

## Cost-savings analysis of early childhood education in Michigan Preliminary findings

*Investing in high-quality early education for low-income children prevents needless spending and produces payoffs in K-12, government programs, and the private sector. Cuts to early education compound beyond the initial budget savings, resulting in more spending that could have been prevented and lost benefits that will never be realized.*

### K-12 education

In K-12 education, when low-income students are not adequately prepared for kindergarten, spending that could have been prevented goes up for:

- Special education
- Students repeating grades
- Teacher-related costs due to absenteeism and turnover
- Teaching English language learners
- School safety due to delinquent behavior in later years

A recent study in Minnesota estimated that K-12 education spent nearly \$4,000 extra for every low-income child that did not have adequate early education. High-quality early education has been shown to reduce these preventable costs.

### Criminal justice, public assistance, and health spending

In other areas of government spending, high-quality early childhood education has been shown to prevent even greater spending than the reductions found in K-12 education. These costs that could be prevented in Michigan include spending on:

- Juvenile justice and adult criminal justice plus losses for crime victims. (An analysis of 58

programs showed an average crime cost savings for society of over \$5,000 per pupil enrolled in early childhood education.)

- Future public assistance costs in terms of welfare (TANF) and unemployment compensation as students reach adulthood with lower educational attainment.
- Public subsidies for child care since some families using early childhood education (ECE) are eligible for such subsidies but don't need them while using ECE.
- Health care costs due to greater use of alcohol, tobacco, and illicit drugs among youth and adults without early childhood education.

### Tax revenues

Moreover, investing in early education for Michigan's low-income children could produce some key benefits that will go unrealized without such investing. These potentially lost benefits include:

- Increased future tax revenues based on greater educational attainment and higher lifetime earnings. (A study of a Michigan early childhood education program estimated that participants paid more than \$30,000 in taxes over their lifetimes relative to similar students who did not have early childhood education.)
- Increased taxes paid by parents (typically mothers) who are more able to participate in the labor force.

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Long-term studies of high-quality early childhood education programs have estimated the present value of public savings in the range of between \$1.54 and \$6.78 for every dollar invested in quality early childhood education.

### The Michigan economy

For Michigan to prosper in the future, its workforce will have to have increased skills and increased educational attainment. Early childhood education programs increase the percentage of students who graduate from high school. For example, a high-quality early childhood program for low-income students in Chicago produced an 11.2 percent increase in their high school graduation rate.

- The average estimated lifetime earnings of a worker in Michigan with a high school diploma are \$352,000 higher than those of a high school dropout.
- Moreover, in Michigan in 2006, high school dropouts were almost twice as likely to be unemployed for the entire year as workers with a high school diploma and no other education.

When more students graduate from high school, more students can enroll in technical training or college.

- The average lifetime earnings of a Michigan worker with 13 to 15 years of schooling are \$331,000 more than those of a worker with no education past high school; the average lifetime earnings of a worker with a bachelor's degree are almost \$1 million higher than those of a high school graduate.

The best recent estimates by economists are that between 10 and 20 percent of economic growth in the U.S. in recent decades can be attributed to increased education of the workforce. Steps to reduce early childhood programs would put Michigan at a competitive disadvantage going forward.

### Bottom line

- Increased investment in early childhood education will yield future returns to the Michigan economy in both reduced future public spending and increased economic activity.
- Reductions to current spending on early childhood education will increase unproductive public spending while reducing incomes and economic activity in Michigan in the future.
- For example, the Great Start Readiness Program currently serves over 24,000 Michigan students. Suspending the program for a single year would save \$103 million but would ultimately cost the State of Michigan between \$240 million and \$720 million in future preventable spending and lost benefits.

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### For more information

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