



# ST. MARY'S MEDICAL CENTER ECONOMIC IMPACT

**Colorado Mesa University**

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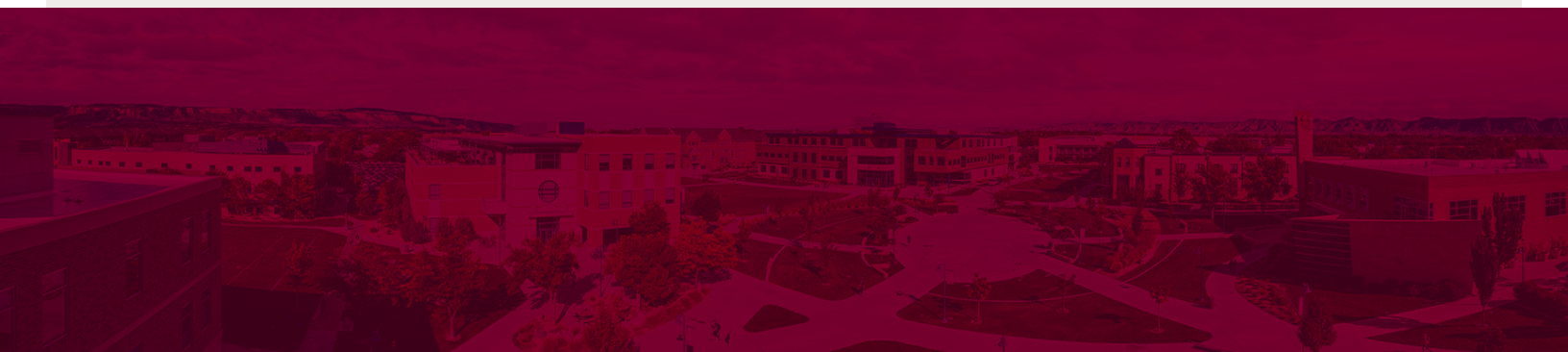
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## EXECUTIVE SUMMARY

- St. Mary's Medical Center wages, expenditures, and capital expenditures create a direct contribution of \$276,955,725 to county GDP. This equates to 3.7% of the total GDP for the county. When adding indirect and induced effects, this equates to \$443,426,992, or 6% of local GDP. For context, the direct contribution of St. Mary's is similar to the entire accommodation and food services industry.
- St. Mary's Medical Center directly employs 2,739 people through a combination of hospital employment and other ventures in Mesa County. This equates to approximately 3% of Mesa County jobs. Adding St. Mary's Medical Center's capital expenditures as well as indirect and induced effects St. Mary's Medical Center's total employment impact is 4,701, which equates to 5% of total Mesa County jobs.
- St. Mary's paid out \$264,868,643 in wages, health insurance, and fringe benefits to its 2,739 employees in 2022. Adding the wages created from capital expenditures raises this direct wage impact to \$274,637,752, which is 5.8% of wages in Mesa County. When including indirect and induced effect wages, the total wage impact is \$365,412,153, or 7.8% of total wages.
- When adding local, state, and federal tax impacts, St. Mary's Medical Center economic activity creates \$105,026,139 in tax revenue.
- St. Mary's makes up about one third of the entire Health care and social assistance industry's contribution to the Mesa County GDP.

### ST. MARY'S MEDICAL CENTER

CONTRIBUTES

**\$443m**

TO LOCAL GDP

EMPLOYS

**5%**

OF MESA COUNTY

CONTRIBUTES

**7.8%**

OF MESA COUNTY  
WAGES

CREATES

**\$105+**

MILLION IN  
TAX REVENUE

## INTRODUCTION

St. Mary's Medical Center, now part of Intermountain Health, is an important part of Mesa County's healthcare sector, a sector that is the largest contributor to the Mesa County economy. St. Mary's Medical Center is the largest health care institution in Mesa County and the region. Mesa County and Grand Junction serve as the healthcare hub for Western Colorado and Eastern Utah, with Grand Junction being the largest city between Salt Lake City and Denver. This combined with the high percentage of retirees results in a high demand for healthcare.

The purpose of this study is to investigate and detail the economic impact of St. Mary's Medical Center on the Mesa County economy. This report was commissioned by St. Mary's Medical Center through Colorado Mesa University. The report will detail and contextualize St. Mary's Medical Center impact on the Mesa County economy for the year 2022. The report proceeds as follows: First, Mesa County demographic and economic information is presented, followed by a deeper look into Mesa County healthcare economy data. The point of this is to place the St. Mary's Medical Center economic impact results in the context of the rest of the economy. The economic impact methodology is then discussed, followed by the economic impact results.

### CONTEXTUALIZING THE RESULTS: DEMOGRAPHIC AND ECONOMIC DATA

The State Demography Office estimates that Mesa County's population in 2022 is 157,636, and is expected to grow to 176,032 by 2030. Figure 1 illustrates Mesa County's population since 2000, as well as the population forecast to 2030. Population growth both in the county and the region is expected over the next three decades.

Figure 1: **Mesa County Population<sup>1</sup>**

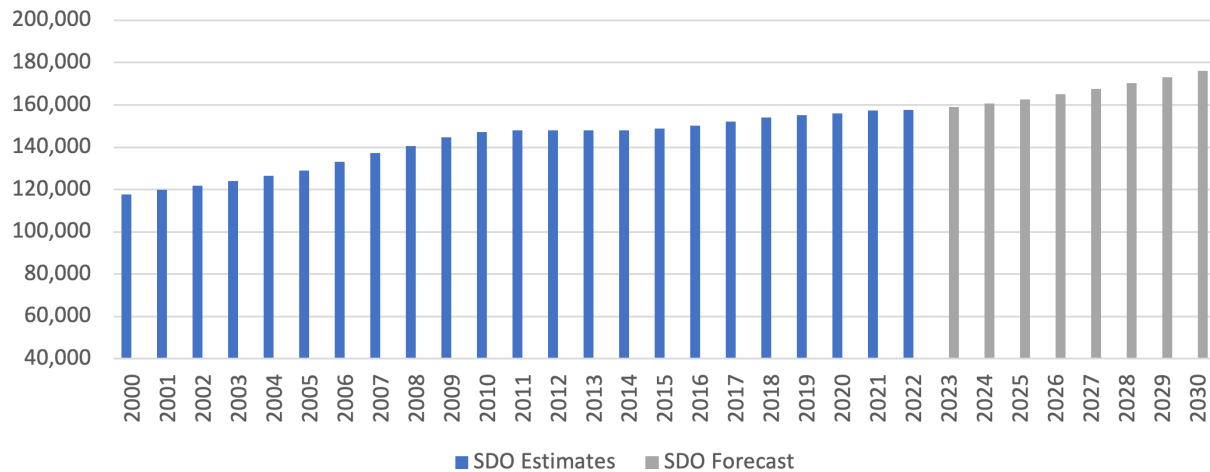
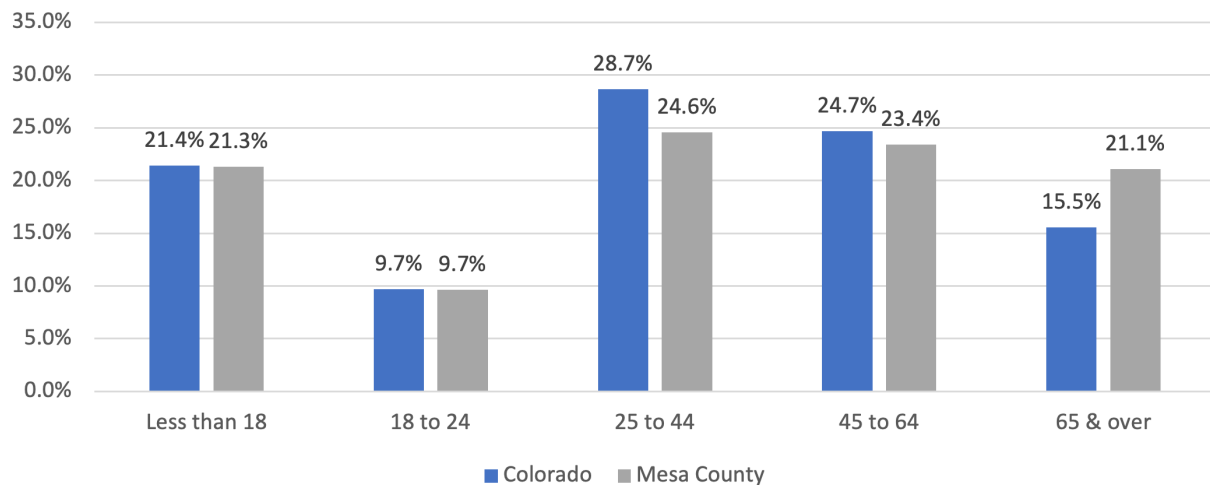


Figure 2 shows the difference in age distribution between Mesa County and the state of Colorado. The primary differences are in the 25 to 44 age group and the 65 and over. Mesa County has less people in the 25 to 44 age group, and significantly more in the 65 and over age group. There are a higher percentage of retirees in Mesa County, and this disproportionate number of retirees creates unique healthcare demands in the region.

Figure 2: **Colorado vs. Mesa County Age Distribution<sup>2</sup>**

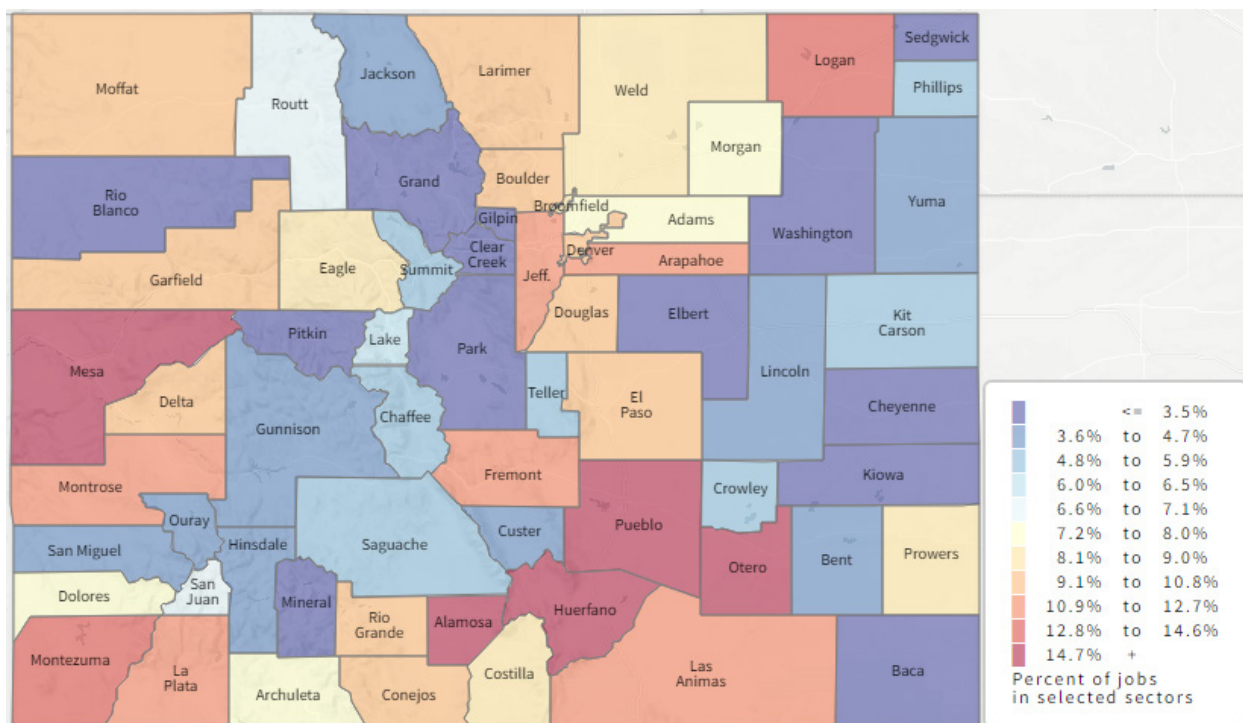


Mesa County and Grand Junction serve as the healthcare hub for Western Colorado and Eastern Utah. Grand Junction is the largest city between Salt Lake City and Denver. This combined with the high percentage of retirees creates a huge demand for healthcare. This can be seen in figure 3, which illustrates the percentage of jobs by county that are in healthcare

1 Data from the Colorado State Demography Office.  
 2 Data from the Colorado State Demography Office.

services. 13.7% of jobs in the county are in the healthcare sector according to BEA data, while the state estimates 15.5% for 2021 (figure 3). In the state of Colorado, Mesa County ranks 4th in terms of the percentage of jobs in healthcare, with only Pueblo, Huerfano, and Alamosa Counties ranking higher.

Figure 3: **Percentage of jobs in health services<sup>3</sup>**



## ECONOMIC OVERVIEW

Table 1 illustrates GDP by industry, and shows the percentage of GDP that healthcare and social assistance contributes compared to the rest of the Mesa County economy. Healthcare and social assistance makes up 12.5% of GDP, which falls only behind real estate, rental, and leasing at 15.7%, and government at 12.8%.

Table 1: **GDP by Industry<sup>4</sup>**

	Total GDP (in thousands)	Percentage
All industry total	\$6,142,260	
Private industries	\$5,354,567	87.2%
Agriculture, forestry, fishing and hunting	\$7,783	0.1%
Mining, quarrying, and oil and gas extraction	\$306,647	5.0%
Utilities	\$21,168	0.3%

<sup>3</sup> Figure is taken from the Colorado State Demography Office.

<sup>4</sup> Data from the Bureau of Economic Analysis (2021 data).



Table 1: **GDP by Industry** *continued*

Construction	\$375,737	6.1%
Manufacturing	\$285,721	4.7%
Wholesale trade	\$267,184	4.3%
Retail trade	\$584,919	9.5%
Transportation and warehousing	\$169,268	2.8%
Information	\$147,082	2.4%
Finance, insurance, real estate, rental, and leasing	\$1,460,525	23.8%
Finance and insurance	\$488,778	8.0%
Real estate and rental and leasing	\$962,507	15.7%
Professional and business services	\$454,728	7.4%
Professional, scientific, and technical services	\$241,245	3.9%
Management of companies and enterprises	\$50,415	0.8%
Administrative and support and waste management and remediation services	\$165,444	2.7%
Educational services, health care, and social assistance	\$791,977	12.9%
Educational services	\$23,412	0.4%
<b>Health care and social assistance</b>	<b>\$768,441</b>	<b>12.5%</b>
Arts, entertainment, recreation, accommodation, and food services	\$260,613	4.2%
Arts, entertainment, and recreation	\$35,598	0.6%
Accommodation and food services	\$224,823	3.7%
Other services (except government and government enterprises)	\$152,124	2.5%
Government and government enterprises	\$786,389	12.8%

Table 2 contextualizes the healthcare industry by illustrating total wage contributions and average weekly wage. Note that QCEW data does not cover 100% of employment in a region, but provides extremely useful information on employment trends by industry, and wage contribution by industry. This dataset shows that in terms of wage contribution, healthcare and social assistance is by far the largest contributor at \$755,210,986. The average weekly wage for healthcare fall in the middle ranges of wages in Mesa County at \$1,182. St. Mary's average weekly wages are \$1,859, much higher than the healthcare average.

Table 2: **QCEW Employment and Wage Data, 2022<sup>5</sup>**

NAICS SECTOR	Average Employment 2022	Total Quarterly Wages	Average Weekly Wage
<b>Total, All Industries</b>	<b>64,501</b>	<b>\$3,444,454,426</b>	<b>\$1,027</b>
Accommodation and Food Services	6,993	\$177,379,734	\$488
Administrative and Waste Services	2,551	\$122,449,893	\$923
Agriculture, Forestry, Fishing & Hunting	380	\$14,596,452	\$740
Arts, Entertainment, and Recreation	984	\$22,545,237	\$441
Construction	5,222	\$320,872,178	\$1,182
Educational Services	5,144	\$218,916,116	\$818

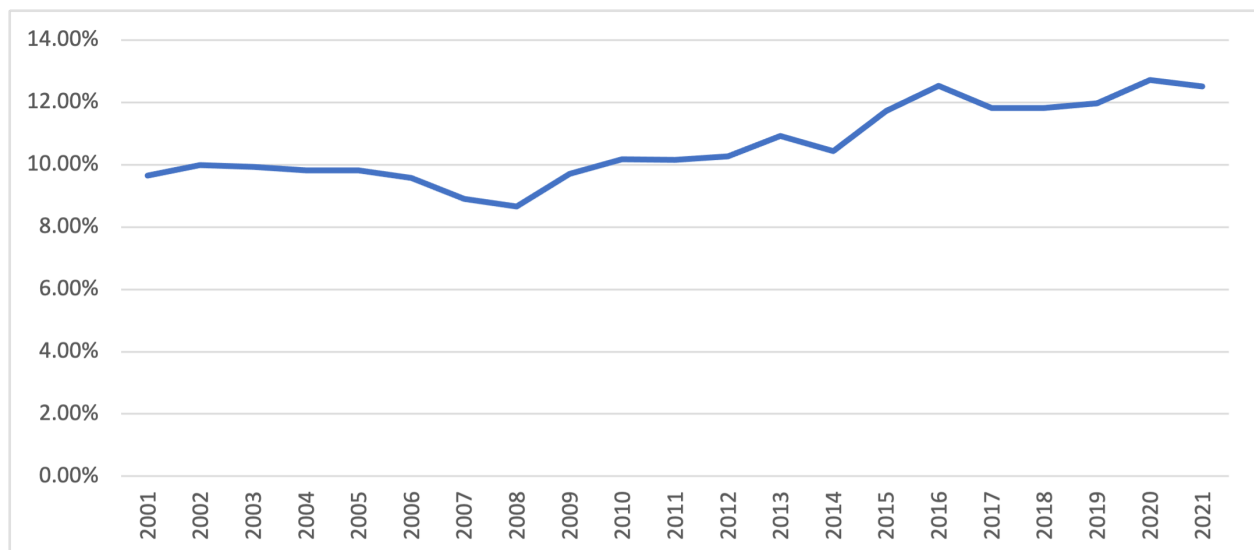
<sup>5</sup> Data from the Colorado Department of Labor and Employment.

Table 2: **QCEW Employment and Wage Data, 2022** *continued*

Finance and Insurance	1,878	\$149,364,344	\$1,530
<b>Health Care and Social Assistance</b>	<b>12,288</b>	<b>\$755,210,986</b>	<b>\$1,182</b>
Information	668	\$40,546,277	\$1,167
Management of Companies and Enterprises	143	\$12,917,221	\$1,733
Manufacturing	3,148	\$159,124,635	\$972
Mining	1,628	\$164,622,831	\$1,945
Other Services, Ex. Public Admin	1,954	\$77,430,660	\$762
Professional and Technical Services	2,512	\$175,591,243	\$1,344
Public Administration	3,606	\$233,772,495	\$1,247
Real Estate and Rental and Leasing	1,049	\$51,013,386	\$935
Retail Trade	8,889	\$398,950,459	\$863
Transportation and Warehousing	2,712	\$157,282,426	\$1,115
Utilities	362	\$31,086,793	\$1,651
Wholesale Trade	2,379	\$159,621,549	\$1,290

The percentage of GDP that healthcare contributes over time in Mesa County can be seen in figure 4. Healthcare has seen a gradual increase from 2008 to 2021, rising from around 10% of GDP to close to 12.5%. This increasing trend towards healthcare economic activity can be seen in healthcare jobs as a percentage of total jobs in figure 5. In addition, figure 6 illustrates total healthcare jobs, rising from 8,036 healthcare jobs in 2001 to 12,748 in 2021.

Figure 4: **% of Mesa County GDP Healthcare<sup>6</sup>**



<sup>6</sup> Data from the Bureau of Economic Analysis

Figure 5: **Healthcare Percentage of Total Jobs**<sup>7</sup>

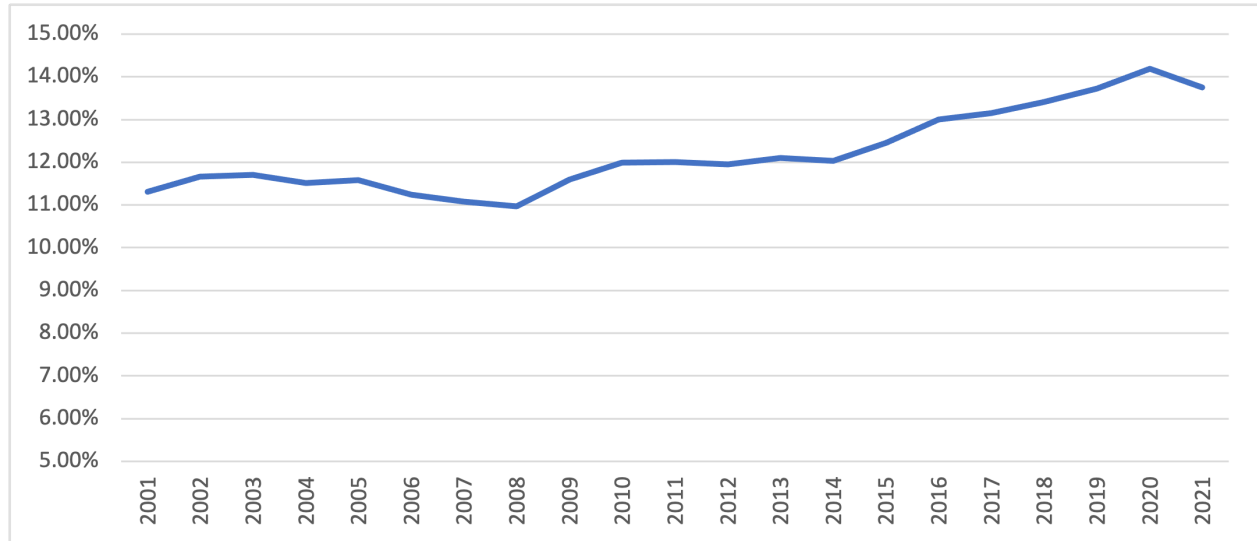
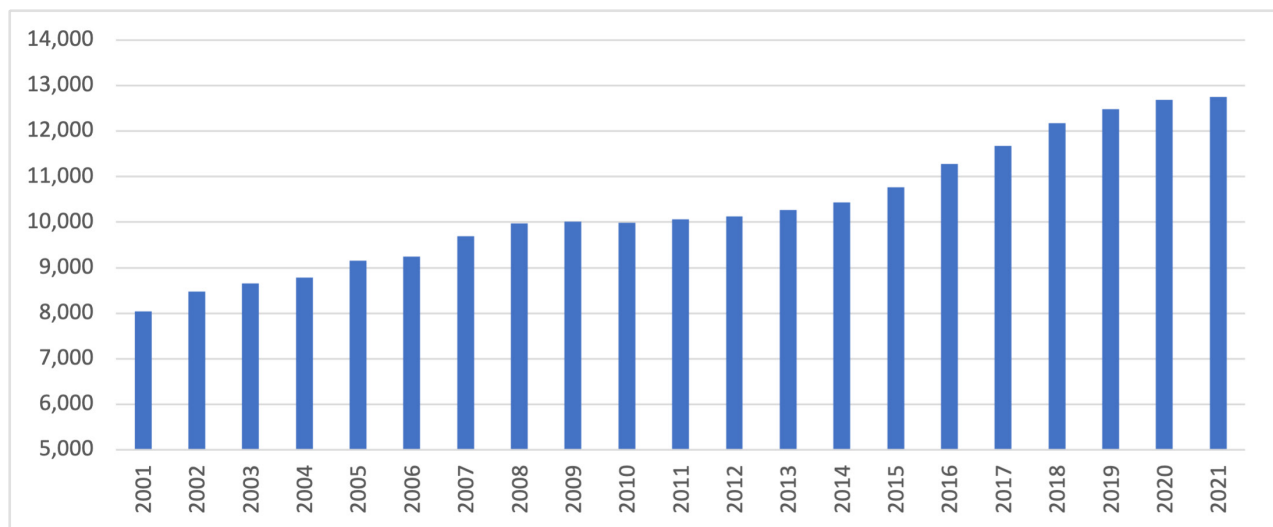


Figure 6: **Healthcare total jobs**<sup>8</sup>



<sup>7</sup> Data from the Bureau of Economic Analysis

<sup>8</sup> Data from the Bureau of Economic Analysis

## METHODOLOGY/DATA SECTION

The study area is considered Mesa County, and the focus is on the economic impact of St. Mary's Medical Center hospital, not SCL Health. Data was collected from St. Mary's Medical Center on jobs, wages, capital expenditures, and other expenditures by category for the year 2022. St. Mary's Medical Center total expenditures were \$590,465,557. St. Mary's Medical Center paid out \$264,868,643 in local salaries and benefits for the year 2022. Adjusting for the percentage of expenditures that were spent directly inside of the county, total expenditures including wages were \$311,485,557. St. Mary's Medical Center provided estimates on the percentage of each expenditure that was spent inside vs. outside of the county. IMPLAN also estimates this per expenditure category based on local data. St. Mary's Medical Center also spent \$23,207,698 on capital expenditures, 87% which was spent inside of the county on new facilities and durable good replacement.

Table 3 shows inpatient vs. outpatient numbers, with inpatient patients making up 5.4% of total hospital visits. Twenty percent of St. Mary's Medical Center patients come from outside of the county. People who travel from outside the county, especially for inpatient stays, contribute more to the county because their family may stay at a hotel, or they may eat locally while they are waiting for their loved one at a hospital. This is particularly difficult to measure and is not counted in this study but is an intangible impact of Mesa County being a regional healthcare hub and of the services St. Mary's Medical Center provides. The average length of stay of inpatient patients is 5.22 days. Table 4 illustrates the different service lines that St. Mary's Medical Center provides.

Table 3: **Inpatient vs. Outpatient**

Type	Number of Visits
Inpatient	12,679
Outpatient	220,091
<b>Grand Total</b>	<b>232,770</b>

Table 4: **St. Mary's Medical Center Medical Center Medical Services**

St. Mary's Medical Center Service Line		
Cardiac Services	Neurosurgery	Rehabilitation
ENT	Obstetrics	Spine
General Medicine	Oncology/Hematology	Thoracic Surgery
General Surgery	Ophthalmology	Urology
Gynecology	Orthopedics	Vascular Services
Neonatology	Other Trauma	

Table 5 illustrates St. Mary's Medical Center direct employment data by full and part time. The medical group category represents several entities, including the physical practices that are part of St. Mary's Medical Center, and hospital owned clinics. St. Mary's Medical Center Medical Group represents the direct employment from St. Mary's Medical Center hospital. There are 1,180 part time employees and 1,559 full time employees. 2021 Mesa County job numbers show a jobs total of 92,746, meaning St. Mary's Medical Center direct employment equates to 2.95% of jobs. Note that healthcare and social assistance as an industry code shows 12,748 jobs, meaning that St. Mary's Medical Center contributes almost 21.4% of jobs to this industry category. Not counted in this impact report are 313 SCL Health employees that live and work in Mesa County



but are affiliated with other SCL health ventures outside of St. Mary's Medical Center and the region.

Table 5: **Number of employees**

Work Area	FTE Type	Total
St. Mary's Medical Group	Full Time	117
	Part Time	404
	Subtotal	<b>521</b>
St. Mary's Medical Center Medical Group	Full Time	1,442
	Part Time	776
	Subtotal	<b>2,218</b>
<b>Grand Total</b>		<b>2,739</b>

## ECONOMIC IMPACT MODELING<sup>9</sup>

This report uses a data and software program called IMPLAN to conduct the economic contribution and impact analysis.<sup>10</sup> IMPLAN is an Input-Output model that accounts for all flows of economic activity between different sectors in an economy, including government and households. The model uses a Social Accounting Matrix (SAM) which accounts for the relationships between different industries, households, and government, as well as other elements like savings, commuting, and trade.

The direct effect from jobs, wages, and expenditures is the starting point for the economic impact story. After the direct industry contribution is calculated, these numbers need to be adjusted for leakages from the economy, supply chain effects, and multiplier effects, all of which IMPLAN estimates.

Leakages are important to consider because not every dollar spent in the county stays in the region. Leakages include taxes, commuting (a leakage of employee compensation), savings, and imports from other areas (as imported goods do not drive further local effects). IMPLAN also calculates supply chain effects for each spending category and industry. Supply chain effects, or indirect effects, are the effects of local spending on suppliers. For instance, a business that supplies medical equipment locally as a result of the large healthcare industry in Mesa County is a supply chain effect. The medical supply company in turn spends money on other local suppliers, buying inputs into their production or sales process, which also affects the supply chain. However, there may be instances where a medical supply is not produced or sold in the region, and IMPLAN estimates how much of this supply chain effect is spent locally vs. non-locally.

Induced effects are also calculated by IMPLAN. Every dollar spent by St. Mary's Medical Center employees and employees in the medical supply chain businesses in the area becomes income to someone else, such as a local business, hotel employee, gas station attendee, or waiter/waitress. Each of these businesses and their employees spend this new income, creating income for someone else. The cumulative impact of these rounds of spending is known as the multiplier effect. The multiplier effect is the total economic effect divided by the direct effect.

## MODEL AND RESULTS

Table 6 illustrates the economic impact of St. Mary's Medical Center. The direct effect is the initial value that the industry contributes to the study region. Indirect effects are supply chain effects, and induced effects represent the employee

<sup>9</sup> Some wording and phrasing explaining economic impact concepts are taken from previous economic impact studies conducted by Nathan Perry.

<sup>10</sup> IMPLAN Group LLC. IMPLAN 2023. Huntersville, NC. IMPLAN.com.

spending from those working in the direct and indirect industries. The three combined are the total economic impact. The direct employment for St. Mary's Medical Center is 2,869, and after indirect and induced effects, the total contribution to county employment is 4,701. The 2,869 includes the St. Mary's Medical Center direct employment (2,739) plus the direct employment that St. Mary's Medical Center capital expenditures create.

The direct jobs of 2,869 result from both St. Mary's Medical Center employment discussed above as well as capital spending on construction. St. Mary's Medical Center direct employment equates to 3% of Mesa County jobs. Adding indirect and induced effects, the total employment resulting from St. Mary's Medical Center is 4,701, which is 5% of total Mesa County jobs.

Table 6 shows that St. Mary's Medical Center creates a direct contribution of \$276,955,725 to county GDP. This equates to 3.7% of the total GDP for the county. When adding indirect and induced effects, this equates to 6% of GDP. The direct impact, or the 3.7%, would be comparable ("apples to apples") to the 12.5% that healthcare contributes to GDP in the county.<sup>11</sup> For context, the direct contribution of St. Mary's is similar to accommodation and food services (3.6% of GDP).

Table 6: **Economic Impact St. Mary's Medical Center<sup>12</sup>**

	Employment	Labor Income	GDP	Output
Direct	2,869	\$274,637,752	\$276,955,725	\$332,359,596
Indirect	474	\$26,400,892	\$48,558,001	\$93,168,478
Induced	1,358	\$64,373,510	\$117,913,266	\$210,444,786
<b>Total</b>	<b>4,701</b>	<b>\$365,412,153</b>	<b>\$443,426,992</b>	<b>\$635,972,860</b>

The direct total output value of \$332,359,596 represents the gross total value of all sales and production due to St. Mary's Medical Center. This is a broader measure than the standard gross domestic product (GDP). Output is the value of an industry's production. It counts the county GDP and the intermediate inputs that are associated with it. This total output measure is the gross measure of local economic activity and is more in line with how a business would account for the sales transaction from one firm to another. GDP is a subset of "output," and is the standard measure of growth by an economy. GDP is a more accurate representation of economic impact, is what economists and the Bureau of Economic Analysis use, and is the emphasis of this report.<sup>13</sup> Total output including indirect and induced effects is \$635,972,860.

St Mary's paid out \$264,868,643 in wages, health insurance, and fringe benefits to its 2,739 employees in 2022. Adding the wages created from capital expenditures raises this direct wage impact to \$274,637,752, which is 5.8% of wages in Mesa County. When including indirect and induced effect wages, the total wage impact is \$365,412,153, or 7.8% of total wages.<sup>14</sup>

These results show growth in economic impact from previous studies on St. Mary's Medical Center. A previous study by the Leeds School of Business showed in 2019, St. Mary's Medical Center created 4,474 jobs, \$283 million in wages, and \$340 million in GDP.<sup>15</sup> This current study shows job gains of 227 jobs and a gain of \$103 million in GDP contribution compared to the previous Leeds study. Part of the GDP and wage increase is due to inflation (inflation increased approximately 14% between the two studies) but the rest of it is real gains.

11 When comparing IMPLAN output to government data such as the BEA GDP data it is important to only use direct impacts as adding indirect and induced creates an "apples to oranges" comparison, as the BEA does not count indirect and induced impacts.

12 Employment, wages, proprietor income, and intermediate inputs were modeled through the use of IMPLAN's industry impact analysis function. Capital expenditures were modeled as a commodity outputs.

13 A good example illustrating the relationship between total output and GDP is car production: GDP only counts the final value of the car, but total output adds the intermediate goods of steel, rubber, and other parts, plus the total value of the car. This is known as double counting in GDP calculations.

14 Note that labor income is the sum of employee compensation (wages and benefits) and proprietor income.

15 Business Research Division, Leeds School of Business. St. Mary's Medical Center Medical Center Economic Impact. February, 2020.

Table 7 illustrates the employment impact by industry. Hospital employment is the obvious top employer, with professional services, construction, real estate, and restaurants employment all being impacted. Note that hospitals have a number higher than the St. Mary's Medical Center employment number of 2,739 because induced economic impacts create demand for healthcare, and the employment numbers in Table 7 represented direct, indirect, and induced.

Table 7: **Employment Impact by Industry Top 10**

Industry	Total Employment
Hospitals	2,824
Marketing research and all other miscellaneous professional, scientific and technical services	165
Construction of new health care structures	129
Other real estate	97
Limited-service restaurants	94
Full-service restaurants	89
Offices of physicians	50
Employment services	49
Retail - General merchandise stores	45
Retail - Food and beverage stores	43

Table 8 illustrates the tax impacts at the federal, state, county, sub-county special district, and sub-county general level. The tax impacts are broken down by direct, indirect, and induced effects. St. Mary's Medical Center contributes a total of \$2,028,552 to county taxes, \$2,200,669 to sub-county special districts, and \$3,435,125 to sub-county general. The overall tax contribution to the state is \$16,030,095 and to the Federal government is \$83,623,888. Two of the direct tax impacts are negative, this is due to tax exemptions in the construction industry. When the model is run without capital expenditures the direct local tax contribution is positive.

Table 8: **Tax Impact of Business Model**

	Sub-county General	Sub-county Special Districts	County	State	Federal	Total
Direct	-\$27,301	\$35,298	-\$16,145	\$7,087,538	\$62,193,075	\$69,272,465
Indirect	\$141,465	\$221,642	\$130,502	\$1,264,539	\$6,333,855	\$8,092,004
Induced	\$2,017,747	\$3,072,158	\$1,850,964	\$7,258,093	\$13,462,709	\$27,661,670
<b>Total</b>	<b>\$2,131,911</b>	<b>\$3,329,098</b>	<b>\$1,965,321</b>	<b>\$15,610,170</b>	<b>\$81,989,639</b>	<b>\$105,026,139</b>

## CONCLUSION

St. Mary's Medical Center is a large contributor to the Mesa County economy. When only looking at direct effects, St. Mary's Medical Center contributes 3.7% to Mesa County's GDP, 3% of jobs, and 5.8% of wages. When including indirect and induced effects, St. Mary's Medical Center accounts for 5% of Mesa County jobs, 7.8% of wages, and 6.2% of local GDP. These numbers account for leakages from the economy, and only counts money spent inside of the county. These are the tangible economic impacts of a large regional hospital. There are intangible impacts of a large regional hospital, as many retirees choose to live in Mesa County as opposed to a different county due to the proximity to high level medical services. In addition, many people travel from outside of the county for the expertise that St. Mary's Medical Center contributes, and any local spending that happens while on a medical visit is also economic impact that is not measured in this report.