



The importance of effective early childhood education can hardly be overstated. In addition to improving the future quality of life and opportunities for children by better preparing them for success in school, such options are crucial to working parents. The Perryman Group recently examined this phenomenon through an economic cost and benefit lens, and the results make a compelling case for substantial and sustained investments.

Empirical studies (including by Nobel Laureate Jim Heckman) have quantified direct effects, including future earnings, parental earnings, crime and social costs, and health and quality of life benefits. Using this excellent work as a starting point, the related and comprehensive dynamic effects which work their way through the economy were modeled using the firm’s complex systems. Earnings from future generations due to breaking the poverty cycle were also incorporated.

When these major categories of benefits were quantified, the analysis indicates that

Fiscal Benefits of Effective Early Childhood Education

Every **+\$1.00** invested yields:

	Increased Tax Revenue	Reduced Social Costs	Total Benefits
Federal	+\$10.18	+\$8.85	+\$19.03
State	+\$3.14	+\$2.73	+\$5.87
Local	+\$2.47	+\$2.15	+\$4.61

Source: US Multi-Regional Impact Assessment System, The Perryman Group

Economic Benefits of Effective Early Childhood Education

Every **+\$1.00** invested yields:

Earnings	+\$15.17
Parental Earnings	+\$14.08
Next Generation Earnings	+\$5.12
Future Generations Earnings	+\$1.09
Reduced Social Costs	+\$21.96
Health and Life Expectancy	+\$2.61
Total Benefits	+\$60.04

Source: US Multi-Regional Impact Assessment System, The Perryman Group

Notes: "Reduced Social Costs" includes crime, social services, etc.

\$1.00 invested in early childhood education yields \$60.04 in aggregate net gains over time. This return on investment includes the total effects (direct, indirect, and induced) associated with increased lifetime earnings of the children and their parents, increased opportunities for future generations, reductions in crime, enhanced health outcomes, and other reduced social costs as described in the accompanying table. The gross product generated per dollar invested in early childhood totals \$32.36.

These results are measured in 2025 dollars on a net present value basis. As a result, while the benefits to future generations are quite substantial, they represent a relatively small addition because they are discounted over several decades.

In addition to these results, The Perryman Group also estimated the fiscal benefits per dollar invested (tax revenue associated with the increase in economic activity as well as

reduced social costs), and they are substantial. In fact, the total benefits include \$19.03 per \$1 invested to the federal government, \$5.87 to the State of Texas, and \$4.61 to local government entities across the state. (See the accompanying table for additional detail.)

The total return on investment in effective early childhood education (\$60.04) is much higher than the return on other types of private or public investments. The largest return of any private sector industries is \$17.81 per dollar invested (a petrochemical facility in which all of the upstream activity is retained), less than one third as high. Public infrastructure such as major highway projects that enhance productivity and efficiency lead to a \$8.01 return for every \$1 spent. Clearly, spending for effective early childhood education is not only worthy of consideration for the benefit of the families affected, but also for the heightened potential for the economy.

In compiling the research for this assessment, a number of supporting facts were identified. For example, only 4% of students who read at grade level by the third

grade failed to finish high school, while 16% without early childhood education did not finish (poverty dramatically compounds the problem). Texas-specific studies have found positive gains in third-grade reading level associated with early childhood education for disadvantaged children. The National

Academies of Sciences has determined that brain development is also positively affected.

According to the National Institute for Early Education Research, Texas ranks 35th in State funding, 40th in overall funding, and only meets two of 10 critical milestones. Investing

in effective early childhood education (particularly for vulnerable students) can greatly enhance opportunities for improved success in school and the preparedness and quantity of the current and future workforce as well as their quality of life. It is also one of the highest-return investments the State can make, helping to foster improved health, reduced social costs, and multi-generational prosperity.

Every **+\$1.00** invested in effective early childhood education yields:

+\$32.26
in gross product

METHODOLOGY

As noted, The Perryman Group compiled research related to the benefits of effective early childhood education from a variety of sources. Studies of the direct measured benefits from sources such as the Heckman Equation project were used as inputs to The Perryman Group's US Multi-Regional Impact Assessment System (USMRIAS). This system was developed by the firm almost 50 years ago and has been consistently maintained and updated since that time. It has been used in hundreds of analyses for clients ranging from major corporations to government agencies. The impact system uses a variety of data (from surveys, industry information, and other sources) to describe the various goods and services (known as resources or inputs)

required to produce another good/service. This process allows for estimation of the total economic impact (including multiplier effects) of investments in early childhood education. The submodel used in the current analysis reflects the specific industrial composition and characteristics of the Texas economy. In addition, the potential reduction in social costs were estimated based on the firm's prior work related to child maltreatment, hunger, and other social issues. See, for example, the firm's study of the economic effects of hunger at <https://www.perrymangroup.com/publications/report/2014/11/6/hunger/>. All results are expressed on a net present value 2025 basis.

THE PERRYMAN GROUP



The Perryman Group is a focused team of analysts who know how to address complex economic information tasks and present our findings effectively.

Our in-house professionals bring expertise in **economics, finance, statistics, mathematics, real estate, valuation, systems analysis, engineering, technical communications, and marketing.** Dr. Ray Perryman, President and CEO, has 40 years of experience in developing systems, analyzing complex problems, and communicating effectively. We have considerable pride in what we do. Our enthusiasm is both unbridled and contagious; every day brings a new opportunity for us to tackle a different problem or create a product or service specifically tailored to our clients.

OUR SERVICES

IMPACT ASSESSMENT

We have developed and continually maintain an extensive set of economic impact evaluation models that can be applied in a variety of contexts.

EXPERT TESTIMONY

We help clients analyze and communicate complex information in common-sense terms through comprehensive, objective analyses and clear, concise expert reports and presentations.

FORECASTING

We are at the cutting edge of econometrics and other advanced statistical methods and have provided innovative approaches for many complex applications.

SPEECHES

Dr. Perryman addresses dozens of audiences throughout the world every year, catering to a wide variety of events.

M. RAY PERRYMAN, PH.D.

Dr. Perryman is the President and CEO of the Perryman Group and Distinguished Professor of Economic Theory and Method at the International Institute for Advanced Studies. Over the past 40 years, Dr. Perryman has helped recruit corporations providing tens of thousands of jobs through economic development work, resolved billion-dollar legal issues, and revamped public policy through impact assessments and other studies. His firm has measured economic impacts for corporate locations and expansions involving billions in investments, and his economic forecasts are used by corporations and government agencies alike.

He has provided economic analysis and expert testimony for civil litigation across a wide range of practice areas including antitrust and competition,

patent infringement and other intellectual property disputes, securities, and commercial and complex litigation. His work combines strong expertise in economic damages calculation, asset valuation, market analysis, and statistical methods and econometrics.



For more information on **subscriptions, economic forecasts, or any of our other corporate services, call 1.800.749.8705.**

Reach out to us for more information!



@PerrymanGroup



/PerrymanGroup



/in/ray-perryman



www.perrymangroup.com



info@perrymangroup.com



1.800.749.8705



1.254.751.7855