

## **Cost savings analysis of school readiness in Michigan**

### **Executive summary**

#### *Background*

Educational and economic research shows that investing in school preparedness for low-income children prevents needless public spending and produces payoffs in K-12, government programs, and the private sector. Conversely, not investing in or cutting programs that produce school readiness results in increased spending and lost benefits for:

- **Schools** – through higher special education costs, higher costs of grade repetition, and lost aid as unprepared students become unsuccessful students and eventually some become dropouts.
- **Taxpayers** – through higher costs of dealing with juvenile and adult criminals; through higher welfare, Medicaid and unemployment costs; and through lower tax revenues as unsuccessful students become unproductive adults.
- **The public** – not only through higher school costs and higher taxes, but also through injuries and property losses, as some juveniles and adults turn to criminal activity.
- **The economy** – through an inability to compete nationally and internationally due to a higher tax burden and a less educated and skilled workforce.

Beginning in the 1980s, Michigan began making investments in fully preparing young children for school – cognitively, physically, socially and emotionally. Currently Michigan's Great Start system encompasses both early childhood services and a strategic plan for the state's early childhood system of programs, services, and supports for children from birth to age five and their families.

One element of that system, the Great Start Readiness Program (GSRP), in concert with federally-funded Head Start programs, serves over 47,000 low-income four-year-olds annually through either a half-day or full-day program of educational preparation.

Economists and economic development officials agree that any strategies to enhance the long-term growth of Michigan must include maintaining and upgrading the quality of its workforce. Yet some recent Michigan data raise the discomfiting prospect that the educational attainment of the state's workforce may decline as retiring workers are replaced by the young people who are currently finishing or (in too many cases) not finishing school.

This study estimates the current cost savings and revenues to Michigan generated from the investments in school readiness over the past 25 years, the cost burden to Michigan when children are not fully-prepared at kindergarten entry, and the additional benefits that could be realized if Michigan were to expand its investment in school readiness to all educationally disadvantaged children.

## *Current cost savings and revenues*

**The cost savings and revenues realized in 2009 due to the investments in school readiness over the past 25 years is an estimated \$1.15 billion.** This study provides estimates of the dollar value of benefits to Michigan in 2009 generated by current school children who received early education services and by young adults who have been more successful because of school readiness programs.

### **Schools**

#### ■ **\$221 million in K-12 savings:**

- \$136 million in reduced spending because fewer K-12 students repeated a grade
- \$69 million in reduced special education spending for disabilities that have been prevented or ameliorated through early intervention such as mild or moderate speech or language problems, cognitive impairment, specific learning disabilities, emotional impairment, and other health problems
- \$16 million in reduced costs of replacing teachers who leave their jobs due to dissatisfaction with working conditions related to student behavior or performance that are influenced by improved school readiness

Moreover, school budgets are higher by an estimated \$125 million, funding they would have lost if more current students prepared by early education had dropped out. This amount isn't counted with the other benefits to Michigan because, technically, the schools get more money but it is merely a transfer from the taxpayers, thus netting to zero for the state as a whole.

### **Taxpayers**

#### ■ **\$584 million in reduced government spending and increased tax revenues:**

- \$214 million in juvenile corrections, which includes reduced costs to arrest, adjudicate, and detain juvenile offenders
- \$106 million in reduced substantiated child abuse and neglect, including the costs of out-of-home placement
- \$94 million in adult criminal justice, which includes reduced costs to arrest, process, and incarcerate adult offenders
- \$66 million in reduced spending by the state on welfare ( TANF) and Medicaid due to the improved employment outcomes for disadvantaged children who have reached adulthood
- \$40 million in reduced unemployment benefits due to improved employment outcomes for disadvantaged children who have reached adulthood
- \$31 million in reduced child care subsidies for families who are eligible for child care subsidy payments but do not use the subsidy while their children are enrolled in the early education program
- \$33 million in increased income tax and sales tax revenue due to both higher wages for disadvantaged children who have reached adulthood and higher productivity of parents while their children are enrolled in early education programs

### **The public**

#### ■ **\$347 million in reduced social costs to the public:**

- \$162 million in reduced tangible losses to victims of violent crimes and property offenses committed by juveniles
- \$97 million in reduced tangible losses to victims of violent crimes and property offenses committed by adults

- \$74 million in increased productivity and incomes of employed parents while their children are enrolled in early education programs
- \$14 million in health savings due to reduced alcohol and drug abuse among teenagers and adults who benefited from school readiness programs when they were children

## **The economy**

Based on past participation and success rates of early education programs in Michigan, an estimated 80,000 adults, age 18 to 29, in the Michigan labor force today are high school graduates who likely would have dropped out of school if not for Michigan's past investment in their school readiness. These people contribute more to state government than they use in government services, but had they not graduated they would have been a net fiscal drain on the state.

The estimated economic impact of these adults is about \$1.3 billion annually, including the \$584 million described above in reduced government spending and increased tax revenues and at least \$700 million in additional wages they have generated.

## ***Ongoing costs when children are not fully-prepared at kindergarten entry***

**The ongoing cost burden of not investing in school readiness for all disadvantaged children is an estimated \$598 million per year.**

Based on a study by Michigan State University, an estimated 35,000 additional low-income 4-year old children in Michigan are eligible but not currently served by a Great Start Readiness Program or Head Start program. Cost burdens associated with the potential lack of school readiness of this group of children are estimated as follows:

- **\$115 million in K-12 spending:**
  - \$71 million in grade repetition
  - \$36 million in preventable special education spending
  - \$8 million in teacher turnover
- **\$303 million in increased government spending and decreased tax revenues:**
  - \$111 million in juvenile corrections
  - \$55 million in child welfare
  - \$49 million in adult criminal justice
  - \$35 million in public assistance (state portion of TANF and Medicaid)
  - \$21 million in unemployment benefits
  - \$16 million in child care subsidies
  - \$16 million in lost income and sales tax revenue
- **\$180 million in increased social costs:**
  - \$84 million losses to victims of juvenile crime
  - \$51 million losses to victims of adult crime
  - \$38 million in decreased productivity of employed parents
  - \$7 million in reduced health costs (alcohol, drug abuse)

## Methodology

To make these estimates, we relied on the best available research data from longitudinal studies of early childhood education programs in Michigan and other states; recent evaluations of the GSRP program done by the High/Scope Educational Research Foundation based in Ypsilanti, Michigan; and a study commissioned by the C.S. Mott Foundation on the multiple impacts of high school dropouts on the Michigan economy.

We used both current and historical expenditure and enrollment data for Michigan schools from the Center for Educational Performance and Information (CEPI) and the Michigan Department of Education, as well as data from early education programs in the state. In some cases, we made conservative assumptions using Minnesota or national data when current Michigan data was limited or unavailable.

The costs and revenues presented here apply the findings from a range of studies of early childhood education programs (some of them model programs) to current and past preschool spending in Michigan. There are other programs and services for children and parents that enhance school readiness, including many that have not yet been studied from a cost-benefit basis. Accordingly, these are conservative estimates of the value of school readiness produced by the total array of early childhood investments in the state.

## Conclusions

Michigan has made substantial investments in school readiness over the past 25 years and, accordingly, has reaped the benefits of adequately preparing many children for school success, resulting in more than a billion dollars in annual savings and revenues. If the state's current investments in school readiness were discontinued or reduced, these annual savings and revenues would subsequently erode, causing a significant negative impact on the State of Michigan's future annual budgets and overall economy. Conversely, those benefits will rise if the state sustains its current level of investment and will increase exponentially as a result of increased investment in the Great Start Readiness Program, Great Start system, and other high-quality and comprehensive programs that promote early educational preparation.

The estimated annual cost of expanding the Great Start School Readiness Program to all eligible children is at most \$236 million, based on a cost of \$6,800 for a full-day program per new student. That cost is less than half of the annual educational, social, and economic benefits that would eventually be realized through this additional investment in Michigan's future.

School success is a critical issue for our nation and especially for states such as Michigan who are facing short- and long-term economic challenges. Not investing in school readiness costs Michigan money. Of equal importance, by not preparing more young children for school success, Michigan will lack the educated and skilled workforce required for its economic competitiveness and, ultimately, its economic growth.

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### For more information

This summary presents highlights of the *Cost savings analysis of school readiness in Michigan* report. For more information about this report, contact Paul Anton at Wilder Research, 651-280-2651.

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