



Executive Summary

This report analyzes the economic and social costs of the high school dropout problem in Montana from the perspective of a state taxpayer. The majority of our analysis considers the consequences of this problem in terms of labor market, tax revenue, and public service costs. In quantifying these costs, we seek to inform public policy, estimate the benefits of addressing the problem, and engage state citizenry in the problem's remedy.

The individual and societal costs associated with dropping out of high school in Montana are profound, with particular implications for the state's American Indian student population. That said, the potential benefits from reducing the dropout rate are equally profound. Our analysis of these costs and benefits reveals the following findings.

Key findings include:

- According to the Montana Office of Public Instruction (MOPI), 1,989 students, or 16.1% of the entire class of 2008, dropped out of high school. The state's dropout and graduation rates have not improved since 2002-03.
- Dropout statistics for Montana's American Indian students are alarming. Only 63% of American Indians in the class of 2008 graduated high school on time.
- On average, Montana high school dropouts work close to eight fewer weeks per year than those whose highest degree is a high school diploma or GED. Almost 30% of high school dropouts in the state meet the federal definition of low-income, which is twice the rate of high school graduates. Our wage equation finds that Montana high school graduates on aver-

age earn 22% more than high school dropouts after controlling for differences in age, gender, and race. Those with some college earn 27% more and those with a bachelor's degree or higher earn 66% more.

- In extrapolating the annual costs of dropouts to Montana's economy, we estimate that the average high school dropout is earning \$5,868 less per year than they would if they had graduated. The total cost to Montana's economy that results from these reduced taxable earnings amounts to \$216 million annually. To put this figure in perspective, the state's total personal income generated by its Agriculture, Forestry, and Fishing industries in 2008 was \$317 million.
- When comparing the average Medicaid subsidies of a high school dropout to the average of an expected high school graduate, we arrive at an estimated increase in annual costs of \$616 per dropout. Accordingly, the total annual Medicaid fiscal impact of Montana's dropouts amounts to approximately \$23 million. Over the course of a lifetime, dropouts will require close to \$25,000 in present value Medicaid subsidies.
- Using the findings of a prior econometric study on the causal relationship of high school graduation to the likelihood of incarceration, we estimate the average annual incarceration costs of Montana's 36,788 dropouts would decline by \$268 per person had they graduated from high school. This represents a potential cost savings of \$9.85 million.
- We estimate that each prevented dropout will result in \$32,402 benefits to the state over that individual's lifetime. By permanently cutting the dropout rate in half, each class of new high school graduates will yield over \$32 million in direct gross economic benefits to the state. By completely eliminating dropouts, the state stands to save \$65 million annually.