

# THE ECONOMIC IMPACT OF THE **MONTANA** OSTEOPATHIC MEDICAL SCHOOL

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BUREAU OF BUSINESS AND  
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## SUMMARY

This is a study of how the construction and successful operation of a four-year graduate medical school located in Great Falls, Montana would affect the economy of the state and its regions. The proposed Montana Osteopathic Medical School (MMS) is a new, privately funded, not-for-profit school that would be the first of its kind in Montana.

Our basic finding is that the construction and operation of the Montana Medical School would be a major economic event. The nature and magnitude of the jobs, income, and sales that can be expected to occur in the coming years due to the presence of MMS in the economy evolves over time as the project moves through the phases of construction and operation, and as a fraction of the graduates of the school begin their careers within our state. But the impacts add substantially in all phases to output, employment, income and sales across Montana.

**Table 1: The Economic Impact of Montana Osteopathic Medical School: Summary**

Category	Units	Impacts by Year			
		2024	2028	2030	2040
Total Employment.....	Jobs	278	364	589	1,715
Personal Income.....	\$ Millions	11.7	24.2	37.5	121.7
Disposable Personal Income..	\$ Millions	10.4	21.2	32.9	107.4
Output.....	\$ Millions	37.1	74.0	106.3	293.6
Population .....	People	136	325	481	1,984

Specifically, we find that the construction, operations, and graduates of the Montana Osteopathic Medical School in Great Falls would add to the economy of the region and the state in several ways.

- It will add 278 jobs, \$11.7 million in income and \$37.1 million in gross receipts to businesses and non-business organizations in each year of the two-year construction phase of the project expected to commence in 2023.
- While the operations of the school directly employ 70 faculty and staff, the total number of jobs directly and indirectly supported by the school’s operations would be 325 in its fourth year of operation, largely due to the highly specialized, highly compensated nature of the jobs at the school, and the spending of many of the 500 medical students and their families who attend (even after accounting for the likelihood that some 3<sup>rd</sup> and 4<sup>th</sup> year student clinical rotations take place outside Montana).

- In its fourth year of operation, it will add \$24.2 million of income to Montana households, \$21.2 million of which is after-tax income.
- Beyond the fourth year, when a fraction of MMS graduates take up positions as Doctors of Osteopathy across the state, the impacts of the school grow substantially. By year 2040, expansion in the health care workforce, together with other operational impacts, grow the total employment impact of MMS to more than 1,700 jobs across the state, with more than \$120 million in annual income and more than \$290 million in economic output in the state because of the presence of the school.
- The school's presence in the economy grows the population of the state both directly and indirectly, as employment opportunities expand. We estimate that by year 2040 there will be almost 2,000 more people in Montana, consisting primarily of working aged people and their children.

It is important to note that as sizable as these impacts are, they likely understate the full benefits to the state economy of the school in two important ways.

The first is the spinoff activities that are likely to occur because of the school. The concentration of highly trained faculty involved in graduate medical instruction in Great Falls will attract funding for research activities. There are likely to be strong synergies with the major hospital in the region, Benefis Health System. Some of these could produce commercialized products or services that would add to the regional economy. These impacts are not included in this study.

There is also the very sizable but hard to measure impact of growing health care access in the state – both in specialized and in general care. This is especially true for the more isolated, underserved portions of the state.

#### How These Results Were Produced

This research report addresses a basic question: what would the economy of the state of Montana look like if the Montana Osteopathic Medical School were constructed and successfully operated? The question calls for a comparison of two states of economic activity. The first is the status quo, no-MMS projection of our future. The second projection is a representation of economic activity that would occur with the spending, production, employment and tax revenue associated with the construction, operations, and graduates of the school.

The BBER used its state-of-the-art economic model, leased from Regional Economic Models, Inc. (REMI), to produce a picture of the economy as it would exist in the event that MMS proceeds as planned. Such an economy would gain not only the substantial spending and income flows that the construction, operations and eventually the graduates of the school themselves create, but also the subsequent rounds of income, spending and employment that are created as those flows are spent and re-spent in the state economy. The REMI model recognizes those linkages and thus is a useful tool for deriving the ultimate contribution of MMS to the economy of Montana.

## About the Bureau of Business and Economic Research

The Bureau of Business and Economic Research (BBER) is the preeminent business research organization in the state of Montana. Founded in 1948 as the research arm of the University of Montana's School of Business Administration. The Bureau's mission statement states,

*"The purpose of the Bureau is to serve the general public, as well as people in business, labor, and government, by providing an understanding of the environment in which Montanans live and work."*

BBER has since grown to become one of the most sought-after sources of information and analysis on the Montana economy. The Bureau has published the *Montana Business Quarterly*, an award-winning business periodical, since 1962, and has conducted the Montana Economic Outlook Seminars, a half-day program on the economic outlook presented in 10 cities states wide, on an annual basis since 1976.

# 1. INTRODUCTION AND OVERVIEW

Montana is one of four states in the U.S. that does not have a medical school physically located within its borders. The proposed Montana Osteopathic Medical School (MMS), slated for construction and operation in Great Falls, would address that shortcoming. The not-for-profit school projects a class size of 125 students for the traditional 4-year progression towards a graduate medical degree (Doctor of Osteopathic Medicine). The Bureau of Business and Economic Research at the University of Montana (BBER) was tasked with assessing how the successful construction and operations of the school would affect the Montana economy. The study is sponsored by Benefis Health Systems. This report is the result of that analysis.

Successful completion of a medical school like MMS is only one step of a longer process of becoming a licensed, certified physician. Depending on the specialization, anywhere from one to six years of additional training (possibly outside Montana) would occur after one is conferred with the medical degree. But given that family medicine doctors have relatively shorter post-graduate training periods, and given that seniors in osteopathic medical schools match up with family medicine residency programs at a much higher rate than seniors at schools conferring an MD degree (23.3% for DO's versus 8.6% for MD's in 2020), there is likely to be a stronger bond between a Montana Osteopathic program and the state where that program is located.

There are many unknowns and obstacles to the establishment of MMS, just as there would be for any new medical school in any state. This study does not inform the question of the likelihood that the school is actually established, nor does it comment on the issues or challenges in making its operations successful. Rather, we examine a simple question: what would the economy of the state look like if the school were successfully constructed and operated? The objective of the examination of this "what if" question is to spell out the kinds of changes in economic performance metrics -- income, jobs, sales and population -- that are possible in the event that the project succeeds as planned.

As is the case for all projections of the future, this study relies on assumptions concerning the decisions made by the school, its students, and the men and women who graduate with DO degrees. From a numerical point of view, those assumptions are critical, since different assumptions lead to different economic impacts. Yet the broad nature of the findings we publish in this report are largely unaffected by small changes in these assumptions in either direction. Education in general, and graduate medical education in particular has long-lasting impacts on economic activity, as these pages will show.

Colleges and universities, as well as stand-alone medical schools, represent concentrations of economic activity that attract the movement of people and investment that otherwise would not occur. As is the case with any new economic activity, the new dollars coming into an economy that are spent within that economy support additional investment, employment and income. The MMS impacts reported in this report reflect that beyond doubt. In fact, these kinds of impacts are more powerful for a medical school due to the highly specialized and thus highly compensated nature of the professional faculty and staff that are its employees.

But education brings more than dollars into a community. It brings students as well. Students and their families who come to Great Falls to pursue a medical degree represent another powerful vector for

economic impact. Even more importantly, education confers skills and talents that translate into economic value for both the individuals and potentially for the state as a whole. As a fraction of graduates from MMS remain in the state to pursue their careers, their income and spending comprise a third powerful force contributing to the school's overall impact.

We analyze this question with the use of an economic model leased from Regional Economic Models Inc. (REMI) that was calibrated with Montana data and specifically designed for this purpose. After carefully constructing a future scenario of what a successful MMS would look like, we use the REMI model to project economic activity for the next two decades. This projection reflects all of the interactions that take place between the school and the rest of the economy. A comparison between this future projection and a status quo, no-MMS future reveals the substantial economic impacts that are due to the school.

## 2. POLICY ANALYSIS WITH THE REMI MODEL

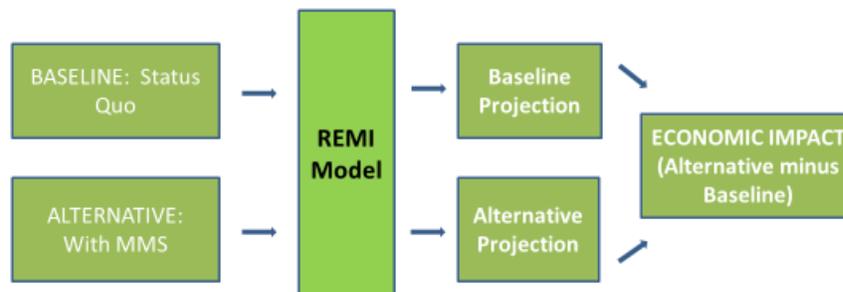
Regional economic impacts occur because of events or activities that create new expenditures within a region. “New spending” constitutes spending that is over and above existing expenditures, and which does not displace other spending elsewhere in the region. It not only adds to economic activity in its own right, but also induces further spending when the recipients of wages, sales, and tax revenues spend portions of their income in the local economy. Changes in the paths of investment, migration, prices, and wages are also possible.

This study utilized an economic model, calibrated to represent the interactions specific to the Montana economy, to estimate the economic impacts resulting from spending associated with the Montana Osteopathic Medical School. Leased from Regional Economic Models, Inc., the REMI model is one of the best known and most respected analytical tools in the policy analysis arena, and has been used in more than 100 previous studies as well as in dozens of peer-reviewed articles in scholarly journals. It is a state-of-the-art econometric forecasting model that incorporates dynamic feedbacks between economic and demographic variables. The REMI model forecasts employment, income, expenditures, and populations for counties and regions based on a model containing over 100 stochastic and dynamic relationships, as well as a number of identities. A full explanation of the design and operation of the model can be found in Treyz (Treyz, 1993).

### The REMI Modeling Methodology

The basic approach of using the REMI model to produce the results for this study is illustrated in Figure 2.1, below. The analysis starts with a baseline projection for the Montana economy, using the status quo assumptions that do not include the Montana Osteopathic Medical School. Next, the analysis employed the REMI model a second time, simulating an alternative scenario where the school is constructed and operated according to a scale and timetable envisioned by its investors.

**Figure 2.1: Policy Analysis Using the REMI Model**

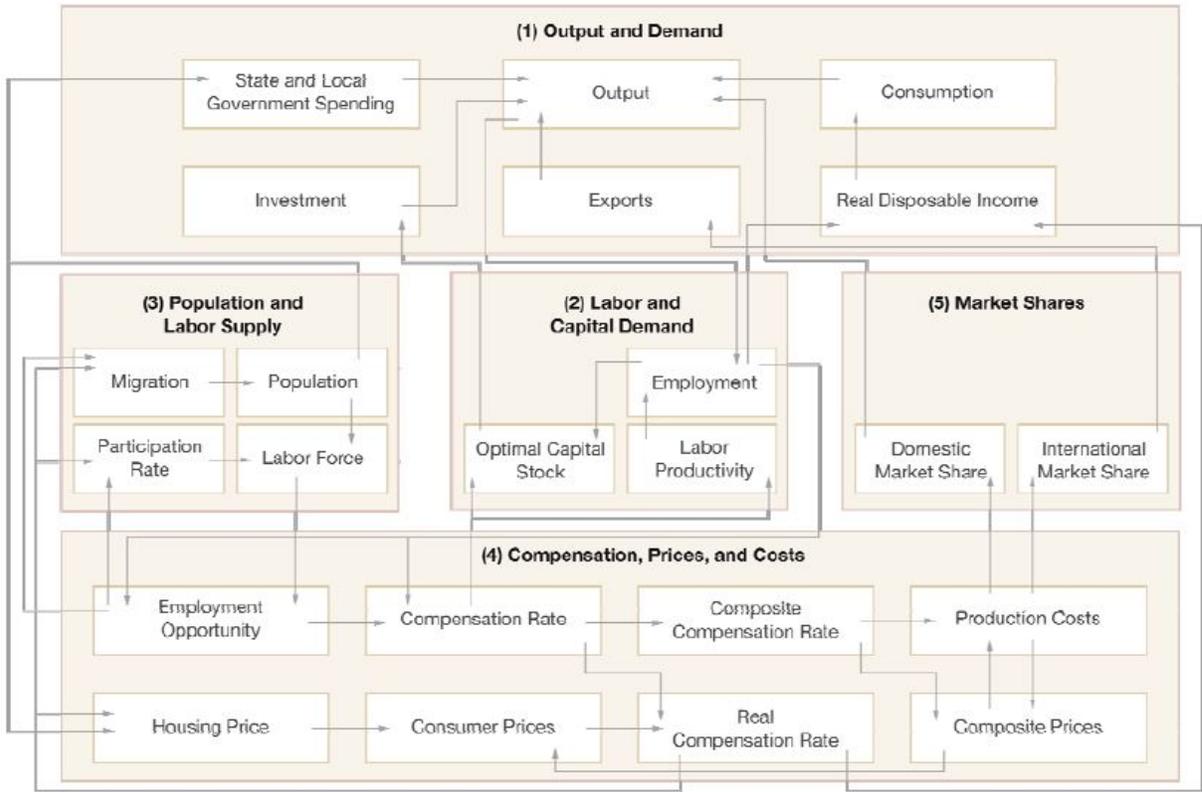


The difference between the baseline scenario and the MMS scenario constitutes the magnitude of the impact of the school on the state economy.

The REMI model utilizes historical data on production, prices, trade flows, migration, and technological advances to calibrate the relationship between five basic blocks of the state economy: 1) Output and

Demand; 2) Labor and Capital Demand; 3) Population and Labor Supply; 4) Compensation, Prices and Costs; and 5) Market Shares. These linkages are shown in Figure 2, below.

**Figure 2.1. Schematic Model of REMI Linkages**



The differences in production, labor demand, and intermediate demand associated with the presence of the medical school impact these blocks, causing them to react to the changes and adjust to a new equilibrium. This new equilibrium constitutes the alternative scenario referred to above—the new “resting point” for an economy with MMS in operation.

The underlying philosophy of the REMI model is that regions throughout the country compete for investment, jobs, and people. When events occur in one region, they set off a chain reaction of events across the country that causes dollars to flow toward better investment and production opportunities, followed over time by workers and households toward better employment opportunities and higher wages. The REMI model consists of an 82-sector input/output matrix that models the technological inter-dependence of production sectors of the economy, as well as extensive trade and capital flow data. Together, these components enable the estimates of the shares of each sector’s demand that can be met by local production. Simplified illustrations of the schematic model in Figure 2.2 are provided on the following pages, in figures 2.3 through 2.7.

**Figure 2.2. Output Linkages**

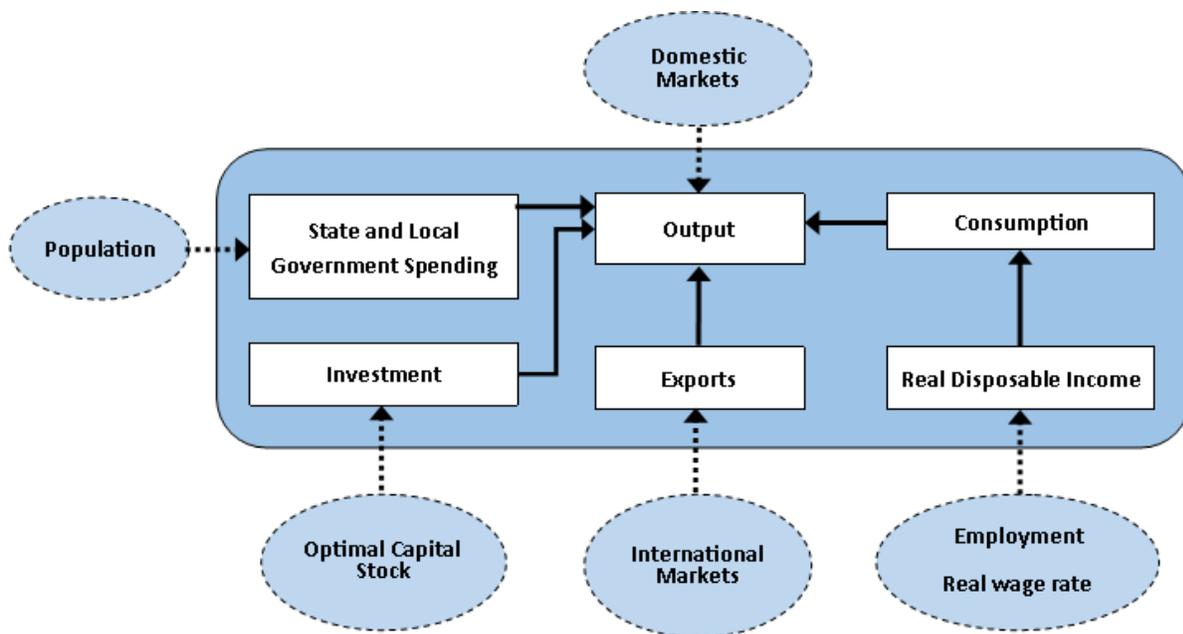


Figure 2.3. Labor and Capital Demand Linkages

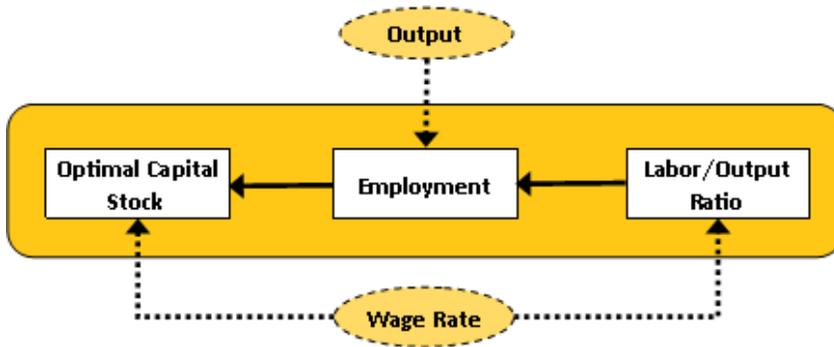


Figure 2.4. Demographic Linkages

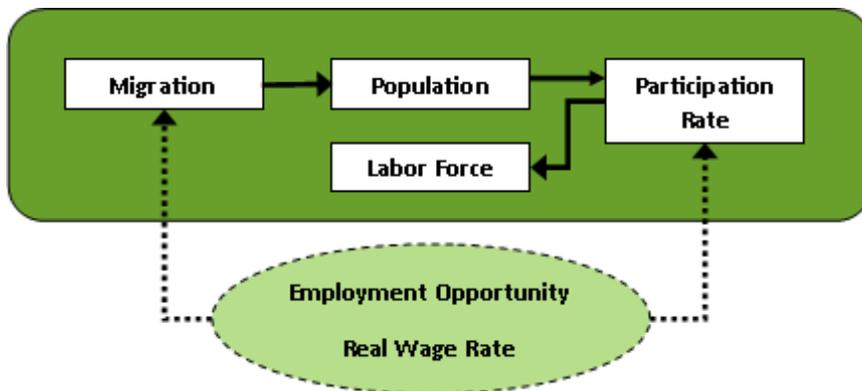


Figure 2.5. Wages, Prices and Production Costs Linkages

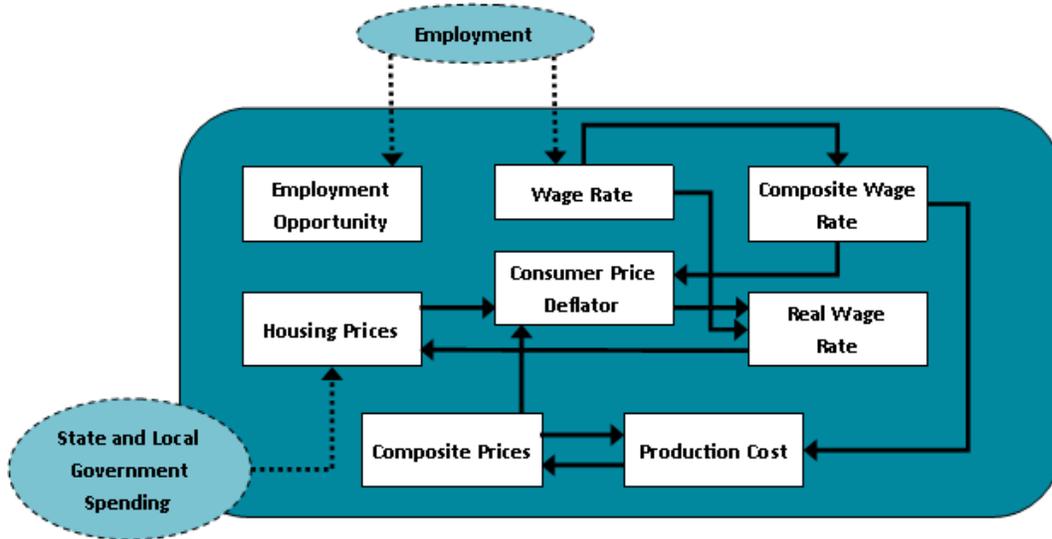
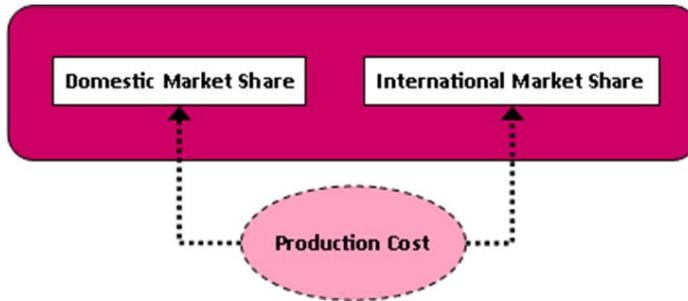


Figure 2.6. Market Share Linkages



As powerful and flexible as this tool is, the output it provides is only as good as the inputs provided. The majority of the work for this study was to carefully craft the inputs used to construct a scenario for the economy that faithfully represents all of the events, income flows, and the direct and indirect impacts that would occur with the successful operation of MMS.

### 3. THE DIRECT AND INDIRECT ECONOMIC CONTRIBUTIONS OF THE MONTANA OSTEOPATHIC MEDICAL SCHOOL

The fundamental question addressed by this research is: what would the economy of Montana look like if the Montana Osteopathic Medical School were successfully constructed and operated? A comparison of the status quo projections for the economy and the alternative projection that incorporates MMS gives a measure of the total economic impact of the school complex. The addition of MMS to the economy involves (a) a determination of the scale and nature of the economic contributions of the school itself, and (b) the use of an economic model to track and estimate how those contributions propagate into the greater economy to support additional jobs, income and spending. The first of these two steps is detailed in this section.

It is useful to break down the total economic impact of the medical school into three distinct pieces:

*Table 3.1. Components of Economic Impacts*

<b>DIRECT IMPACTS</b>	Payroll, vendor purchases, tax payments and other economic flows that come from the construction and operations of the school itself.
<b>INDIRECT IMPACTS</b>	Economic flows that occur because of the school but are not part of the school itself.
<b>INDUCED IMPACTS</b>	Spending, employment, consumption and other economic flows that occur as direct and indirect spending is received by workers, businesses and governments as revenue, and re-spent (to some degree) in the state economy.

In this analysis, the direct impacts are based on plans released by the from the investors and from the operational data of other schools of a similar nature. Indirect impacts, which stem from the spending of students and the location decisions of MMS graduates when they decide where to practice, are based on national data on the location decisions of medical school graduates. These are briefly described in this section.

Assumptions about the school’s basic operational information that comprise the direct impacts for this analysis are as follows.

**Construction.** The school will be built and operated in Great Falls, Montana. Construction of the building represents a \$38 million overall project, spread across two years. Other capital acquisitions add another \$15 million in equipment and infrastructure spending. The project is assumed to be completed in the year 2024.

**Operations.** The school will employ 70 faculty and staff with a total compensation of \$11.7 million annually. It is assumed that instruction will commence in 2025 with an entering class of 125 students.

Indirect impacts consist of two principal components. The first is the spending on non-Montana students while they attend MMS. The second is the expansion in the Montana health care workforce when a fraction of MMS graduates end up practicing and living in the state.

Student expenditures. Students who come to Montana to attend MMS spend money on housing, transportation, books, and a host of other living expenses. We estimate this spending to be \$2602 per month. Spending on MMS tuition is already taken into account in the operations of the school.

This spending is assumed to take place in Great Falls during each student's first two years, which is primarily classroom-related. The students third and fourth years are spent doing clinical rotations at different locations, some of which may be outside the state. We have assumed that these students will spend time in Great Falls, Kalispell, Missoula and Billings, and their spending occurs at those locations. We assume that 20 percent of fourth year students perform rotations outside of Montana.

Graduates. With a class size of 125 students, MMS is expected to produce that number of degreed DOs each year after 2028, the year its first class matriculates. National level data suggest that 39 percent of medical school graduates go on to practice in the state where they obtained their degrees. Even though several more steps involving years of additional training are involved after graduation from MMS for many specializations of practicing doctors, for simplicity we assume that 49 new doctors (39 percent of 125 graduates) enter the Montana health care workforce each year after 2026.

In the urbanized areas of the state, these additional doctors will displace some doctors who might have come to Montana in a no-MMS scenario. Thus the net number of doctors in the economy with MMS does not increase by the number of MMS graduates who elect to practice in the state. In rural areas, we expect no displacement. We assume that doctors who are MMS graduates are distributed across the state in proportion to population. We also assume that the net new doctors in the state because of MMS support the employment of 3 additional health support personnel.

## 4. THE ECONOMIC IMPACT OF THE MONTANA OSTEOPATHIC MEDICAL SCHOOL

This analysis considers two economic scenarios for the state of Montana. The baseline, status quo scenario, and a scenario where the Montana Osteopathic Medical School (MMS) is constructed and successfully operated in north central Montana. The MMS scenario adds to the economy (a) the construction of the facility and the purchase and deployment of the physical infrastructure of the school, (b) the operations of the school, including the expenditures of students who attend, and (c) the increase in the supply of medical professionals in Montana that occurs as a fraction of those attending practice within the state.

The difference between the baseline and the alternative scenarios is the total impact of the medical school. We present those impacts in this section of the report.

### Results Summary

The basic finding of this study is that the construction and successful operation of the Montana Osteopathic Medical School would be an important economic event in almost every part of the state.

- Employment would immediately rise by 278 jobs for each year of the two-year construction period, growing to over 360 jobs when the school is fully operational;
- Job gains grow substantially as the school’s graduates impact the health care workforce throughout the state, with total employment gains of more than 1,700 jobs by year 2040;
- Income received by Montana households each year is more than \$110 million higher per year within ten years of the school’s full operation;
- The output (gross receipts) of Montana business and non-business organizations is \$74 million higher annually when the school comes into full operation, with output impacts in excess of \$290 million by year 2040;
- Population gains of more than 1,800 occur within 10 years of full operation of MMS.

**Table 4.1: The Economic Impact of Montana Osteopathic Medical School: Summary**

Category	Units	Impacts by Year			
		2024	2028	2030	2040
Total Employment.....	Jobs	278	364	589	1,715
Personal Income.....	\$ Millions	11.7	24.2	37.5	121.7
Disposable Personal Income..	\$ Millions	10.4	21.2	32.9	107.4
Output.....	\$ Millions	37.1	74.0	106.3	293.6
Population .....	People	136	325	481	1,984

- These impacts highlight the strong linkages that exist between the operations of the school and the rest of the state economy.

A more detailed examination of the economic impacts of MMS reveals additional insights on why the size of these contributions is so substantial.

### a. Employment Impacts

The breadth of the economic impacts created by the construction and operation of MMS is apparent from an examination of what kinds of jobs are ultimately supported by the construction and operation of the school. The detail on employment impacts of MMS by major industry in Montana shown in table 4.2 show changing patterns over time as the project evolves.

Unsurprisingly, the sector with the largest employment impacts during the second year of the construction phase (2024) is the construction industry, which sees an increase of 156 jobs compared to the no-MMS baseline. But many other industries in this year are affected as well, with significant numbers of jobs supported in retail trade and government. Indeed, more than a third of the jobs created in Montana due to MMS can be found in industries other than construction.

**Table 4.2: Employment Impacts**

Industry	Impacts by Year			
	2024	2028	2030	2040
Construction.....	156	37	50	105
Manufacturing.....	12	4	6	14
Wholesale Trade.....	4	6	8	19
Retail Trade.....	25	46	62	143
Transportation and Warehousing.....	3	7	9	19
Professional and Technical Services.....	9	15	21	55
Administrative and Waste Services.....	5	13	20	54
Health Care and Social Assistance.....	12	26	154	756
Arts, Entertainment, and Recreation.....	3	8	11	21
Accommodation and Food Services.....	11	28	43	130
Other Services, except Public Administration.....	8	19	26	56
Other Private.....	11	105	115	175
Government.....	19	49	64	167
<b>TOTAL.....</b>	<b>278</b>	<b>364</b>	<b>589</b>	<b>1,715</b>

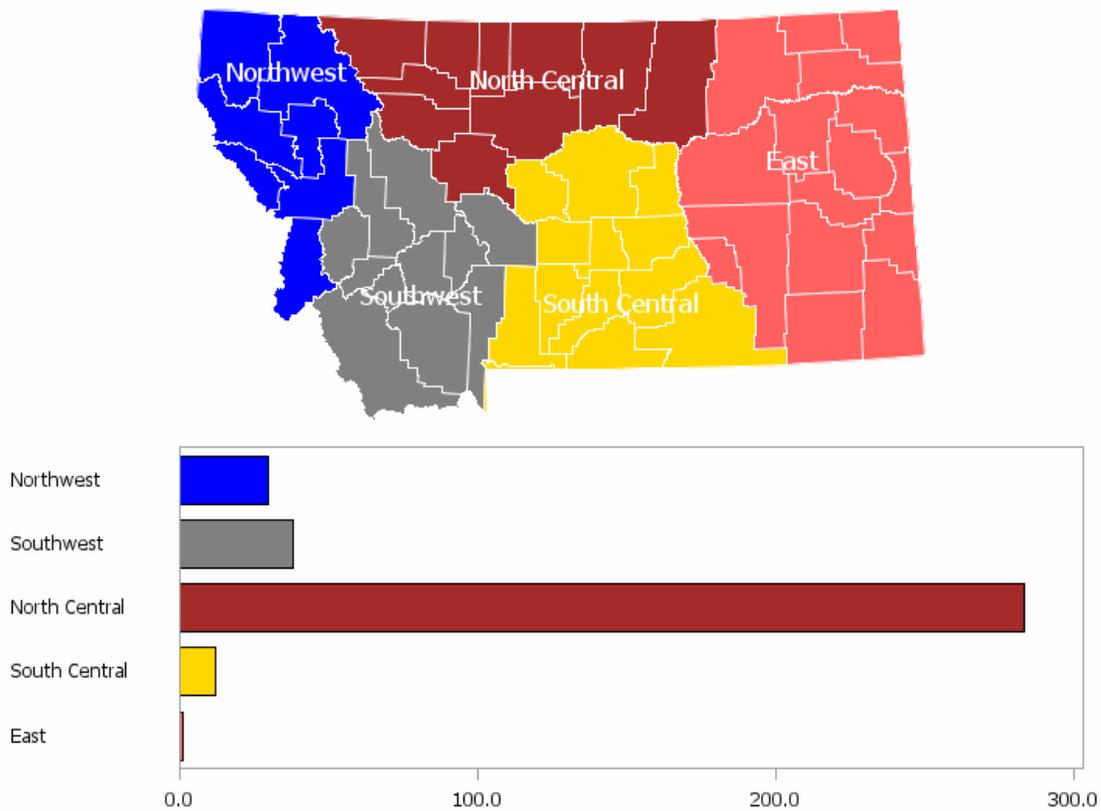
In year 2028 the construction phase is completed, and the school is projected to be a full operation with all four classes populated with students. The school’s 70 employees can be found in the “Other Private” category, which includes medical education. This industry category rises to the top in employment

impacts in this year with 105 jobs, but the spending of workers, students, and the school itself can be seen to support significant employment in industries with no direct connection to MMS.

In the years 2030 and 2040 the growing significance of the graduates of MMS is apparent, as the Health Care and Social Assistance industry category employment impacts rise in prominence. Under the assumption that 39 percent of MMS graduates practice within the state, by the year 2040 there would be 686 new doctors in Montana. Even after accounting for the fact that those doctors would displace doctors who might have come to Montana in the no-MMS scenario, this is a significant increase in the health care workforce, particularly when support staff are taken into account.

Other employment impacts in these future years grow in size, as the population and spending impacts from health care growth propagate throughout the rest of the economy.

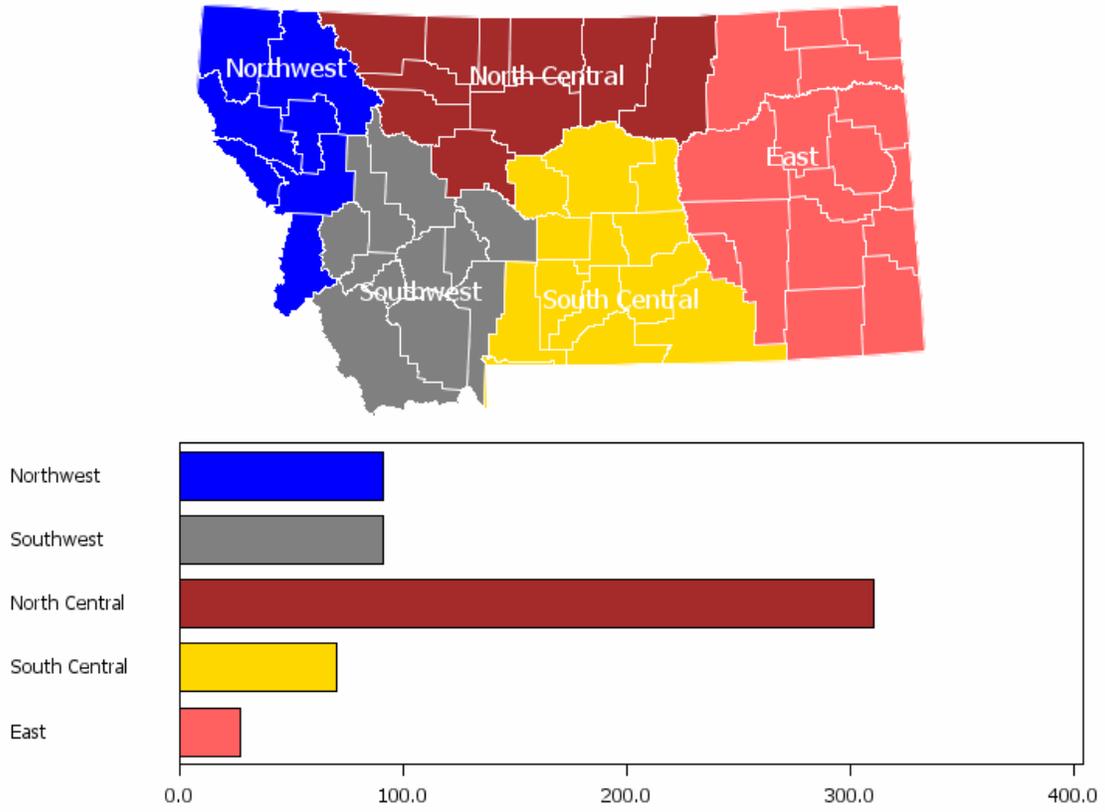
**Figure 4.1 Employment Impacts by Region, 2028**



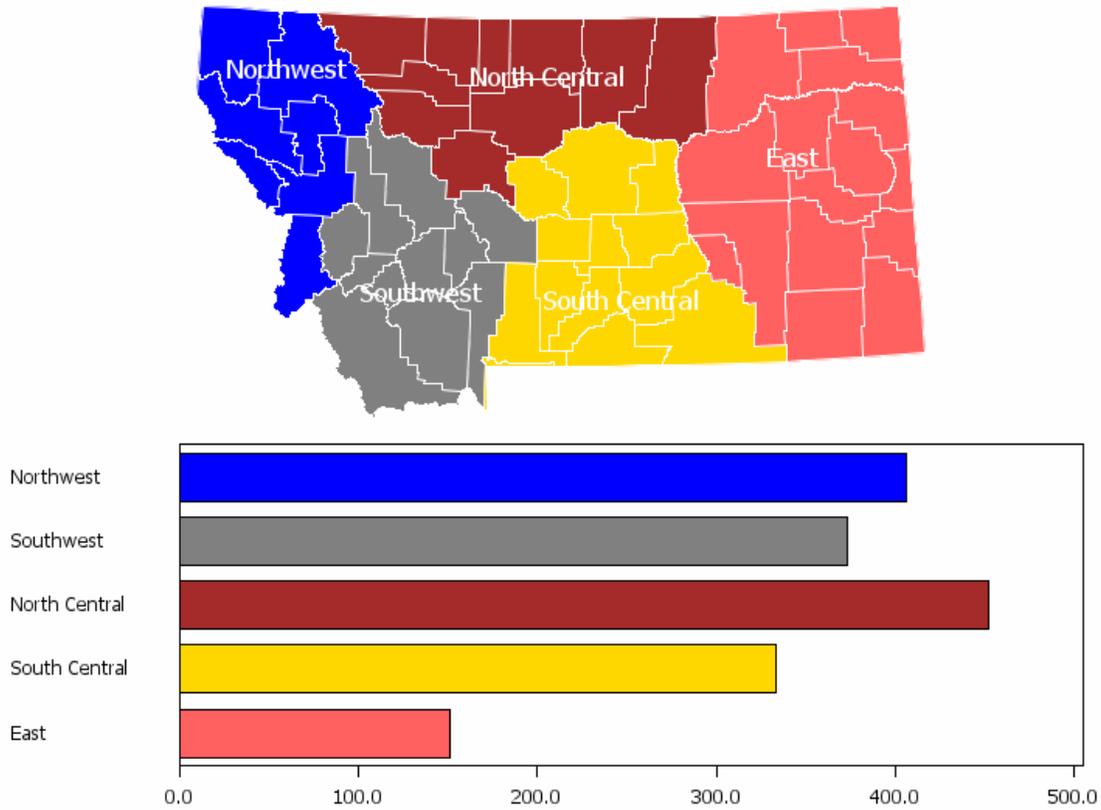
Additional insights on the nature of the MMS impacts can be seen from a geographical comparison of the different regions of the state. Returning to the year 2028, when the school is in full operation but has yet to produce graduates, we can see from figure 4.1 above that most of the employment impacts are contained within the north central region of the state in which MMS is located. There are smaller impacts in other regions, partly due to the presence of third and fourth year MMS students performing their clinical rotations in those parts of the state.

In the years 2030 and 2040, the rising importance of practicing physicians who are graduates of MMS produces a pattern of employment impacts that is geographically more balanced.

Figure 4.2: Employment Impacts by Region, 2030



**Figure 4.3: Employment Impacts by Region, 2040**



### **b. Personal Income and Compensation Impacts**

Another dimension of the contributions made to the state economy by the Montana Medical School is the income received by Montana households. The larger economy that exists because of the construction, operations, and graduates of the school Montana translates into more income, which in turns fuels some of the spending that supports the job gains described in the previous section.

**Table 4.3: Personal Income Impacts (millions of dollars)**

Category	Impacts by Year			
	2024	2028	2030	2040
Total Earnings by Place of Work	13.0	25.5	39.2	112.1
Total Wage and Salary Disbursements	8.3	18.6	28.1	79.6
Supplements to Wages and Salaries	2.0	5.3	7.7	22.4
Employer contributions for employee pension and insurance funds	1.3	3.5	5.1	14.5
Employer contributions for government social insurance	0.7	1.8	2.6	7.9
Proprietors' income with inventory valuation and capital consumption adjustments	2.7	1.6	3.4	10.1
Less:				
Contributions for government social insurance	1.5	3.6	5.4	15.3
Employee and self-employed contributions for government social insurance	0.8	1.8	2.8	7.5
Employer contributions for government social insurance	0.7	1.8	2.6	7.9
Plus:				
Adjustment for residence	0.0	0.0	(0.0)	(0.3)
Gross In	0.5	1.4	1.6	2.7
Gross Out	0.5	1.4	1.6	3.1
Equals:				
Net earnings by place of residence	11.5	22.0	33.8	96.4
Plus:				
Property Income	0.5	1.6	2.5	13.3
Dividends	0.2	0.6	0.9	4.7
Interest	0.2	0.7	1.1	6.3
Rent	0.1	0.3	0.5	2.3
Plus:				
Personal Current Transfer Receipts	(0.3)	0.6	1.1	12.0
Equals:				
Personal Income	11.7	24.2	37.5	121.7
Less:				
Personal Current Taxes	1.3	2.9	4.6	14.4
Equals:				
Disposable Personal Income	10.4	21.2	32.9	107.4

Income received by Montana households because of MMS grows from \$11.7 million per year in the construction phase of the project, to more than \$120 million per year in 2040, when the school has been in full operation for 12 years. While most of this income is received in the form of earnings, which are associated with employment, there are other forms of income that are affected as well. These include so-called unearned income, such as rents, royalties, dividends and transfer payment from governments. These reflect the fact that an economy with MMS is a larger and more populous economy, with commensurate growth in all forms of income. The income impacts in Table 4.3 give additional insight on the breadth of the changes in the state economy that would be due to the operations of MMS.

The nature of the jobs that are created because of the construction, operations and graduates of the MMS can be seen from a focus on the elements of compensation as shown in Table 4.4. Wages and salaries comprise roughly 70 percent of the additional earnings received by Montana households that are ultimately due to the school. In addition to wages and salaries, earnings include non-wage benefits (included in compensation) as well as business proprietor income.

**Table 4.4: Compensation Impacts**

Category	Units	Impacts by Year			
		2024	2028	2030	2040
Wages and Salaries.....	\$ Millions	8.3	18.6	28.1	79.6
Compensation.....	\$ Millions	10.3	23.9	35.9	102.0
Earnings.....	\$ Millions	13.0	25.5	39.2	112.1
Earnings per Job, New Jobs.....	\$ Dollars	\$46,934	\$70,269	\$66,630	\$65,360

The average earnings for all of the new jobs that are created because of the medical school varies over the phases of the project as the nature of the impacts change. When the school becomes fully operational, the average earnings vary between \$70,000 and \$65,000 for each new job added. Thus these jobs pay significantly more than the state average, which was \$41,789 in 2020. All dollar figures in this report are adjusted for inflation and are in constant purchasing power units.

### c. Output Impacts

A larger state economy has more jobs and income, and also produces more in output. In this report we define output as gross receipts to Montana business and non-business organizations (except retail and wholesale trade, where markup is used). A consideration of output impacts gives insight on how businesses with no direct link to medical education nonetheless see impacts to their operations.

The output impacts associated with the MMS operations reveal a pattern of broad impacts across the entire economy, as shown in Table 4.5. The school’s own operations are reflected in years 2028 and beyond in the Other Private industry category. But it is easily seen that other, unrelated businesses see increases in output as well, including construction, retail trade and government. As the school produces graduates who expand the health care workforce, the output impacts on that industry become especially prominent.

**Table 4.5: Output Impacts (millions of dollars)**

Industry	Impacts by Year			
	2024	2028	2030	2040
Construction.....	21.1	5.4	7.1	16.1
Manufacturing.....	2.2	1.5	2.0	4.2
Wholesale Trade.....	1.2	2.0	2.9	9.0
Retail Trade.....	2.1	4.3	6.0	17.3
Transportation and Warehousing.....	0.3	0.5	0.7	1.7
Professional and Technical Services.....	1.2	2.2	3.1	8.9
Administrative and Waste Services.....	0.4	1.2	1.9	5.8
Health Care and Social Assistance.....	1.5	3.3	21.8	125.9
Arts, Entertainment, and Recreation.....	0.2	0.5	0.7	1.6
Accommodation and Food Services.....	0.7	1.8	2.9	9.4
Other Services, except Public Administration.	0.5	1.3	1.8	4.5
Other Private.....	3.3	44.1	47.6	67.6
Government.....	2.3	5.9	7.8	21.6
<b>TOTAL.....</b>	<b>37.1</b>	<b>74.0</b>	<b>106.3</b>	<b>293.6</b>

The table clearly shows how the operations of the school have a measurable, significant impact on businesses and governments of all kind across the state. There are more people, more income, and more spending in Montana because of MMS, and this is reflected in the gross receipts of Montana business and non-business organizations.

## d. Population Impacts

The addition of the Montana Osteopathic Medical School to the Montana economy adds to the economy of the state. It also increases the population as well, both as a cause and effect. Not only is the population increased because of the students and faculty of the school who come to Great Falls and other places in Montana to participate. And, in the case of medical graduates, to remain here to practice. But it also increases population in ways not directly related to the school, as the spending increases economic opportunity in Montana and makes our state a more attractive place to move to.

The population impacts due to the presence of the medical school are dominated by working age adults and their children, as seen from Table 4.6. The population increase that is caused by the medical school ultimately creates demand for public services, especially K-12 public schools.

**Table 4.6: Population Impacts**

Age Cohort	Impacts by Year			
	2024	2028	2030	2040
Ages 0-14.....	34	85	127	515
Ages 15-24.....	28	49	71	277
Ages 25-64.....	74	187	276	1,138
Ages 65+.....	0	4	7	55
Total.....	136	325	481	1,984

## 5. CONCLUSION

This report has presented a thorough examination of the changes that would occur in a Montana economy that come about due to the successful construction and operation of the Montana Osteopathic Medical School in Great Falls. It is apparent that the school's establishment and successful operation would represent a significant economic event for both the north central region of Montana as well as the rest of the state.

The medical campus itself produces important impacts on the economy. The construction of the building and the investment in equipment bring more than \$50 million in spending to Great Falls and support more than 270 jobs over a two-year period. The operations of the school, with its specialized, highly credentialed medical faculty and staff and the more than \$12 million in annual spending by medical students and their families in Great Falls and elsewhere in Montana are another sizable injection of demand that shows up in income and employment throughout the economy.

But what might be the most important impacts occur when students leave the campus and become practicing physicians. The fraction that stay in Montana represent a durable and growing contribution to the health care workforce that enriches the state in tangible and intangible ways.

## REFERENCES

Treyz, G. (1993). *Regional Economic Modeling: A Systematic Approach to Economic Forecasting and Policy Analysis*. New York, NY: Springer Netherlands.

U.S. Census Bureau. (2017). *PEPANNRES 2017*. Retrieved from United States Census Bureau American FactFinder:  
[https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP\\_2017\\_PEPANNRES&prodType=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP_2017_PEPANNRES&prodType=table)

American Academy of Family Physicians, <https://www.aafp.org/students-residents/residency-program-directors/national-resident-matching-program-results.html>

## APPENDIX: REMI TABLES

## Med School Impact Revised Jan 21 - Summary

Category	Units	2019	2020	2021	2022	2023	2024	2025	2026	2027
Total Employment	Individuals (Jobs)	0.000	0.000	0.000	0.000	+261.046	+277.621	+345.959	+360.566	+365.614
Private Non-Farm Employment	Individuals (Jobs)	0.000	0.000	0.000	0.000	+248.770	+258.534	+312.213	+318.835	+319.355
Residence Adjusted Employment	Individuals	0.000	0.000	0.000	0.000	+258.749	+275.226	+339.329	+353.943	+358.894
Population	Individuals	0.000	0.000	0.000	0.000	+78.151	+136.146	+197.217	+247.005	+289.294
Labor Force	Individuals	0.000	0.000	0.000	0.000	+79.529	+126.638	+174.724	+208.158	+229.746
Gross Domestic Product	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+19.323	+20.624	+45.103	+46.586	+47.358
Output	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+34.730	+37.051	+70.424	+72.848	+73.969
Value-Added	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+19.323	+20.624	+45.103	+46.586	+47.358
Personal Income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+11.196	+11.713	+21.196	+22.252	+23.370
Disposable Personal Income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+9.921	+10.369	+18.787	+19.599	+20.489
Real Disposable Personal Income	Millions of Fixed (2012) Dollars	0.000	0.000	0.000	0.000	+8.982	+9.387	+17.007	+17.743	+18.548
Real Disposable Personal Income per Capita	Thousands of Fixed (2012) Dollars	0.000	0.000	0.000	0.000	+0.005	+0.004	+0.008	+0.007	+0.006
PCE-Price Index	2012=100 (Nation)	0.000	0.000	0.000	0.000	+0.001	+0.004	+0.005	+0.007	+0.007

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**Region: All Regions - Comparison Type: Differences - Forecast: Med School Impact Revised Jan 21 - Comparison Forecast: Standard Regional Control**

## Med School Impact Revised Jan 21 - Summary

Year	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	+363.596	+476.760	+589.049	+704.751	+820.828	+936.185	+1050.177	+1163.160	+1275.144	+1386.389	+1495.628	+1605.283	+1714.904
	+314.785	+421.470	+525.365	+631.555	+737.453	+842.268	+945.598	+1047.922	+1149.246	+1249.967	+1348.828	+1448.158	+1547.547
	+356.839	+469.458	+581.136	+696.246	+811.795	+926.701	+1040.322	+1153.003	+1264.748	+1375.812	+1484.905	+1594.453	+1704.003
	+324.632	+391.802	+481.205	+588.988	+711.574	+846.285	+990.309	+1141.662	+1300.285	+1464.141	+1633.108	+1806.740	+1984.454
	+244.105	+289.345	+350.191	+423.701	+505.073	+592.561	+684.192	+775.351	+868.317	+964.234	+1058.583	+1153.870	+1249.419
	+47.513	+58.004	+68.637	+79.801	+91.235	+102.834	+114.529	+126.342	+138.261	+150.294	+162.326	+174.610	+187.138
	+74.006	+90.023	+106.272	+123.371	+140.916	+158.769	+176.866	+195.291	+214.082	+233.313	+252.857	+272.944	+293.572
	+47.513	+58.004	+68.637	+79.801	+91.235	+102.834	+114.529	+126.342	+138.261	+150.294	+162.326	+174.610	+187.138
	+24.154	+30.845	+37.477	+44.607	+52.107	+59.905	+67.935	+76.246	+84.818	+93.689	+102.646	+112.024	+121.723
	+21.229	+27.095	+32.911	+39.165	+45.755	+52.616	+59.692	+67.030	+74.610	+82.460	+90.406	+98.733	+107.354
	+19.218	+24.529	+29.794	+35.456	+41.421	+47.632	+54.038	+60.681	+67.543	+74.649	+81.843	+89.381	+97.185
	+0.005	+0.007	+0.008	+0.009	+0.010	+0.010	+0.009	+0.009	+0.008	+0.008	+0.007	+0.006	+0.005
	+0.007	+0.008	+0.010	+0.012	+0.014	+0.016	+0.019	+0.021	+0.024	+0.026	+0.029	+0.031	+0.034

**Region: All Regions - Comparison Type: Differences - Forecast: Med School Impact Revised Jan 21 - Comparison Forecast: Standard Regional Control**

## Med School Impact Revised Jan 21 - Income Profile

Category	Units	2019	2020	2021	2022	2023	2024	2025	2026	2027
Total Earnings by Place of Work	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+12.380	+13.030	+23.768	+24.672	+25.321
Total Wages and Salaries	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+7.836	+8.316	+17.358	+17.971	+18.444
Supplements to Wages and Salaries	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+1.790	+2.000	+4.657	+4.930	+5.154
Employer contributions for employee p	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+1.179	+1.317	+3.111	+3.292	+3.442
Employer contributions for government	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.611	+0.682	+1.546	+1.638	+1.713
Proprietors' income with inventory valu	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+2.753	+2.715	+1.754	+1.771	+1.723
Less: Contributions for Government Social	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+1.385	+1.505	+3.240	+3.392	+3.507
Employee and Self-Employed Contribut	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.774	+0.823	+1.694	+1.754	+1.794
Employer contributions for government	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.611	+0.682	+1.546	+1.638	+1.713
Plus: Adjustment for Residence	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.002	+0.016	+0.021	+0.045	+0.035
Gross Inflow	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.453	+0.513	+1.273	+1.358	+1.377
Gross Outflow	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.451	+0.497	+1.252	+1.312	+1.342
Equals: Net Earnings by Place of Residenc	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+10.997	+11.541	+20.550	+21.325	+21.850
Plus: Property Income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.444	+0.510	+0.860	+1.036	+1.310
Personal Dividend Income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.165	+0.189	+0.316	+0.378	+0.474
Personal Interest Income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.183	+0.214	+0.369	+0.452	+0.579
Rental Income of Persons	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.096	+0.107	+0.175	+0.206	+0.257
Plus: Personal Current Transfer Receipts	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	-0.245	-0.338	-0.214	-0.110	+0.210
Equals: Personal Income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+11.196	+11.713	+21.196	+22.252	+23.370
Less: Personal current taxes	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+1.274	+1.344	+2.409	+2.653	+2.881
Equals: Disposable personal income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+9.921	+10.369	+18.787	+19.599	+20.489

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**Region: All Regions - Comparison Type: Differences - Forecast: Med School Impact Revised Jan 21 - Comparison Forecast: Standard Regional Control**

## Med School Impact Revised Jan 21 - Income Profile

Year												
2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
+25.550	+32.442	+39.248	+46.364	+53.615	+60.920	+68.221	+75.532	+82.842	+90.228	+97.381	+104.696	+112.086
+18.647	+23.418	+28.129	+33.084	+38.154	+43.284	+48.434	+53.608	+58.798	+63.990	+69.147	+74.367	+79.645
+5.292	+6.493	+7.730	+9.047	+10.422	+11.840	+13.287	+14.758	+16.251	+17.760	+19.274	+20.815	+22.384
+3.534	+4.308	+5.105	+5.952	+6.836	+7.748	+8.677	+9.623	+10.582	+11.552	+12.524	+13.514	+14.521
+1.758	+2.185	+2.625	+3.095	+3.586	+4.092	+4.609	+5.135	+5.669	+6.209	+6.750	+7.301	+7.862
+1.610	+2.531	+3.388	+4.233	+5.039	+5.796	+6.500	+7.165	+7.793	+8.477	+8.961	+9.514	+10.058
+3.568	+4.472	+5.380	+6.330	+7.307	+8.299	+9.298	+10.302	+11.309	+12.316	+13.314	+14.322	+15.340
+1.809	+2.287	+2.754	+3.235	+3.721	+4.207	+4.689	+5.167	+5.640	+6.107	+6.564	+7.021	+7.477
+1.758	+2.185	+2.625	+3.095	+3.586	+4.092	+4.609	+5.135	+5.669	+6.209	+6.750	+7.301	+7.862
+0.025	-0.004	-0.046	-0.087	-0.126	-0.162	-0.196	-0.226	-0.253	-0.277	-0.300	-0.320	-0.339
+1.377	+1.480	+1.565	+1.658	+1.757	+1.861	+1.970	+2.084	+2.203	+2.324	+2.449	+2.578	+2.712
+1.352	+1.484	+1.611	+1.745	+1.883	+2.024	+2.166	+2.309	+2.456	+2.602	+2.749	+2.898	+3.051
+22.007	+27.966	+33.823	+39.947	+46.182	+52.458	+58.728	+65.004	+71.280	+77.635	+83.767	+90.053	+96.407
+1.568	+2.039	+2.524	+3.138	+3.872	+4.719	+5.667	+6.701	+7.832	+9.062	+10.392	+11.824	+13.343
+0.565	+0.733	+0.908	+1.127	+1.389	+1.690	+2.027	+2.392	+2.792	+3.225	+3.691	+4.193	+4.723
+0.699	+0.914	+1.134	+1.417	+1.758	+2.153	+2.599	+3.089	+3.629	+4.220	+4.863	+5.561	+6.306
+0.304	+0.392	+0.482	+0.593	+0.725	+0.875	+1.041	+1.219	+1.411	+1.617	+1.837	+2.070	+2.313
+0.578	+0.840	+1.130	+1.522	+2.053	+2.727	+3.540	+4.541	+5.706	+6.992	+8.487	+10.147	+11.972
+24.154	+30.845	+37.477	+44.607	+52.107	+59.905	+67.935	+76.246	+84.818	+93.689	+102.646	+112.024	+121.723
+2.925	+3.750	+4.566	+5.441	+6.352	+7.289	+8.243	+9.216	+10.208	+11.229	+12.240	+13.291	+14.369
+21.229	+27.095	+32.911	+39.165	+45.755	+52.616	+59.692	+67.030	+74.610	+82.460	+90.406	+98.733	+107.354

**Region: All Regions - Comparison Type: Differences - Forecast: Med School Impact Revised Jan 21 - Comparison Forecast: Standard Regional Control**

## Med School Impact Revised Jan 21 - Summary-All Regions

Region	Category	Units	2019	2020	2021	2022	2023	2024
Northwestern	Total Employment	Individuals (Jobs)	0.000	0.000	0.000	0.000	+33.262	+34.119
	Private Non-Farm Employment	Individuals (Jobs)	0.000	0.000	0.000	0.000	+32.092	+32.318
	Residence Adjusted Employment	Individuals	0.000	0.000	0.000	0.000	+33.786	+34.833
	Population	Individuals	0.000	0.000	0.000	0.000	+9.378	+16.249
	Labor Force	Individuals	0.000	0.000	0.000	0.000	+9.653	+15.207
	Gross Domestic Product	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+2.335	+2.444
	Output	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+4.216	+4.403
	Value-Added	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+2.335	+2.444
	Personal Income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+1.324	+1.322
	Disposable Personal Income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+1.170	+1.165
	Real Disposable Personal Income	Millions of Fixed (2012) Dollars	0.000	0.000	0.000	0.000	+1.059	+1.055
	Real Disposable Personal Income per Capita	Thousands of Fixed (2012) Dollars	0.000	0.000	0.000	0.000	+0.002	+0.001
	PCE-Price Index	2012=100 (Nation)	0.000	0.000	0.000	0.000	+0.000	+0.002
	Southwestern	Total Employment	Individuals (Jobs)	0.000	0.000	0.000	0.000	+49.263
Private Non-Farm Employment		Individuals (Jobs)	0.000	0.000	0.000	0.000	+47.112	+48.562
Residence Adjusted Employment		Individuals	0.000	0.000	0.000	0.000	+53.970	+57.072
Population		Individuals	0.000	0.000	0.000	0.000	+17.228	+29.915
Labor Force		Individuals	0.000	0.000	0.000	0.000	+16.625	+26.432
Gross Domestic Product		Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+3.669	+3.949
Output		Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+6.535	+7.008
Value-Added		Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+3.669	+3.949
Personal Income		Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+2.499	+2.629
Disposable Personal Income		Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+2.232	+2.347
Real Disposable Personal Income		Millions of Fixed (2012) Dollars	0.000	0.000	0.000	0.000	+2.021	+2.125
Real Disposable Personal Income per Capita		Thousands of Fixed (2012) Dollars	0.000	0.000	0.000	0.000	+0.006	+0.004
PCE-Price Index		2012=100 (Nation)	0.000	0.000	0.000	0.000	+0.001	+0.004
		Total Employment	Individuals (Jobs)	0.000	0.000	0.000	0.000	+169.768
	Private Non-Farm Employment	Individuals (Jobs)	0.000	0.000	0.000	0.000	+161.079	+168.942
	Residence Adjusted Employment	Individuals	0.000	0.000	0.000	0.000	+161.439	+173.070
	Population	Individuals	0.000	0.000	0.000	0.000	+48.840	+85.237

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## Med School Impact Revised Jan 21 - Summary-All Regions

Year															
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
+29.332	+30.676	+30.753	+30.186	+60.277	+90.911	+122.641	+154.645	+186.584	+218.276	+249.764	+281.098	+313.018	+343.377	+374.394	+405.459
+27.283	+28.421	+28.364	+27.721	+56.519	+85.217	+114.627	+144.077	+173.327	+202.255	+230.939	+259.450	+288.520	+316.077	+344.286	+372.553
+31.266	+32.699	+32.603	+31.838	+61.679	+92.104	+123.629	+155.438	+187.186	+218.690	+249.988	+281.139	+312.872	+343.053	+373.898	+404.787
+20.598	+24.647	+28.004	+30.689	+42.734	+61.677	+86.450	+116.095	+149.835	+187.015	+227.144	+269.869	+315.078	+362.023	+410.870	+461.340
+17.918	+20.207	+21.715	+22.576	+33.005	+48.341	+67.349	+88.843	+112.070	+136.497	+161.759	+187.656	+214.281	+240.838	+267.776	+294.964
+2.295	+2.432	+2.474	+2.464	+5.107	+7.859	+10.771	+13.775	+16.843	+19.955	+23.113	+26.317	+29.626	+32.856	+36.200	+39.616
+3.813	+4.039	+4.097	+4.061	+8.137	+12.389	+16.894	+21.544	+26.298	+31.136	+36.070	+41.118	+46.388	+51.600	+57.033	+62.620
+2.295	+2.432	+2.474	+2.464	+5.107	+7.859	+10.771	+13.775	+16.843	+19.955	+23.113	+26.317	+29.626	+32.856	+36.200	+39.616
+1.109	+1.251	+1.314	+1.350	+2.899	+4.451	+6.162	+7.993	+9.928	+11.954	+14.067	+16.269	+18.677	+20.945	+23.427	+26.006
+0.979	+1.100	+1.151	+1.188	+2.540	+3.894	+5.388	+6.991	+8.690	+10.472	+12.336	+14.282	+16.411	+18.425	+20.630	+22.925
+0.887	+0.996	+1.042	+1.075	+2.300	+3.525	+4.878	+6.329	+7.867	+9.480	+11.167	+12.929	+14.856	+16.680	+18.676	+20.753
+0.000	+0.000	0.000	0.000	+0.002	+0.003	+0.004	+0.004	+0.004	+0.004	+0.004	+0.004	+0.004	+0.003	+0.002	+0.001
+0.002	+0.002	+0.002	+0.002	+0.002	+0.004	+0.006	+0.008	+0.010	+0.012	+0.015	+0.017	+0.019	+0.022	+0.024	+0.026
+34.942	+38.169	+38.760	+38.071	+64.385	+91.093	+119.086	+147.548	+176.123	+204.644	+233.035	+261.259	+289.308	+317.250	+345.282	+373.499
+31.401	+34.342	+34.708	+33.880	+58.863	+83.622	+109.274	+135.149	+160.984	+186.678	+212.190	+237.514	+262.661	+287.714	+312.854	+338.185
+52.802	+56.641	+57.046	+56.028	+82.290	+108.845	+136.756	+165.187	+193.791	+222.390	+250.911	+279.327	+307.603	+335.802	+364.127	+392.661
+37.721	+45.003	+50.998	+55.679	+68.629	+87.298	+111.025	+138.975	+170.485	+204.950	+241.980	+281.192	+322.289	+364.997	+409.229	+454.839
+31.477	+36.567	+39.444	+41.030	+51.227	+65.680	+83.480	+103.575	+125.355	+148.137	+171.704	+195.827	+220.477	+245.321	+270.415	+295.735
+2.738	+3.049	+3.148	+3.139	+5.498	+7.947	+10.565	+13.284	+16.073	+18.915	+21.803	+24.730	+27.693	+30.696	+33.761	+36.898
+4.670	+5.184	+5.334	+5.293	+8.934	+12.721	+16.776	+20.993	+25.325	+29.756	+34.284	+38.911	+43.646	+48.509	+53.506	+58.658
+2.738	+3.049	+3.148	+3.139	+5.498	+7.947	+10.565	+13.284	+16.073	+18.915	+21.803	+24.730	+27.693	+30.696	+33.761	+36.898
+2.607	+2.997	+3.147	+3.232	+4.707	+6.177	+7.803	+9.548	+11.393	+13.329	+15.345	+17.441	+19.613	+21.866	+24.215	+26.659
+2.331	+2.668	+2.790	+2.872	+4.176	+5.474	+6.911	+8.456	+10.092	+11.811	+13.604	+15.471	+17.407	+19.418	+21.518	+23.704
+2.110	+2.415	+2.526	+2.600	+3.780	+4.956	+6.257	+7.655	+9.136	+10.692	+12.316	+14.005	+15.758	+17.579	+19.480	+21.458
+0.003	+0.003	+0.002	+0.001	+0.004	+0.005	+0.006	+0.006	+0.007	+0.007	+0.006	+0.006	+0.005	+0.004	+0.003	+0.001
+0.004	+0.004	+0.004	+0.004	+0.004	+0.007	+0.009	+0.012	+0.014	+0.017	+0.020	+0.023	+0.026	+0.029	+0.032	+0.036
+269.365	+278.919	+283.285	+282.821	+297.194	+309.658	+323.054	+336.816	+350.873	+364.956	+379.406	+394.070	+408.286	+422.774	+437.347	+451.897
+241.850	+244.043	+244.314	+241.545	+253.694	+264.086	+275.505	+287.318	+299.431	+311.637	+324.282	+337.140	+349.664	+362.486	+375.401	+388.327
+240.783	+249.649	+254.578	+254.921	+269.571	+282.345	+295.936	+309.818	+323.912	+337.979	+352.356	+366.868	+380.899	+395.159	+409.463	+423.721
+131.467	+167.772	+199.091	+225.901	+253.922	+282.341	+311.022	+339.874	+369.111	+397.980	+426.227	+454.992	+482.993	+511.404	+540.078	+568.866

Region	Category	Units	2019	2020	2021	2022	2023	2024
North Central	Labor Force	Individuals	0.000	0.000	0.000	0.000	+50.453	+80.556
	Gross Domestic Product	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+12.567	+13.437
	Output	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+22.605	+24.195
	Value-Added	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+12.567	+13.437
	Personal Income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+6.919	+7.287
	Disposable Personal Income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+6.117	+6.436
	Real Disposable Personal Income	Millions of Fixed (2012) Dollars	0.000	0.000	0.000	0.000	+5.538	+5.826
	Real Disposable Personal Income per Capita	Thousands of Fixed (2012) Dollars	0.000	0.000	0.000	0.000	+0.018	+0.013
	PCE-Price Index	2012=100 (Nation)	0.000	0.000	0.000	0.000	+0.002	+0.013
Northeastern and Southeastern	Total Employment	Individuals (Jobs)	0.000	0.000	0.000	0.000	+0.294	+0.373
	Private Non-Farm Employment	Individuals (Jobs)	0.000	0.000	0.000	0.000	+0.267	+0.324
	Residence Adjusted Employment	Individuals	0.000	0.000	0.000	0.000	+0.581	+0.844
	Population	Individuals	0.000	0.000	0.000	0.000	+0.159	+0.347
	Labor Force	Individuals	0.000	0.000	0.000	0.000	+0.109	+0.227
	Gross Domestic Product	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.038	+0.045
	Output	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.064	+0.075
	Value-Added	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.038	+0.045
	Personal Income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.022	+0.032
	Disposable Personal Income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.019	+0.028
	Real Disposable Personal Income	Millions of Fixed (2012) Dollars	0.000	0.000	0.000	0.000	+0.017	+0.025
	Real Disposable Personal Income per Capita	Thousands of Fixed (2012) Dollars	0.000	0.000	0.000	0.000	+0.000	+0.000
PCE-Price Index	2012=100 (Nation)	0.000	0.000	0.000	0.000	+0.000	+0.000	
Central and South Central	Total Employment	Individuals (Jobs)	0.000	0.000	0.000	0.000	+8.460	+8.757
	Private Non-Farm Employment	Individuals (Jobs)	0.000	0.000	0.000	0.000	+8.220	+8.388
	Residence Adjusted Employment	Individuals	0.000	0.000	0.000	0.000	+8.974	+9.406
	Population	Individuals	0.000	0.000	0.000	0.000	+2.547	+4.397
	Labor Force	Individuals	0.000	0.000	0.000	0.000	+2.690	+4.216
	Gross Domestic Product	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.713	+0.749
	Output	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+1.310	+1.370
	Value-Added	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.713	+0.749
	Personal Income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.432	+0.443

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Year															
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
+118.718	+143.317	+159.621	+171.077	+183.372	+195.646	+209.143	+222.777	+237.368	+252.844	+265.722	+278.973	+293.904	+307.145	+320.571	+334.105
+38.870	+39.844	+40.453	+40.637	+42.195	+43.619	+45.148	+46.733	+48.365	+50.016	+51.714	+53.442	+55.138	+56.863	+58.627	+60.428
+59.922	+61.505	+62.389	+62.529	+64.779	+66.832	+69.084	+71.463	+73.961	+76.544	+79.269	+82.118	+85.001	+88.027	+91.141	+94.336
+38.870	+39.844	+40.453	+40.637	+42.195	+43.619	+45.148	+46.733	+48.365	+50.016	+51.714	+53.442	+55.138	+56.863	+58.627	+60.428
+16.875	+17.352	+18.237	+18.898	+20.253	+21.525	+22.821	+24.147	+25.496	+26.840	+28.252	+29.709	+31.130	+32.641	+34.201	+35.802
+14.941	+15.258	+15.958	+16.576	+17.785	+18.926	+20.083	+21.268	+22.472	+23.671	+24.933	+26.237	+27.504	+28.857	+30.254	+31.689
+13.526	+13.813	+14.446	+15.006	+16.100	+17.133	+18.181	+19.254	+20.344	+21.429	+22.571	+23.751	+24.899	+26.124	+27.389	+28.688
+0.040	+0.034	+0.031	+0.028	+0.027	+0.026	+0.024	+0.023	+0.022	+0.020	+0.019	+0.018	+0.016	+0.015	+0.014	+0.013
+0.015	+0.026	+0.027	+0.028	+0.029	+0.031	+0.032	+0.034	+0.036	+0.038	+0.039	+0.041	+0.043	+0.045	+0.047	+0.049
+0.839	+0.920	+0.920	+0.881	+13.974	+27.281	+40.656	+53.865	+66.806	+79.463	+91.845	+103.980	+115.921	+127.647	+139.227	+150.709
+0.735	+0.783	+0.768	+0.726	+13.036	+25.162	+37.143	+48.853	+60.262	+71.377	+82.228	+92.855	+103.314	+113.595	+123.760	+133.855
+1.626	+1.687	+1.492	+1.258	+13.981	+26.864	+39.845	+52.708	+65.366	+77.802	+90.021	+102.052	+113.936	+125.642	+137.237	+148.767
+0.727	+1.026	+1.201	+1.274	+5.804	+13.616	+24.026	+36.379	+50.063	+64.828	+80.385	+96.542	+113.143	+130.054	+147.148	+164.422
+0.474	+0.650	+0.743	+0.762	+3.871	+8.922	+15.374	+22.961	+31.181	+39.874	+48.866	+58.014	+67.238	+76.534	+85.871	+95.081
+0.115	+0.124	+0.126	+0.124	+1.344	+2.590	+3.860	+5.134	+6.404	+7.668	+8.927	+10.184	+11.442	+12.699	+13.964	+15.245
+0.189	+0.204	+0.207	+0.204	+2.056	+3.948	+5.874	+7.805	+9.730	+11.650	+13.573	+15.507	+17.464	+19.446	+21.454	+23.503
+0.115	+0.124	+0.126	+0.124	+1.344	+2.590	+3.860	+5.134	+6.404	+7.668	+8.927	+10.184	+11.442	+12.699	+13.964	+15.245
+0.060	+0.066	+0.062	+0.055	+0.764	+1.507	+2.308	+3.146	+4.011	+4.897	+5.800	+6.719	+7.656	+8.606	+9.573	+10.565
+0.052	+0.056	+0.053	+0.047	+0.643	+1.269	+1.947	+2.658	+3.393	+4.148	+4.918	+5.704	+6.507	+7.322	+8.153	+9.006
+0.047	+0.051	+0.048	+0.042	+0.582	+1.149	+1.762	+2.406	+3.071	+3.755	+4.452	+5.164	+5.891	+6.628	+7.381	+8.153
+0.000	+0.000	+0.000	0.000	+0.005	+0.008	+0.010	+0.011	+0.012	+0.012	+0.011	+0.010	+0.009	+0.007	+0.006	+0.004
+0.000	+0.000	+0.000	+0.000	+0.001	+0.003	+0.006	+0.009	+0.012	+0.015	+0.018	+0.021	+0.024	+0.027	+0.031	+0.034
+11.480	+11.881	+11.896	+11.638	+40.931	+70.107	+99.314	+127.953	+155.800	+182.838	+209.111	+234.736	+259.857	+284.580	+309.033	+333.340
+10.945	+11.245	+11.201	+10.912	+39.359	+67.277	+95.007	+122.056	+148.265	+173.651	+198.283	+222.287	+245.808	+268.957	+291.857	+314.628
+12.852	+13.268	+13.175	+12.794	+41.937	+70.978	+100.079	+128.646	+156.447	+183.461	+209.728	+235.362	+260.503	+285.248	+309.729	+334.067
+6.703	+8.556	+10.000	+11.089	+20.714	+36.272	+56.465	+80.251	+106.792	+135.535	+165.927	+197.690	+230.638	+264.629	+299.415	+334.987
+6.137	+7.417	+8.224	+8.660	+17.870	+31.603	+48.354	+66.917	+86.587	+106.840	+127.300	+147.847	+168.335	+188.745	+209.237	+229.535
+1.085	+1.137	+1.156	+1.150	+3.860	+6.623	+9.459	+12.309	+15.149	+17.974	+20.784	+23.588	+26.395	+29.212	+32.058	+34.951
+1.830	+1.917	+1.942	+1.920	+6.117	+10.382	+14.743	+19.111	+23.456	+27.779	+32.095	+36.429	+40.814	+45.275	+49.810	+54.455
+1.085	+1.137	+1.156	+1.150	+3.860	+6.623	+9.459	+12.309	+15.149	+17.974	+20.784	+23.588	+26.395	+29.212	+32.058	+34.951
+0.545	+0.585	+0.611	+0.619	+2.222	+3.817	+5.513	+7.273	+9.077	+10.915	+12.782	+14.680	+16.614	+18.588	+20.608	+22.690

Region	Category	Units	2019	2020	2021	2022	2023	2024
	Disposable Personal Income	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.383	+0.393
	Real Disposable Personal Income	Millions of Fixed (2012) Dollars	0.000	0.000	0.000	0.000	+0.347	+0.355
	Real Disposable Personal Income per Cap	Thousands of Fixed (2012) Dollars	0.000	0.000	0.000	0.000	+0.001	+0.001
	PCE-Price Index	2012=100 (Nation)	0.000	0.000	0.000	0.000	+0.000	+0.001

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**Comparison Type: Differences - Forecast: Med School Impact Revised Jan 21 - Comparison Forecast: Standard Regional Control**

Year															
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
+0.484	+0.517	+0.537	+0.546	+1.951	+3.348	+4.835	+6.382	+7.969	+9.590	+11.239	+12.917	+14.631	+16.384	+18.178	+20.030
+0.438	+0.468	+0.486	+0.495	+1.767	+3.031	+4.377	+5.777	+7.214	+8.682	+10.175	+11.694	+13.246	+14.832	+16.456	+18.133
+0.001	+0.001	+0.000	+0.000	+0.004	+0.006	+0.008	+0.009	+0.010	+0.010	+0.010	+0.010	+0.009	+0.009	+0.008	+0.007
+0.001	+0.001	+0.001	+0.001	+0.002	+0.004	+0.006	+0.009	+0.011	+0.014	+0.016	+0.019	+0.022	+0.024	+0.027	+0.030

**Comparison Type: Differences - Forecast: Med School Impact Revised Jan 21 - Comparison Forecast: Standard Regional Control**

## Med School Impact Revised Jan 21 - Output

Industries	Units	2019	2020	2021	2022	2023	2024	2025	2026	2027
Forestry and Logging; Fishing, hunting and	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.020	+0.020	+0.013	+0.012	+0.010
Support activities for agriculture and forest	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.001	+0.001	+0.002	+0.002	+0.001
Oil and gas extraction	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.004	+0.001	+0.000	-0.002	-0.005
Mining (except oil and gas)	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.113	+0.096	+0.059	+0.063	+0.062
Support activities for mining	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.001	-0.019	-0.003	+0.002	+0.005
Utilities	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.221	+0.230	+1.041	+1.050	+1.059
Construction	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+21.019	+21.078	+4.856	+5.611	+5.708
Wood product manufacturing	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.501	+0.551	+0.206	+0.225	+0.223
Nonmetallic mineral product manufacturing	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.153	+0.152	+0.052	+0.056	+0.055
Primary metal manufacturing	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.012	+0.014	+0.007	+0.008	+0.008
Fabricated metal product manufacturing	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.123	+0.126	+0.054	+0.059	+0.059
Machinery manufacturing	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.007	+0.008	+0.007	+0.008	+0.008
Computer and electronic product manufact	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.007	+0.020	+0.005	+0.003	+0.001
Electrical equipment, appliance, and comp	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.000	+0.000	0.000	0.000	-0.001
Motor vehicles, bodies and trailers, and pa	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.011	+0.013	+0.019	+0.020	+0.021
Other transportation equipment manufact	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.002	+0.004	+0.010	+0.011	+0.011
Furniture and related product manufacturi	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.039	+0.775	+0.059	+0.061	+0.062
Miscellaneous manufacturing	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.007	+0.007	+0.011	+0.011	+0.011
Food manufacturing	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.121	+0.140	+0.560	+0.576	+0.589
Beverage and tobacco product manufactur	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.061	+0.073	+0.169	+0.182	+0.192
Textile mills; Textile product mills	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.006	+0.007	+0.008	+0.008	+0.008
Apparel manufacturing; Leather and allied	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.004	+0.003	+0.006	+0.005	+0.004
Paper manufacturing	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.001	+0.001	+0.001	+0.001	+0.001
Printing and related support activities	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.006	+0.006	+0.017	+0.016	+0.016
Petroleum and coal products manufacturin	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.317	+0.302	+0.308	+0.283	+0.251
Chemical manufacturing	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.009	+0.008	+0.011	+0.010	+0.009
Plastics and rubber products manufacturin	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.026	+0.027	+0.017	+0.018	+0.018
Wholesale trade	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+1.060	+1.153	+1.856	+1.923	+1.963
Retail trade	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+2.024	+2.150	+4.041	+4.175	+4.269
Air transportation	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.052	+0.053	+0.099	+0.100	+0.100

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# Med School Impact Revised Jan 21 - Output

Year												
2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
+0.008	+0.009	+0.010	+0.010	+0.009	+0.007	+0.004	+0.001	-0.002	-0.006	-0.010	-0.015	-0.019
+0.000	0.000	-0.001	-0.001	-0.002	-0.003	-0.004	-0.005	-0.006	-0.007	-0.008	-0.010	-0.011
-0.007	-0.008	-0.012	-0.019	-0.028	-0.041	-0.056	-0.073	-0.092	-0.113	-0.135	-0.160	-0.185
+0.058	+0.070	+0.073	+0.070	+0.060	+0.045	+0.026	+0.002	-0.025	-0.054	-0.085	-0.117	-0.150
+0.008	+0.020	+0.029	+0.037	+0.043	+0.048	+0.052	+0.056	+0.060	+0.063	+0.066	+0.069	+0.072
+1.059	+1.159	+1.247	+1.339	+1.431	+1.523	+1.615	+1.709	+1.805	+1.905	+2.006	+2.112	+2.221
+5.411	+6.171	+7.124	+8.215	+9.332	+10.408	+11.406	+12.325	+13.172	+13.960	+14.677	+15.371	+16.052
+0.209	+0.238	+0.269	+0.302	+0.333	+0.361	+0.385	+0.405	+0.423	+0.439	+0.451	+0.464	+0.476
+0.051	+0.062	+0.074	+0.086	+0.098	+0.108	+0.118	+0.127	+0.135	+0.143	+0.150	+0.157	+0.164
+0.007	+0.009	+0.011	+0.013	+0.015	+0.017	+0.019	+0.021	+0.023	+0.025	+0.027	+0.030	+0.032
+0.057	+0.069	+0.083	+0.097	+0.112	+0.126	+0.139	+0.152	+0.165	+0.178	+0.191	+0.204	+0.217
+0.008	+0.010	+0.012	+0.014	+0.016	+0.018	+0.020	+0.022	+0.024	+0.026	+0.028	+0.030	+0.033
-0.001	-0.001	-0.002	-0.004	-0.008	-0.013	-0.018	-0.024	-0.030	-0.034	-0.038	-0.042	-0.046
-0.001	-0.001	-0.001	-0.001	-0.001	-0.002	-0.002	-0.003	-0.003	-0.004	-0.004	-0.005	-0.005
+0.021	+0.030	+0.040	+0.051	+0.062	+0.073	+0.085	+0.098	+0.110	+0.123	+0.136	+0.150	+0.164
+0.011	+0.012	+0.012	+0.013	+0.013	+0.014	+0.015	+0.016	+0.016	+0.017	+0.018	+0.019	+0.020
+0.062	+0.076	+0.090	+0.105	+0.120	+0.136	+0.153	+0.171	+0.190	+0.210	+0.232	+0.254	+0.277
+0.010	+0.019	+0.028	+0.037	+0.045	+0.054	+0.063	+0.072	+0.082	+0.093	+0.105	+0.118	+0.131
+0.598	+0.663	+0.730	+0.805	+0.885	+0.970	+1.058	+1.151	+1.248	+1.350	+1.455	+1.566	+1.681
+0.200	+0.240	+0.284	+0.334	+0.389	+0.448	+0.510	+0.576	+0.645	+0.718	+0.792	+0.870	+0.951
+0.008	+0.011	+0.014	+0.016	+0.019	+0.022	+0.024	+0.027	+0.030	+0.033	+0.036	+0.039	+0.043
+0.003	+0.003	+0.003	+0.002	+0.001	+0.000	-0.001	-0.003	-0.005	-0.008	-0.010	-0.013	-0.009
+0.001	+0.002	+0.002	+0.003	+0.004	+0.004	+0.005	+0.006	+0.006	+0.007	+0.008	+0.008	+0.009
+0.015	+0.019	+0.022	+0.025	+0.027	+0.030	+0.033	+0.035	+0.038	+0.040	+0.043	+0.045	+0.048
+0.216	+0.249	+0.259	+0.254	+0.232	+0.197	+0.150	+0.094	+0.033	-0.033	-0.102	-0.173	-0.244
+0.008	+0.013	+0.019	+0.024	+0.030	+0.035	+0.041	+0.048	+0.054	+0.061	+0.069	+0.077	+0.085
+0.018	+0.028	+0.039	+0.049	+0.061	+0.072	+0.083	+0.094	+0.106	+0.118	+0.130	+0.142	+0.155
+1.973	+2.450	+2.919	+3.425	+3.950	+4.492	+5.052	+5.636	+6.248	+6.894	+7.567	+8.279	+9.025
+4.299	+5.160	+6.000	+6.924	+7.896	+8.909	+9.958	+11.056	+12.199	+13.395	+14.616	+15.908	+17.259
+0.097	+0.134	+0.168	+0.202	+0.235	+0.267	+0.299	+0.330	+0.361	+0.392	+0.422	+0.453	+0.483

Industries	Units	2019	2020	2021	2022	2023	2024	2025	2026	2027
Rail transportation	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.006	-0.015	-0.029	-0.056	-0.080
Water transportation	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.000	+0.000	+0.001	+0.001	+0.001
Truck transportation	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.207	+0.222	+0.255	+0.265	+0.268
Couriers and messengers	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.015	+0.014	+0.031	+0.030	+0.028
Transit and ground passenger transportati	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.012	+0.013	+0.088	+0.090	+0.090
Pipeline transportation	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.005	+0.004	+0.009	+0.008	+0.007
Scenic and sightseeing transportation; Sup	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.029	+0.030	+0.072	+0.070	+0.069
Warehousing and storage	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.012	+0.015	+0.022	+0.022	+0.022
Publishing industries, except Internet	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.001	0.000	+0.004	+0.000	-0.003
Motion picture and sound recording indust	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.019	+0.024	+0.072	+0.070	+0.068
Data processing, hosting, and related serv	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.057	+0.074	+0.297	+0.305	+0.312
Broadcasting, except Internet	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.013	+0.020	+0.048	+0.048	+0.047
Telecommunications	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.092	+0.088	+0.257	+0.245	+0.232
Monetary authorities - central bank; Credit	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.038	+0.011	+0.040	+0.001	-0.036
Securities, commodity contracts, other inv	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.116	+0.109	+0.226	+0.212	+0.197
Insurance carriers and related activities	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.064	+0.057	+0.179	+0.166	+0.152
Real estate	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+2.275	+2.287	+10.401	+10.632	+10.813
Rental and leasing services; Lessors of nor	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.279	+0.287	+0.492	+0.500	+0.500
Professional, scientific, and technical servi	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.879	+1.176	+2.066	+2.143	+2.171
Management of companies and enterprise	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.001	0.000	0.000	-0.002	-0.003
Administrative and support services	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.375	+0.405	+1.071	+1.100	+1.117
Waste management and remediation servi	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.033	+0.035	+0.077	+0.079	+0.080
Educational services; private	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.031	+0.035	+30.761	+30.761	+30.760
Ambulatory health care services	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.844	+0.832	+1.702	+1.726	+1.775
Hospitals; private	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.393	+0.452	+0.812	+0.864	+0.912
Nursing and residential care facilities	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.061	+0.066	+0.110	+0.115	+0.118
Social assistance	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.120	+0.126	+0.408	+0.417	+0.426
Performing arts, spectator sports, and rela	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.031	+0.030	+0.092	+0.090	+0.088
Museums, historical sites, and similar insti	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.001	0.000	+0.000	0.000	-0.001
Amusement, gambling, and recreation ind	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.165	+0.158	+0.394	+0.396	+0.400
Accommodation	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.193	+0.191	+0.458	+0.468	+0.479

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Year												
2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
-0.099	-0.112	-0.130	-0.151	-0.174	-0.201	-0.229	-0.258	-0.289	-0.320	-0.351	-0.382	-0.412
+0.001	+0.001	+0.001	+0.001	+0.001	+0.001	+0.001	+0.001	+0.002	+0.002	+0.002	+0.002	+0.002
+0.266	+0.328	+0.389	+0.455	+0.522	+0.590	+0.660	+0.732	+0.806	+0.884	+0.964	+1.048	+1.137
+0.027	+0.035	+0.041	+0.048	+0.055	+0.061	+0.066	+0.072	+0.077	+0.083	+0.088	+0.094	+0.099
+0.090	+0.103	+0.115	+0.128	+0.141	+0.154	+0.167	+0.180	+0.193	+0.206	+0.220	+0.233	+0.248
+0.006	+0.007	+0.006	+0.004	+0.001	-0.003	-0.009	-0.015	-0.021	-0.028	-0.035	-0.042	-0.049
+0.067	+0.078	+0.087	+0.097	+0.106	+0.114	+0.122	+0.130	+0.138	+0.145	+0.153	+0.161	+0.170
+0.021	+0.024	+0.027	+0.029	+0.032	+0.035	+0.038	+0.041	+0.044	+0.047	+0.050	+0.054	+0.057
-0.007	-0.009	-0.012	-0.015	-0.020	-0.026	-0.032	-0.039	-0.046	-0.055	-0.064	-0.073	-0.083
+0.066	+0.075	+0.084	+0.094	+0.104	+0.115	+0.127	+0.140	+0.154	+0.169	+0.185	+0.203	+0.221
+0.317	+0.343	+0.369	+0.399	+0.430	+0.463	+0.498	+0.535	+0.575	+0.618	+0.663	+0.711	+0.761
+0.047	+0.053	+0.059	+0.065	+0.072	+0.079	+0.086	+0.093	+0.101	+0.109	+0.117	+0.126	+0.135
+0.218	+0.248	+0.275	+0.302	+0.329	+0.354	+0.378	+0.402	+0.426	+0.450	+0.475	+0.501	+0.528
-0.071	-0.076	-0.092	-0.115	-0.146	-0.184	-0.228	-0.278	-0.333	-0.391	-0.453	-0.517	-0.584
+0.180	+0.212	+0.239	+0.268	+0.296	+0.323	+0.349	+0.375	+0.402	+0.430	+0.458	+0.487	+0.518
+0.138	+0.164	+0.187	+0.210	+0.233	+0.255	+0.276	+0.297	+0.317	+0.339	+0.360	+0.382	+0.405
+10.848	+12.291	+13.665	+15.192	+16.795	+18.450	+20.142	+21.879	+23.658	+25.486	+27.339	+29.253	+31.222
+0.493	+0.582	+0.669	+0.762	+0.858	+0.956	+1.055	+1.156	+1.261	+1.369	+1.480	+1.595	+1.715
+2.163	+2.611	+3.080	+3.583	+4.104	+4.639	+5.185	+5.747	+6.326	+6.928	+7.549	+8.192	+8.857
-0.004	-0.005	-0.005	-0.007	-0.008	-0.011	-0.013	-0.016	-0.019	-0.022	-0.026	-0.029	-0.033
+1.120	+1.435	+1.748	+2.077	+2.414	+2.760	+3.113	+3.476	+3.852	+4.242	+4.642	+5.057	+5.486
+0.079	+0.095	+0.111	+0.128	+0.145	+0.162	+0.179	+0.197	+0.214	+0.233	+0.251	+0.270	+0.289
+30.759	+30.772	+30.783	+30.796	+30.809	+30.823	+30.834	+30.848	+30.860	+30.873	+30.885	+30.898	+30.911
+1.803	+10.708	+19.660	+28.766	+38.016	+47.428	+57.017	+66.819	+76.851	+87.138	+97.676	+108.469	+119.537
+0.948	+1.195	+1.437	+1.700	+1.974	+2.257	+2.548	+2.850	+3.164	+3.491	+3.825	+4.179	+4.549
+0.120	+0.158	+0.193	+0.230	+0.268	+0.306	+0.344	+0.382	+0.421	+0.462	+0.503	+0.545	+0.590
+0.431	+0.494	+0.553	+0.617	+0.682	+0.748	+0.816	+0.885	+0.956	+1.030	+1.103	+1.180	+1.259
+0.086	+0.107	+0.125	+0.143	+0.160	+0.177	+0.193	+0.209	+0.225	+0.241	+0.257	+0.274	+0.291
-0.002	-0.003	-0.003	-0.004	-0.005	-0.006	-0.008	-0.009	-0.011	-0.013	-0.015	-0.017	-0.019
+0.398	+0.484	+0.556	+0.630	+0.704	+0.776	+0.847	+0.918	+0.990	+1.062	+1.133	+1.206	+1.280
+0.483	+0.623	+0.750	+0.884	+1.021	+1.160	+1.302	+1.449	+1.600	+1.758	+1.920	+2.090	+2.267

Industries	Units	2019	2020	2021	2022	2023	2024	2025	2026	2027
Food services and drinking places	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.447	+0.511	+1.185	+1.253	+1.314
Repair and maintenance	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.210	+0.210	+0.522	+0.529	+0.534
Personal and laundry services	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.154	+0.145	+0.410	+0.411	+0.416
Religious, grantmaking, civic, professional,	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.184	+0.181	+0.368	+0.372	+0.378
Private households	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+0.005	+0.005	+0.008	+0.008	+0.007
State and Local Government	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	+1.437	+2.251	+4.025	+5.014	+5.591
Federal Civilian	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Federal Military	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Farm	Millions of Fixed (2020) Dollars	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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**Region: All Regions - Category: Output - Comparison Type: Differences - Forecast: Med School Impact Revised Jan 21  
- Comparison Forecast: Standard Regional Control**

Year												
2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
+1.355	+1.753	+2.153	+2.587	+3.041	+3.511	+3.995	+4.492	+5.001	+5.522	+6.047	+6.584	+7.130
+0.533	+0.631	+0.720	+0.813	+0.906	+0.999	+1.092	+1.187	+1.282	+1.380	+1.477	+1.577	+1.680
+0.414	+0.501	+0.571	+0.644	+0.716	+0.788	+0.859	+0.930	+1.003	+1.076	+1.148	+1.223	+1.299
+0.379	+0.467	+0.547	+0.635	+0.725	+0.817	+0.910	+1.006	+1.104	+1.206	+1.308	+1.415	+1.525
+0.007	+0.009	+0.010	+0.012	+0.013	+0.014	+0.016	+0.017	+0.018	+0.018	+0.019	+0.020	+0.021
+5.922	+6.722	+7.758	+8.940	+10.219	+11.561	+12.939	+14.341	+15.771	+17.214	+18.671	+20.144	+21.634
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Region: All Regions - Category: Output - Comparison Type: Differences - Forecast: Med School Impact Revised Jan 21  
- Comparison Forecast: Standard Regional Control**