



The Economic Value of New Mexico Institute of Mining and Technology



NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY (NMT) creates value in many ways. The university plays a key role in helping students increase their employability and achieve their individual potential. The university facilitates new research developments and draws visitors and students to the state, generating new dollars and opportunities for New Mexico. NMT provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Furthermore, NMT is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

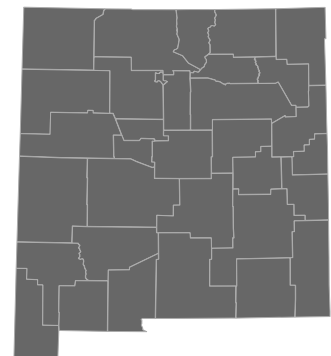
NMT influences both the lives of its students and the state economy. The university supports a variety of industries in New Mexico, serves state businesses, and benefits society as a whole in New Mexico from an expanded economy and improved quality of life. Additionally, the benefits created by NMT extend to the state government through increased tax revenues and public sector savings.

This study measures the economic impacts created by NMT on the business community and the benefits the university generates in return for the investments made by its key stakeholder groups—students, taxpayers, and society. The following two analyses are presented:

 **Economic impact analysis**

 **Investment analysis**

All results reflect employee, student, and financial data, provided by the university, for fiscal year (FY) 2021-22. Impacts on the New Mexico economy are reported under the economic impact analysis and are measured in terms of added income. The returns on investment to students, taxpayers, and society in New Mexico are reported under the investment analysis.



New Mexico

NMT influences both the **lives of its students** and the **state economy**.

Economic impact analysis



NMT promotes economic growth in New Mexico through its direct expenditures and the resulting expenditures of visitors, students, and state businesses. The university serves as an employer and buyer of goods and services for its day-to-day and research operations. The university's reputation and activities attract visitors and students from outside New Mexico, whose expenditures benefit state vendors. In addition, NMT is a large source of higher education to New Mexico residents and a supplier of trained workers to state industries, enhancing overall productivity in the state workforce.

Operations spending impact



NMT adds economic value to New Mexico as an employer of state residents and a large-scale buyer of goods and services. In FY 2021-22, the university employed 951 full-time and part-time faculty and staff (excluding research employees), all of whom lived in New Mexico. Total payroll at NMT was \$42.5 million (excluding payroll from research employees), much of which was spent in the state for groceries, mortgage and rent payments, dining out, and other household expenses. In addition, the university spent \$30.5 million on day-to-day expenses related to facilities, supplies, and professional services (excluding research expenditures).

NMT's day-to-day operations spending added \$47.5 million in income to the state during the analysis year. This figure represents the university's payroll, the multiplier effects generated by the in-state spending of the university and its employees, and a downward adjustment to account for funding that the university received from state sources. The \$47.5 million in added income is equivalent to supporting 1,021 jobs in the state.

Research spending impact



Research activities impact the economy by employing people and requiring the purchase of equipment and other supplies and services.

In FY 2021-22, NMT spent \$32.8 million on payroll to support research activities. This, along with \$48.5 million in other research spending,^{*} created a net total of \$72.9 million in added income for the state economy. This added income is equivalent to supporting 1,219 jobs.

Visitor spending impact



Thousands of visitors from outside the state were attracted to NMT during the analysis year to attend various activities, including commencement,

* Excludes indirect costs because indirect costs are not necessarily spent during the analysis year.

Impacts created by NMT in FY 2021-22



Operations spending impact

\$47.5 million

+



Research spending impact

\$72.9 million

+



Visitor spending impact

\$2.7 million

+



Student spending impact

\$1.2 million

+



Alumni impact

\$151.7 million



Total economic impact

\$276.0 million

OR

Jobs supported

3,484



orientation, concerts, museum, and other entertainment and business events sponsored by the university. While in the state, visitors spent money for lodging, food, transportation, and other personal expenses. The off-campus expenditures of the university's out-of-state visitors generated a net impact of \$2.7 million in added income for the state economy in FY 2021-22. This \$2.7 million in added income is equivalent to supporting 45 jobs.

Student spending impact



Around 10% of students attending NMT originated from outside the state in FY 2021-22 and relocated to New Mexico to attend NMT. These students may not have come to the state if the university did not exist. In addition, some in-state students, referred to as retained students, would have left New Mexico if not for the existence of NMT. While attending the university, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$1.2 million in added income for the state economy in FY 2021-22, which supported eight jobs in New Mexico.

Alumni impact



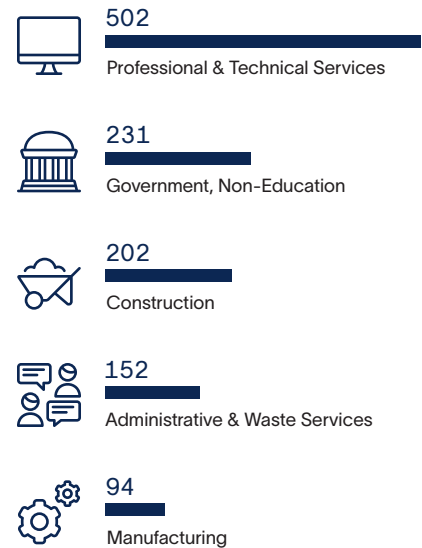
The education and training NMT provides for state residents has the greatest impact. Since the establishment of the university, students have studied at NMT and entered the state workforce with greater knowledge and new skills. Today, thousands of former NMT students are employed in New Mexico. As a result of their education from NMT, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2021-22, NMT alumni generated \$151.7 million in added income for the state economy, which is equivalent to supporting 1,190 jobs.

Total impact

NMT added \$276 million in income to the New Mexico economy during the analysis year, equal to the sum of the operations and research spending impacts; the visitor and student spending impacts; and the alumni impact. For context, the \$276 million impact was equal to approximately 0.3% of the total gross state product (GSP) of New Mexico. This contribution that the university provided on its own by its size is as large as nearly a third of the entire Arts, Entertainment, & Recreation industry in the state.

NMT's total impact can also be expressed in terms of jobs supported. The \$276 million impact supported 3,484 state jobs, using the jobs-to-sales ratios specific to each industry in the state. In addition, the \$276 million, or 3,484 supported jobs, stemmed from different industry sectors. For instance, among non-education industry sectors, the activities of NMT and its alumni in the Professional & Technical Services industry sector supported 502 jobs in FY 2021-22. If the university did not exist, these impacts would not have been generated in New Mexico.

NMT impacts by industry (jobs supported)





An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. If the benefits outweigh the costs, then the investment is financially worthwhile. The analysis presented here evaluates NMT as an investment from the perspectives of students, taxpayers, and society in New Mexico.

Student perspective



In FY 2021-22, NMT served 1,713 degree-seeking and 306 non-degree-seeking students. In order to attend the university, the students paid for tuition, fees, books, and supplies. They also took out loans and will incur interest on those loans. Additionally, students gave up money they would have otherwise earned had they been working instead of attending college. The total investment made by NMT's students in FY 2021-22 amounted to a present value of \$27.6 million, equal to \$10 million in out-of-pocket expenses (including future principal and interest on student loans) and \$17.7 million in forgone time and money.

In return for their investment, NMT's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average NMT bachelor's degree graduate from FY 2021-22 will see annual earnings that are \$22,900 higher than a person with a high school diploma or equivalent working in New Mexico. Similarly, master's and doctoral NMT students can expect respective post-graduation average earnings of \$73,100 and \$106,200, which translate into \$13,700 and \$46,800, respectively, of the annual earnings premium over the bachelor's degree earnings. Over a working lifetime, the benefits of the bachelor's degree over a high school diploma will amount to an undiscounted value of \$916 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that NMT's FY 2021-22 students will receive over their working careers is \$123.4 million.

Students see a high rate of return for their investment in NMT



Average annual return for NMT students
17.5%



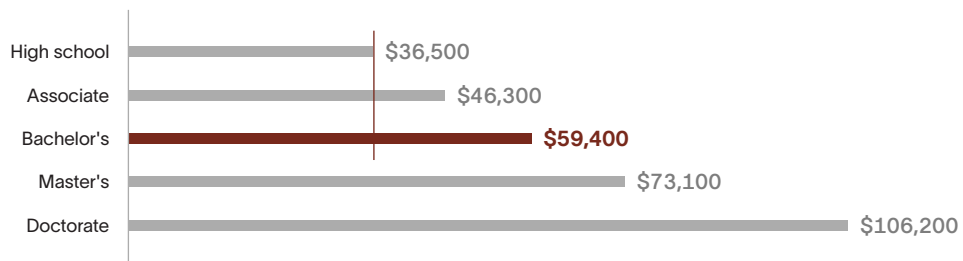
Stock market 30-year average annual return
9.6%



Interest earned on savings account (national deposit rate)
0.4%

Source: Forbes' S&P 500, 1992-2021. FDIC.gov, 2-2022.

The average bachelor's degree graduate from NMT will see an increase in earnings of **\$22,900** each year compared to a person with a high school diploma or equivalent working in New Mexico.



Source: Lightcast employment data.

The students' benefit-cost ratio is 4.5. In other words, for every dollar students invest in NMT in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$4.50 in higher future earnings. Annually, the students' investment in NMT has an average annual internal rate of return of 17.5%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 9.6%.

Taxpayer perspective



NMT generates more in tax revenue than it receives. These benefits to taxpayers consist primarily of taxes that the state government will collect from the added revenue created in the state. As NMT students will earn more, they will make higher tax payments throughout their working lives. Students' employers will also make higher tax payments as they increase their output and purchases of goods and services. By the end of the FY 2021-22 students' working lives, the state government will have collected a present value of \$42.4 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of NMT students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The education that NMT students receive will generate savings in three main categories: 1) healthcare, 2) justice system, and 3) income assistance. Improved health will lower students' demand for national healthcare services. In addition, costs related to the justice system will decrease. NMT students will be more employable, so their reduced demand for income assistance such as welfare and unemployment benefits will benefit taxpayers. For a list of study references, contact the university for a copy of the main report. Altogether, the present value of the benefits associated with an education from NMT will generate \$15 million in savings to state taxpayers.

Total taxpayer benefits amount to \$57.4 million, the present value sum of the added tax revenue and public sector savings. Taxpayer costs are \$46.1 million, equal to the amount of state government funding NMT received in FY 2021-22. These benefits and costs yield a benefit-cost ratio of 1.2. This means that for every dollar of public money invested in NMT in FY 2021-22, taxpayers will receive a cumulative present value of \$1.20 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 1.7%, which compares favorably to other long-term investments in the public sector.

For every dollar of public money invested in NMT, taxpayers will receive a cumulative value of **\$1.20** over the course of the students' working lives.

Social perspective



Society as a whole in New Mexico benefits from the presence of NMT in two major ways. Primarily, society benefits from an increased economic base in the state. This is attributed to the added income from students' increased lifetime earnings (added student income) and increased business output (added business income), which raise economic prosperity in New Mexico.

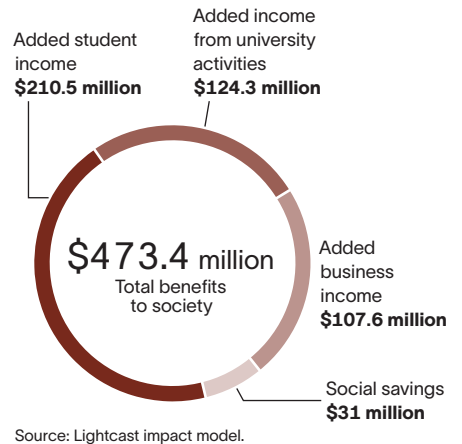


Benefits to society also consist of the savings generated by the improved lifestyles of NMT students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are distinct from the costs avoided by the taxpayers outlined above. Healthcare savings include avoided medical costs associated with smoking, alcohol dependence, obesity, drug abuse, and depression. Justice system savings include avoided costs to the government and society due to less judicial activity. Income assistance savings include reduced welfare and unemployment claims. For a list of study references, contact the university for a copy of the main report.

Altogether, the social benefits of NMT equal a present value of \$473.4 million. These benefits include \$210.5 million in added student income, \$107.6 million in added business income, \$124.3 million in added income from university activities, as well as \$31 million in social savings related to health, the justice system, and income assistance in New Mexico. People in New Mexico invested a present value total of \$174.5 million in NMT in FY 2021-22. The cost includes all the university and student costs.

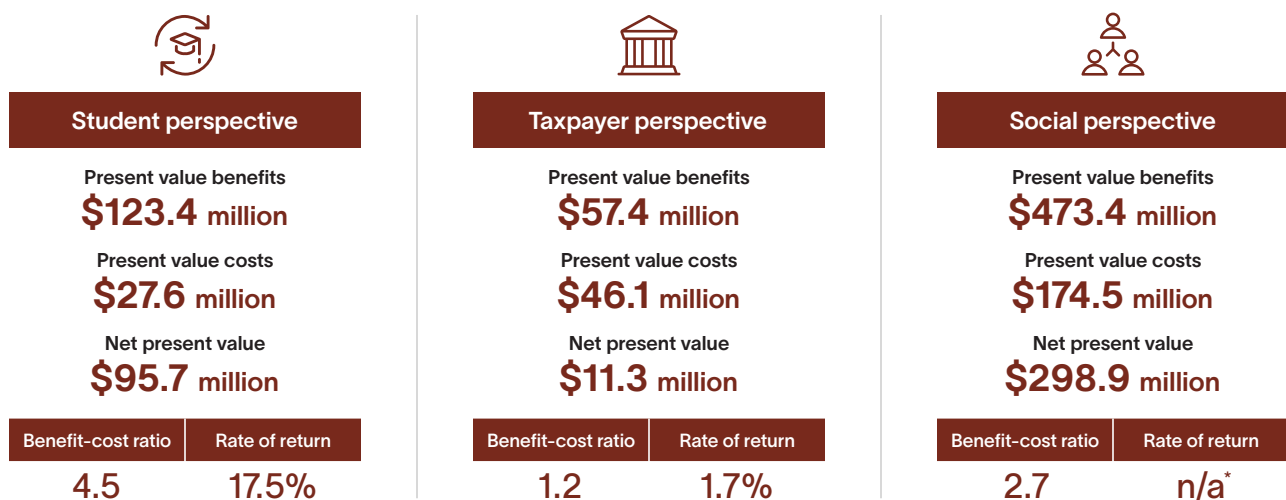
The benefit-cost ratio for society is 2.7, equal to the \$473.4 million in benefits divided by the \$174.5 million in costs. In other words, for every dollar invested in NMT, people in New Mexico will receive a cumulative value of \$2.70 in benefits. The benefits of this investment will occur for as long as NMT's FY 2021-22 students remain employed in the state workforce.

Social benefits in New Mexico from NMT



Summary of investment analysis results

The results of the analysis demonstrate that NMT is a strong investment for all three major stakeholder groups—students, taxpayers, and society. As shown, students receive a great return for their investments in an education from NMT. At the same time, taxpayers' investment in NMT returns more to government budgets than it costs and creates a wide range of social benefits throughout New Mexico.



* The rate of return is not reported for the social perspective because the beneficiaries are not necessarily the same as the original investors.

Conclusion

The results of this study demonstrate that NMT creates value from multiple perspectives. The university benefits state businesses by increasing consumer spending in the state and supplying a steady flow of qualified, trained workers to the workforce. NMT enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The university benefits state taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, NMT benefits society as a whole in New Mexico by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students.



About the study

Data and assumptions used in the study are based on several sources, including the FY 2021-22 academic and financial reports from NMT, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Lightcast's Multi-Regional Social Accounting Matrix model, and a variety of studies and surveys relating education to social behavior. The study applies a conservative methodology and follows standard practice using only the most recognized indicators of economic impact and investment effectiveness. For a full description of the data and approach used in the study, please contact the university for a copy of the main report.

The results of this study demonstrate that NMT creates value from **multiple perspectives.**



Lightcast provides colleges and universities with labor market data that help create better outcomes for students, businesses, and communities. Our data, which cover more than 99% of the U.S. workforce, are compiled from a wide variety of government sources, job postings, and online profiles and résumés. Hundreds of institutions use Lightcast to align programs with regional needs, drive enrollment, connect students with in-demand careers, track their alumni's employment outcomes, and demonstrate their institution's economic impact on their region. Visit lightcast.io/solutions/education to learn more or connect with us.