3,025,792	30	\$944,703	\$4,447,970	40	\$1,427,496
Clinical Partners	\$77,016,661	710	\$46,659,556	\$134,413,875	1,143	\$63,880,611
Lab/R&D/Office/Classroom	\$24,472,636	177	\$9,249,832	\$39,141,026	282	\$13,705,984
Residential	\$3,967,905	10	\$237,223	\$4,340,568	12	\$351,341
2040	\$130,755,584	1,236	\$66,910,217	\$217,031,179	1,876	\$93,010,595
Hospital, Emergency, MOB	\$0	0	\$0	\$0	0	\$0
Retail/Service/Restaurant	\$11,420,359	189	\$5,166,883	\$17,983,041	234	\$7,057,956
Hotels	\$6,051,584	60	\$1,889,406	\$8,895,939	81	\$2,854,993
Clinical Partners	\$77,016,661	710	\$46,659,556	\$134,413,875	1,143	\$63,880,611
Lab/R&D/Office/Classroom	\$32,299,075	267	\$12,957,148	\$51,397,756	406	\$18,865,696
Residential	\$3,967,905	10	\$237,223	\$4,340,568	12	\$351,341
2045	\$244,401,531	1,985	\$112,987,849	\$386,641,928	3,091	\$158,980,591
Hospital, Emergency, MOB	\$97,993,068	569	\$38,663,000	\$151,681,613	966	\$55,650,572
Retail/Service/Restaurant	\$11,420,359	189	\$5,166,883	\$17,983,041	234	\$7,057,956
Hotels	\$6,051,584	60	\$1,889,406	\$8,895,939	81	\$2,854,993
Clinical Partners	\$77,016,661	710	\$46,659,556	\$134,413,875	1,143	\$63,880,611
Lab/R&D/Office/Classroom	\$47,951,954	447	\$20,371,780	\$69,326,892	656	\$29,185,119
Residential	\$3,967,905	10	\$237,223	\$4,340,568	12	\$351,341

Note: Direct impacts for residential represent property management. Hospital jobs reflect FTE total. All figures are in 2022 dollars.

3.3 Visitor Impacts

Another component of the economic impact would be from hotel guest spending on goods and services off-site, or outside the development. The hotels could bring a significant number of additional visitors to Flagstaff who will spend money in the community. This would include expenditures for restaurants, retail, entertainment and local transportation by guests at the hotels in the development. Based on stabilized occupancy rates of 65 percent, the first hotel could attract approximately 51,000 guests per year from 2029 to 2035, increasing to 102,000 guests per year beginning in 2036 when the second hotel opens. These estimates assume 1.8 persons per room.¹

According to the Arizona Office of Tourism and Longwoods International, the average visitor in Northern Arizona spends about \$223 per day on lodging, retail, restaurants, entertainment and local transportation.² These spending levels are adjusted to account for higher spending on lodging based on projected stabilized room rates of \$193 per night. Adjustments are also made for on-site spending at the restaurants and retail in the development, assuming that 50 percent of guest spending on retail and 75 percent of guest spending on restaurants would be captured within the development. This resulted in average per person per day spending of \$158 on-site and \$96 off-site for guests at all three hotels combined (Figure 6). In total, guests at the hotels could spend an estimated \$16.2 million per year on-site (or within the development) on lodging, retail and food beginning in 2035, and \$9.8 million off-site (outside the development) at other local businesses. The off-site spending forms the basis for the visitor impacts.

¹ This analysis does not include any adjustments for net new visitors, versus existing visitors that may choose to stay at these new hotels instead of at other existing properties.

² Arizona Office of Tourism and Longwoods International, Northern Region Year-End Data Review, 2021.

**FIGURE 6
ANNUAL VISITOR SPENDING**

Type of Expenditure	On-Site		Off-Site*	
	Expenditures	Distribution	Expenditures	Distribution
2029-2035				
Lodging	\$5,494,710	68%	\$0	0%
Food & Beverage	\$1,767,987	22%	\$589,329	12%
Local Transportation	\$0	0%	\$1,793,610	36%
Entertainment	\$0	0%	\$1,691,118	34%
Retail*	\$845,559	10%	\$845,559	17%
Total Annual 2029-2035	\$8,108,256	100%	\$4,919,616	100%
Total Visitor Days**	51,246			
Average Expenditure per Day	\$158		\$96	

Type of Expenditure	On-Site		Off-Site*	
	Expenditures	Distribution	Expenditures	Distribution
2036 and beyond				
Lodging	\$10,989,420	136%	\$0	0%
Food & Beverage	\$3,535,974	44%	\$1,178,658	24%
Local Transportation	\$0	0%	\$3,587,220	73%
Entertainment	\$0	0%	\$3,382,236	69%
Retail	\$1,691,118	21%	\$1,691,118	34%
Total Annual 2036 and beyond	\$16,216,512	200%	\$9,839,232	200%
Total Visitor Days**	102,492			
Average Expenditure per Day	\$158		\$96	

Source: Arizona Office of Tourism and Longwoods International, Northern Region Year-End Data Review, 2021; Applied Economics, 2022.

*Off-site expenditures are outside the NAH campus at other businesses in Flagstaff. Analysis assumes that 25% of food and beverage, 50% of retail, 100% of local transportation and 100% of entertainment expenditures would occur elsewhere in Flagstaff.

**Hotel visitor day estimates assume 1.8 persons per room.

Industry-specific multipliers are applied to each category of visitor expenditures. As a result of the multiplier effect, the indirect impacts of this spending are spread to local suppliers. All total, the \$4.9 million in new off-site visitor spending each year from 2029 to 2035 could result in a total economic impact of \$7.8 million per year in Flagstaff and Coconino County (Figure 7). This level of activity could support \$3.1 million in total annual labor income and an estimated 71 direct, indirect and induced jobs at local retail, restaurant, transportation services and entertainment establishments. Similarly, the projected buildout level of visitor spending of \$9.8 million per year beginning in 2036 could create a total annual economic impact of \$15.6 million per year, directly and indirectly supporting more than 140 jobs and \$6.2 million in annual labor income.

**FIGURE 7
OFF-SITE VISITOR SPENDING IMPACTS FROM HOTEL GUESTS**

	Direct			Total Impacts		
	Visitor Spending	Jobs	Labor Income	Output	Jobs	Labor Income
2029 to 2035	\$4,919,616	51	\$2,261,772	\$7,821,947	71	\$3,106,095
2036 and beyond	\$9,839,232	102	\$4,523,544	\$15,643,893	142	\$6,212,189

Note: Visitor spending excludes spending for hotel, and the portion of retail and food sales that are included in the direct impacts of the project. All figures are in 2022 dollars.

3.4 Combined Economic Impacts

The operations impacts and visitor impacts can be combined to estimate the total on-going economic impacts resulting from the proposed development. These combined impacts are detailed in Figure 8. All total, the project could create an annual economic impact of \$402.3 million in Flagstaff and Coconino County by 2045, or a cumulative impact of \$3.5 billion between 2025 and 2045. The project could directly and indirectly support an estimated 3,233 local jobs and \$165.2 million in annual payroll in the region at buildout (2045). This would represent a significant increase in economic activity in Flagstaff and the surrounding area. All direct impacts would be in Flagstaff, and the majority of the indirect/induced and visitor spending impacts would also be captured in the city, given the location of existing businesses that would serve as suppliers, and businesses that sell goods and services to employees and visitors.

The new jobs generated by the Northern Arizona Healthcare Campus could also support an estimated local population of about 2,600 people, not including the residents in the 315 residential units within the NAH campus. Supported population includes families of direct employees, as well as families of employees at related supplier and consumer businesses. It is estimated that about 50 percent of the employees who work in the development would live in Flagstaff, based on local commuting data, with the remaining employees mostly living elsewhere in Coconino County.³

The multipliers used in this analysis are from IMPLAN, a national vendor of economic impact software, and are specific to Coconino County. Industry specific multipliers are applied for the expected types of businesses in the development, visitor spending, and construction. The average output multiplier for this mixed-use development is 1.65, which means that for every \$1 million of gross revenues created by the office, retail, restaurant, research, hotel and healthcare uses, an additional \$650,000 in economic activity and 5.1 indirect and induced jobs are generated in the local economy.

³ On The Map, Census Longitudinal Employer Household Dynamics.

**FIGURE 8
 COMBINED TOTAL ECONOMIC IMPACTS OF NORTHERN ARIZONA HEALTHCARE CAMPUS
 (MILLIONS OF DOLLARS)**

Annual Impacts	NAH Campus Direct Impacts			NAH Campus Indirect/Induced Impacts			Off-Site Visitor Spending			Total Economic
	Output	Jobs	Labor	Output	Jobs	Labor	Output	Jobs	Labor	Output
			Income			Income			Income	
2025	\$4.0	10	\$0.2	\$0.4	2	\$0.1	\$0.0	0	\$0.0	\$4.3
2030	\$92.5	890	\$51.8	\$64.0	478	\$19.2	\$7.8	71	\$3.1	\$164.3
2035	\$118.1	1,085	\$61.5	\$79.3	587	\$23.8	\$7.8	71	\$3.1	\$213.0
2040	\$130.8	1,236	\$66.9	\$86.3	640	\$26.1	\$15.6	142	\$6.2	\$232.7
2045	\$244.4	1,985	\$113.0	\$142.2	1,106	\$46.0	\$15.6	142	\$6.2	\$402.3
Total 2025-2045	\$1,971.0	1,985	\$1,015.1	\$1,292.0	1,106	\$392.3	\$219.01	142	\$86.97	\$3,482.0

Note: All figures are in 2022 dollars.

4.0 REVENUE IMPACTS

In addition to supporting jobs and payroll in the development and at related businesses in the region, the Northern Arizona Healthcare Campus could generate significant local tax revenues through sales taxes on retail, restaurant and hotel sales and leases, as well as property taxes. Direct annual taxes to the city, county and local school districts are estimated at \$3.9 million per year by 2045, or \$70.9 million cumulatively from 2023 to 2045, including construction sales tax (Figure 9). In addition, there could be an estimated \$31.7 million in cumulative taxes generated by employees and visitors elsewhere in Flagstaff and Coconino County.

4.1 Direct Revenues

Figure 9 details revenues by type and jurisdiction. Property taxes are estimated at \$225,000 per year to the city and \$1.1 million to the county, schools and special districts by 2045.⁴ There are no property taxes on the exempt hospital, ambulatory care and medical offices. Over the next 23 years from 2023 to 2045, the non-exempt development in the Northern Arizona Healthcare Campus could generate in \$17.2 million in new local property tax revenues.

Sales taxes shown in Figure 9 include construction sales taxes estimated at \$11.4 million to the city and \$6.5 million to the county over 23 years. These estimates assume that the materials portion of the construction cost for the hospital, ambulatory care and medical offices would be exempt from construction sales taxes, but the labor portion would still be taxable. For all other construction, sales taxes would apply to construction materials. In addition to taxes on construction materials, there would also be an estimated 300 non-local contractors per week working on the hospital, ambulatory care and medical office construction from 2023 to 2025 that would be given weekly stipends of approximately \$500 to cover local food and lodging expenses. This analysis assumes that \$400 (80%) of that total per person weekly amount would be spent in Flagstaff, including \$250 on lodging, resulting in \$9.6 million in taxable local spending of construction stipends over three years. Sales taxes on this spending are estimated at \$219,000 to the city and \$125,000 to the county over three years.

In addition, \$14.6 million in non-construction sales taxes to the city and \$8.3 to the county from leases, hotels, retail and restaurants are projected from 2026 to 2045. Taxable sales and leases are increased at a rate of 2 percent per year to reflect inflation. Total city sales taxes (construction and non-construction) are estimated at \$26.1 million, including \$11.4 in general fund sales tax, \$3.4 million in dedicated transit sales tax, and \$11.3 million in dedicated sales taxes for transportation, road repair and the Butler Overpass.

City bed, board and beverage taxes would be generated by the two hotels and the restaurants in the development and are estimated at \$451,000 per year by 2045, or \$5.8 million cumulatively over the 23-year period. This includes lodging taxes on construction contractor housing from 2023 through 2025.

⁴ Property tax estimates are based on current limited property value per square foot for comparable residential, office, retail, restaurant and hotel properties in Flagstaff applied to the projected square footage by type in the development.

**FIGURE 9
ANNUAL LOCAL REVENUE IMPACTS OF BUSINESSES
IN NORTHERN ARIZONA HEALTHCARE CAMPUS**

	City of Flagstaff						Schools	Special Districts	Coconino County	
	Property Tax	GF Sales Tax (1%)	Transit Sales Tax (0.295%)	Roads & Transportation Sales Tax (0.986%)	Bed Board & Beverage Tax	State Shared Revenues	Property Tax	Property Tax	Property Tax	Sales Tax
Total	\$3,023,807	\$11,432,515	\$3,372,592	\$11,272,460	\$5,788,829	\$4,233,780	\$10,579,142	\$2,576,388	\$1,031,431	\$14,862,270
2023	\$0	\$139,620	\$41,188	\$137,665	\$30,000	\$0	\$0	\$0	\$0	\$181,505
2024	\$0	\$521,340	\$153,795	\$514,041	\$60,000	\$0	\$0	\$0	\$0	\$677,742
2025	\$0	\$434,174	\$128,081	\$428,096	\$30,000	\$0	\$0	\$0	\$0	\$564,427
2026	\$51,998	\$2,268,575	\$669,230	\$2,236,815	\$0	\$211,689	\$181,920	\$44,304	\$17,737	\$2,949,147
2027	\$52,251	\$138,897	\$40,975	\$136,953	\$0	\$211,689	\$182,805	\$44,519	\$17,823	\$180,566
2028	\$52,503	\$177,128	\$52,253	\$174,648	\$0	\$211,689	\$183,690	\$44,735	\$17,909	\$230,266
2029	\$84,949	\$304,177	\$89,732	\$299,918	\$207,012	\$211,689	\$297,203	\$72,379	\$28,976	\$395,430
2030	\$84,949	\$349,967	\$103,240	\$345,067	\$211,152	\$211,689	\$297,203	\$72,379	\$28,976	\$454,957
2031	\$134,240	\$250,683	\$73,952	\$247,174	\$215,375	\$211,689	\$469,656	\$114,378	\$45,790	\$325,888
2032	\$134,240	\$308,274	\$90,941	\$303,958	\$219,683	\$211,689	\$469,656	\$114,378	\$45,790	\$400,756
2033	\$134,240	\$260,811	\$76,939	\$257,160	\$224,077	\$211,689	\$469,656	\$114,378	\$45,790	\$339,054
2034	\$134,240	\$266,027	\$78,478	\$262,303	\$228,558	\$211,689	\$469,656	\$114,378	\$45,790	\$345,835
2035	\$134,240	\$450,354	\$132,854	\$444,049	\$233,129	\$211,689	\$469,656	\$114,378	\$45,790	\$585,460
2036	\$180,149	\$399,055	\$117,721	\$393,468	\$377,164	\$211,689	\$630,273	\$153,493	\$61,450	\$518,772
2037	\$180,149	\$435,543	\$128,485	\$429,445	\$384,708	\$211,689	\$630,273	\$153,493	\$61,450	\$566,206
2038	\$180,149	\$415,177	\$122,477	\$409,364	\$392,402	\$211,689	\$630,273	\$153,493	\$61,450	\$539,730
2039	\$180,149	\$423,480	\$124,927	\$417,552	\$400,250	\$211,689	\$630,273	\$153,493	\$61,450	\$550,525
2040	\$180,149	\$584,560	\$172,445	\$576,376	\$408,255	\$211,689	\$630,273	\$153,493	\$61,450	\$759,928
2041	\$225,042	\$468,594	\$138,235	\$462,034	\$416,420	\$211,689	\$787,335	\$191,743	\$76,763	\$609,172
2042	\$225,042	\$477,966	\$141,000	\$471,274	\$424,748	\$211,689	\$787,335	\$191,743	\$76,763	\$621,356
2043	\$225,042	\$487,525	\$143,820	\$480,700	\$433,243	\$211,689	\$787,335	\$191,743	\$76,763	\$633,783
2044	\$225,042	\$1,348,817	\$397,901	\$1,329,934	\$441,908	\$211,689	\$787,335	\$191,743	\$76,763	\$1,753,462
2045	\$225,042	\$521,772	\$153,923	\$514,467	\$450,746	\$211,689	\$787,335	\$191,743	\$76,763	\$678,303

4.2 Employee Revenue Impacts

In addition to direct taxes paid by the businesses in the development, there would also be taxes generated by employees and by off-site visitor spending. Using the results from the economic impact analysis, it is possible to estimate these employee and visitor tax impacts. All total, the employees working in the development could generate an estimated \$27.1 million in tax revenues to the city, county, schools and other special districts from 2024 to 2045.

City sales taxes from employee spending by the estimated 1,985 employees within the development are estimated at \$3.8 million from 2024 to 2045, assuming 50 percent of the workers live in Flagstaff (Figure 10). This total includes \$1.7 million in city general fund sales tax, \$0.5 million in dedicated sales taxes for transit, and \$1.7 million in dedicated sales taxes for other road and transportation improvements. Additional employee sales taxes of approximately \$4.4 million are projected for the county from 2024 to 2045, assuming all the workers live in Coconino County. Employee sales taxes are calculated by multiplying direct labor income from the economic impact times 33 percent, times the local sales tax rate, times the percent of workers that are assumed to live in the region.⁵

Property taxes on employee housing are estimated at about \$1.8 million total to the city from 2024 to 2045. There would be an additional \$8.6 million in property taxes to the county, school district and other special taxing districts during this same period. Employee property taxes are estimated based on per capita assessed value of residential property in Coconino County, times the annual supported population living in the city and county, times the property tax rates for each area.

There would also be an estimated \$5.2 million in city state-shared revenues and \$3.4 million in county state-shared revenues from 2024 to 2045 based on the supported population associated with this development that would be living in Flagstaff, and in Coconino County. This includes state shared income and sales taxes and vehicle license taxes.

⁵ According to the Census Bureau Consumer Expenditure Survey, persons in the median income range spend about 33 percent of their income on taxable goods.

**FIGURE 10
ANNUAL LOCAL REVENUE IMPACTS FROM EMPLOYEES
WORKING IN NORTHERN ARIZONA HEALTHCARE CAMPUS**

	City of Flagstaff					Schools	Special Districts	Coconino County		St:
	Property Tax	GF Sales Tax (1%)	Transit Sales Tax (0.295%)	Roads & Transportation Sales Tax (0.986%)	State Shared Revenues	Property Tax	Property Tax	Property Tax	Sales Tax	
Total	\$1,828,907	\$1,686,689	\$497,573	\$1,663,075	\$5,161,325	\$6,398,646	\$1,558,292	\$623,847	\$4,376,638	\$
2024	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2025	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2026	\$958	\$392	\$116	\$387	\$2,704	\$3,352	\$816	\$327	\$1,018	
2027	\$958	\$392	\$116	\$387	\$2,704	\$3,352	\$816	\$327	\$1,018	
2028	\$958	\$392	\$116	\$387	\$2,704	\$3,352	\$816	\$327	\$1,018	
2029	\$34,972	\$38,963	\$11,494	\$38,418	\$98,694	\$122,354	\$29,797	\$11,929	\$101,102	
2030	\$51,278	\$45,493	\$13,420	\$44,856	\$144,710	\$179,402	\$43,691	\$17,491	\$118,045	
2031	\$85,292	\$84,064	\$24,799	\$82,887	\$240,701	\$298,404	\$72,672	\$29,093	\$218,130	
2032	\$103,941	\$100,093	\$29,528	\$98,692	\$293,330	\$363,649	\$88,561	\$35,455	\$259,724	
2033	\$103,941	\$100,093	\$29,528	\$98,692	\$293,330	\$363,649	\$88,561	\$35,455	\$259,724	
2034	\$103,941	\$100,093	\$29,528	\$98,692	\$293,330	\$363,649	\$88,561	\$35,455	\$259,724	
2035	\$103,941	\$100,093	\$29,528	\$98,692	\$293,330	\$363,649	\$88,561	\$35,455	\$259,724	
2036	\$103,941	\$100,093	\$29,528	\$98,692	\$293,330	\$363,649	\$88,561	\$35,455	\$259,724	
2037	\$118,423	\$107,499	\$31,712	\$105,994	\$334,201	\$414,318	\$100,901	\$40,395	\$278,939	
2038	\$118,423	\$107,499	\$31,712	\$105,994	\$334,201	\$414,318	\$100,901	\$40,395	\$278,939	
2039	\$118,423	\$107,499	\$31,712	\$105,994	\$334,201	\$414,318	\$100,901	\$40,395	\$278,939	
2040	\$118,423	\$107,499	\$31,712	\$105,994	\$334,201	\$414,318	\$100,901	\$40,395	\$278,939	
2041	\$118,423	\$107,499	\$31,712	\$105,994	\$334,201	\$414,318	\$100,901	\$40,395	\$278,939	
2042	\$135,667	\$119,758	\$35,328	\$118,081	\$382,864	\$474,648	\$115,593	\$46,277	\$310,748	
2043	\$135,667	\$119,758	\$35,328	\$118,081	\$382,864	\$474,648	\$115,593	\$46,277	\$310,748	
2044	\$135,667	\$119,758	\$35,328	\$118,081	\$382,864	\$474,648	\$115,593	\$46,277	\$310,748	
2045	\$135,667	\$119,758	\$35,328	\$118,081	\$382,864	\$474,648	\$115,593	\$46,277	\$310,748	

4.3 Visitor Revenue Impacts

Additional taxes could be generated by off-site visitor spending at retail, restaurants and entertainment outside of the Northern Arizona Healthcare Campus. It is assumed that 50 percent of the retail spending and 75 percent of restaurant spending by hotel guests would be captured by the businesses within the project. The remaining amount would most likely be spent in Flagstaff at other local businesses. This off-site visitor spending could generate an estimated \$2.6 million in city sales (including both general fund and dedicated transit and other road and transportation sales taxes), \$0.4 million in city bed, board and beverage taxes on restaurants, and \$1.5 million in county sales taxes for a total of \$4.5 million from 2024 to 2045, assuming an annual inflation rate of 2 percent (Figure 11).

**FIGURE 11
ANNUAL LOCAL REVENUE IMPACTS FROM HOTEL GUESTS**

	City of Flagstaff				Coconino County	
	GF Sales Tax (1%)	Transit Sales Tax (0.295%)	Roads & Transportation Sales Tax (0.986%)	Bed Board & Beverage Tax	Sales Tax	Total Revenues
Total	\$1,147,290	\$338,451	\$1,131,228	\$432,585	\$1,491,477	\$4,541,031
2024	\$0	\$0	\$0	\$0	\$0	\$0
2025	\$0	\$0	\$0	\$0	\$0	\$0
2026	\$0	\$0	\$0	\$0	\$0	\$0
2027	\$0	\$0	\$0	\$0	\$0	\$0
2028	\$0	\$0	\$0	\$0	\$0	\$0
2029	\$35,204	\$10,385	\$34,711	\$13,274	\$45,765	\$139,339
2030	\$35,908	\$10,593	\$35,405	\$13,539	\$46,680	\$142,126
2031	\$36,626	\$10,805	\$36,113	\$13,810	\$47,614	\$144,968
2032	\$37,359	\$11,021	\$36,836	\$14,086	\$48,566	\$147,867
2033	\$38,106	\$11,241	\$37,572	\$14,368	\$49,538	\$150,825
2034	\$38,868	\$11,466	\$38,324	\$14,655	\$50,528	\$153,841
2035	\$39,645	\$11,695	\$39,090	\$14,948	\$51,539	\$156,918
2036	\$80,876	\$23,859	\$79,744	\$30,494	\$105,139	\$320,113
2037	\$82,494	\$24,336	\$81,339	\$31,104	\$107,242	\$326,515
2038	\$84,144	\$24,822	\$82,966	\$31,726	\$109,387	\$333,045
2039	\$85,827	\$25,319	\$84,625	\$32,361	\$111,575	\$339,706
2040	\$87,543	\$25,825	\$86,318	\$33,008	\$113,806	\$346,501
2041	\$89,294	\$26,342	\$88,044	\$33,668	\$116,082	\$353,431
2042	\$91,080	\$26,869	\$89,805	\$34,342	\$118,404	\$360,499
2043	\$92,902	\$27,406	\$91,601	\$35,028	\$120,772	\$367,709
2044	\$94,760	\$27,954	\$93,433	\$35,729	\$123,188	\$375,063
2045	\$96,655	\$28,513	\$95,302	\$36,444	\$125,651	\$382,565

4.4 Summary

The proposed mix of uses in the master plan for the Northern Arizona Healthcare Campus could create significant economic and community benefits for the region, as well as a large amount of local tax revenues. These benefits include the economic impacts of the extended construction phase, and the on-going operations impacts of businesses in the development. Over the long-term, this project would help to create a new employment node in the I-17 corridor, supporting a significant number of new jobs, generating new sales and property taxes, and creating additional demand at other local businesses based on supplier purchases and employee spending. The hotels could also significantly increase the number of visitors to the city, who would in turn spend money at other local establishments and create additional economic activity. All these economic impacts are in addition to the community benefits of expanded healthcare options that will be available to residents of Flagstaff and Coconino County at this new NAH campus.