

The Value of Getting One Child Ready for Kindergarten

Cost Savings of Early Childhood Education in Michigan

Research studies have demonstrated that effective early childhood education (ECE) programs prepare young children cognitively, physically, socially, and emotionally for success in school, and are particularly valuable for disadvantaged children. Effectively preparing children for kindergarten reduces needless public spending throughout the education, social service, and legal systems, and increases future state revenues by lowering high school drop-out rates and promoting a skilled workforce that contributes to the tax base.

Potential per-child lifetime cost savings due to early childhood education

The public benefits of ECE for one disadvantaged child in Detroit include over \$11,000 in savings to the legal system (nearly \$8,000 for a child in Michigan as a whole) due to the impact of ECE on felony arrests. Reduced criminal activity also reduces harm suffered by victims of crime, with avoided costs totaling over \$24,000 per disadvantaged child in ECE in Detroit and over \$16,000 per disadvantaged child in ECE in Michigan overall.

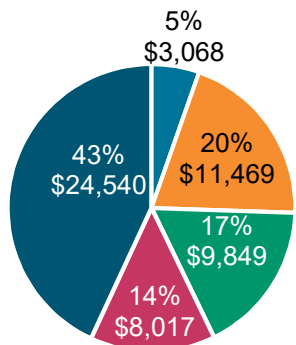
In addition, because of increased educational attainment resulting from ECE, each enrolled disadvantaged child in Detroit will eventually (in adulthood) contribute almost \$6,000 in additional state and local taxes. A disadvantaged child enrolled in ECE in Michigan overall will contribute an extra \$4,500 in state taxes as a result of ECE. Each child enrolled in ECE will also ultimately pay more than \$8,000 in additional federal taxes as a result of ECE, and their reduced need for various public programs will reduce state and local costs by about \$4,000.

The lifetime economic value of early childhood education for one disadvantaged child in Detroit, Michigan is an estimated \$201,000, including nearly \$57,000 in public benefits (i.e., savings and revenue to state, local, and federal government, as well as avoided harm to victims of crime) and \$144,000 in individual benefits to each ECE participant and their family. For one disadvantaged child in Michigan as a whole, the estimated value of ECE is also an estimated \$201,000, but it is distributed differently, with \$42,000 in public benefits and \$158,000 in individual benefits per child.¹

A. PUBLIC BENEFITS OF EARLY CHILDHOOD EDUCATION

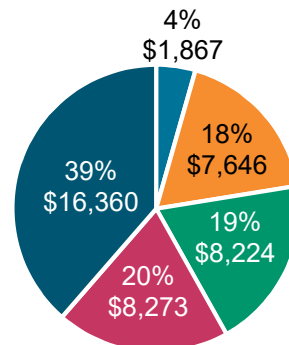
Detroit

Public benefits per child: **\$56,944**



Michigan

Public benefits per child: **\$42,370**

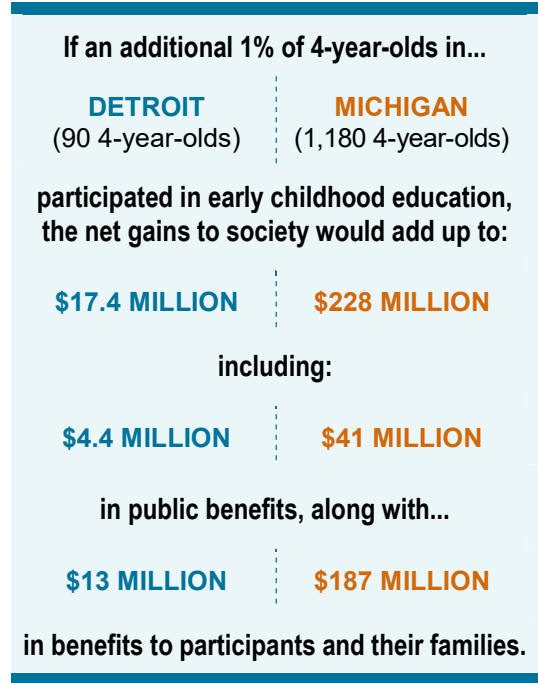


¹ Although the estimated public benefits of ECE exceed the estimated costs of ECE by a ratio of at least 4 to 1, some of the estimated benefits are lower than those reported in 2015 and 2011. This change does not indicate that the value of that ECE-related outcome is lower now than it was in 2015 or 2011. It simply indicates that we have incorporated the latest literature and current data for Michigan and Detroit, resulting in more conservative estimates of benefits.

Research has shown that early childhood education enhances educational attainment, improves mental health, and reduces the incidence of maladaptive behaviors like substance abuse and criminal activity. These benefits produce substantial economic value to society.

Setting aside the gains to participants and their families, the public benefits of ECE still total almost \$57,000 for one Detroit child in ECE, and more than \$42,000 for one Michigan child in ECE (returns of \$7.25 and \$5.40 per dollar invested, respectively). If we increase the rates of ECE participation by just one percentage point, the net benefits to society (after accounting for ECE costs) would add up to \$13 million in Detroit and \$187 million in Michigan overall. The implications of these results are clear: investing in quality early childhood education makes economic sense.

Society as a whole reaps over \$200,000 in benefits from one child participating in ECE in Detroit or in Michigan overall. Assuming an average ECE cost of \$7,850 per child, the total returns to society are over \$25 per dollar invested.



B. ESTIMATED LIFETIME SAVINGS PER DISADVANTAGED CHILD IN ECE

Cost category	Detroit	Michigan
K-12 savings due to reduced need for special education and grade repetition	\$3,068	\$1,867
Savings to legal system	\$11,469	\$7,646
State and local income tax revenue	\$5,869	\$4,515
Other state savings (child care subsidies, public assistance, child welfare, unemployment insurance)	\$3,980	\$3,709
Total savings and revenue to state and local government, including K-12 system	\$24,387	\$17,736
Avoided harm to victims of crime	\$24,540	\$16,360
Federal income tax revenue	\$8,017	\$8,273
Total public benefits per child in ECE	\$56,944	\$42,370
Increased earnings for ECE participants (in adulthood) and their parents ^a	\$103,096	\$130,229
Savings and avoided mortality due to reduced tobacco use, substance abuse, and depression	\$41,110	\$28,128
Total private benefits (to participants and their families)	\$144,206	\$158,357
Total per-child lifetime benefits	\$201,151	\$200,727

Note. These results show the potential economic benefits associated with one disadvantaged child receiving ECE at the same quality and intensity as the ECE programs represented in the literature. The reported estimates are present values, discounted at a 3% discount rate. All estimates are in 2019 U.S. dollars.

^a Estimated federal, state, and local taxes have been subtracted from the value of increased earnings to ensure that their value is only counted once.