



Investing in South Carolina's workforce infrastructure: Early care and education as economic development



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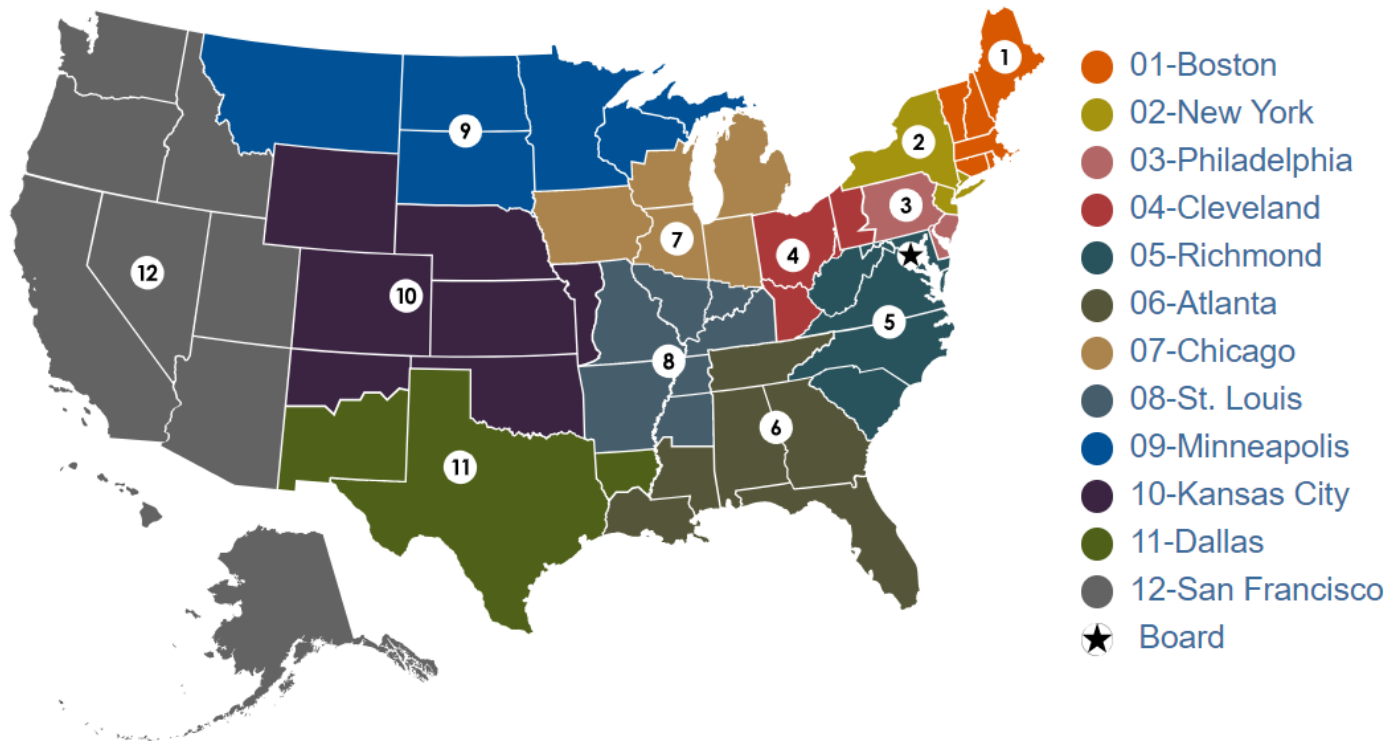
**The views expressed here are those of the author and not necessarily those of the Federal Reserve Bank of Minneapolis or the Federal Reserve System.*

Key takeaways

- Early years are a sensitive period for brain development.
- Early education and health investments can yield high public returns when reaching disadvantaged children.
- High-quality early care and education (ECE) supports child development and parental employment.
- ECE public policy: Provide resources to low- to moderate-income families to access a variety of high-quality ECE programs.

Federal Reserve System

Overview



Federal Reserve System

Community Development



@MplsFedCMD 

- Promote the economic resilience and mobility of low- to moderate-income (LMI) individuals and communities.
- Research. Information Sharing. Training. Convening.



FedCommunities.org

Early Childhood Development: Economic Development with a High Public Return

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Note: The following paper was developed in March 2003 with Minnesota audiences in mind. However, the authors subsequently discovered a high degree of interest throughout the country in their research on the economics of early childhood development and the universality of the issues discussed. This paper also motivated the October conference at the Minneapolis Fed.

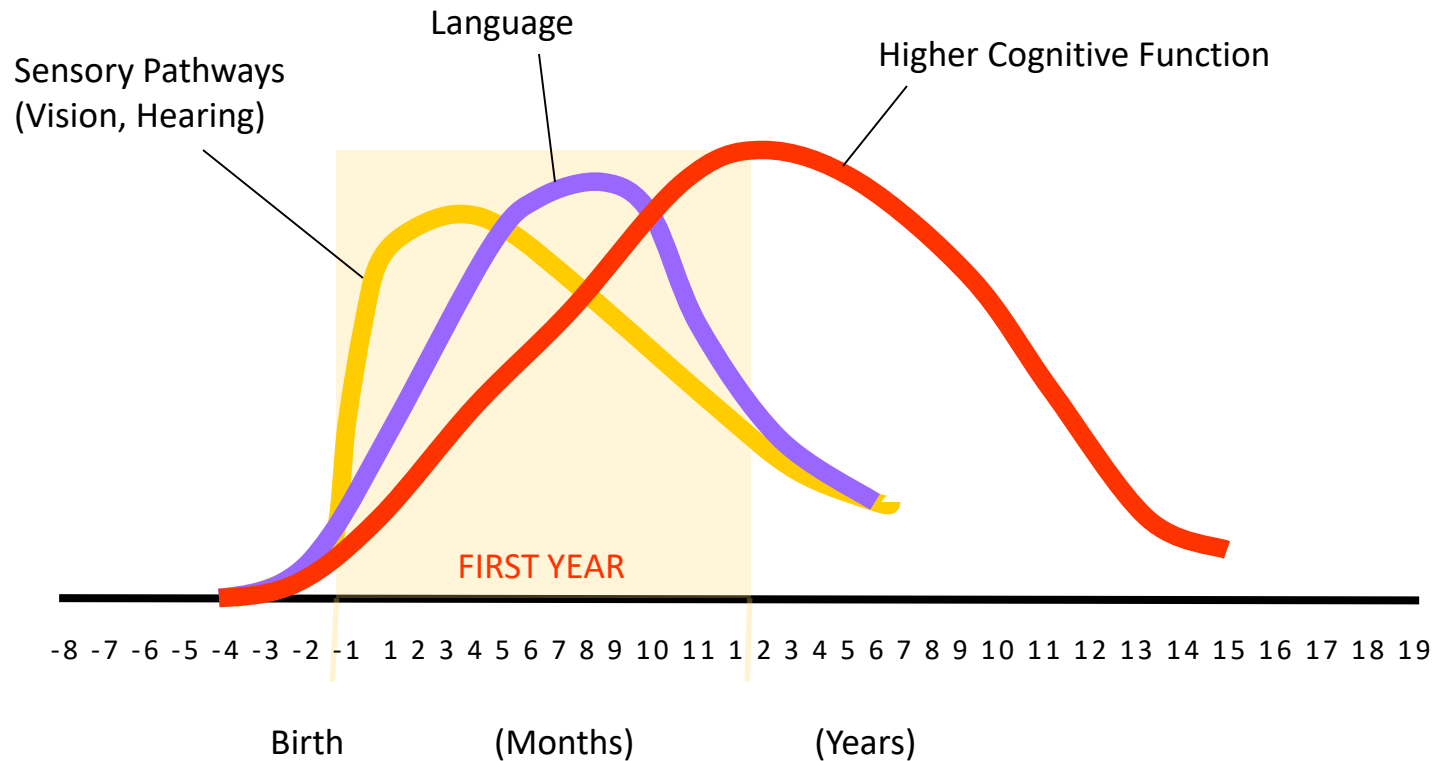
University of Minnesota is not visible enough in the business community. And still others raise the broader concern that Minnesota's citizens and policymakers have become too complacent and unwilling to make the public commitment to be competitive in a global economy.

Those who raise these concerns conclude that Minnesota and local governments need to take a more active role in promoting our economy. Often that implies that the state or local governments subsidize private activities that the market is not funding. Proponents of this view argue that without such subsidies, either well-deserving businesses will not get funded or other states will lure our businesses to greener pastures.



Human Brain Development

Synapse Formation Dependent on Early Experiences



Human Brain...

At **Birth**



At **6** Years Old

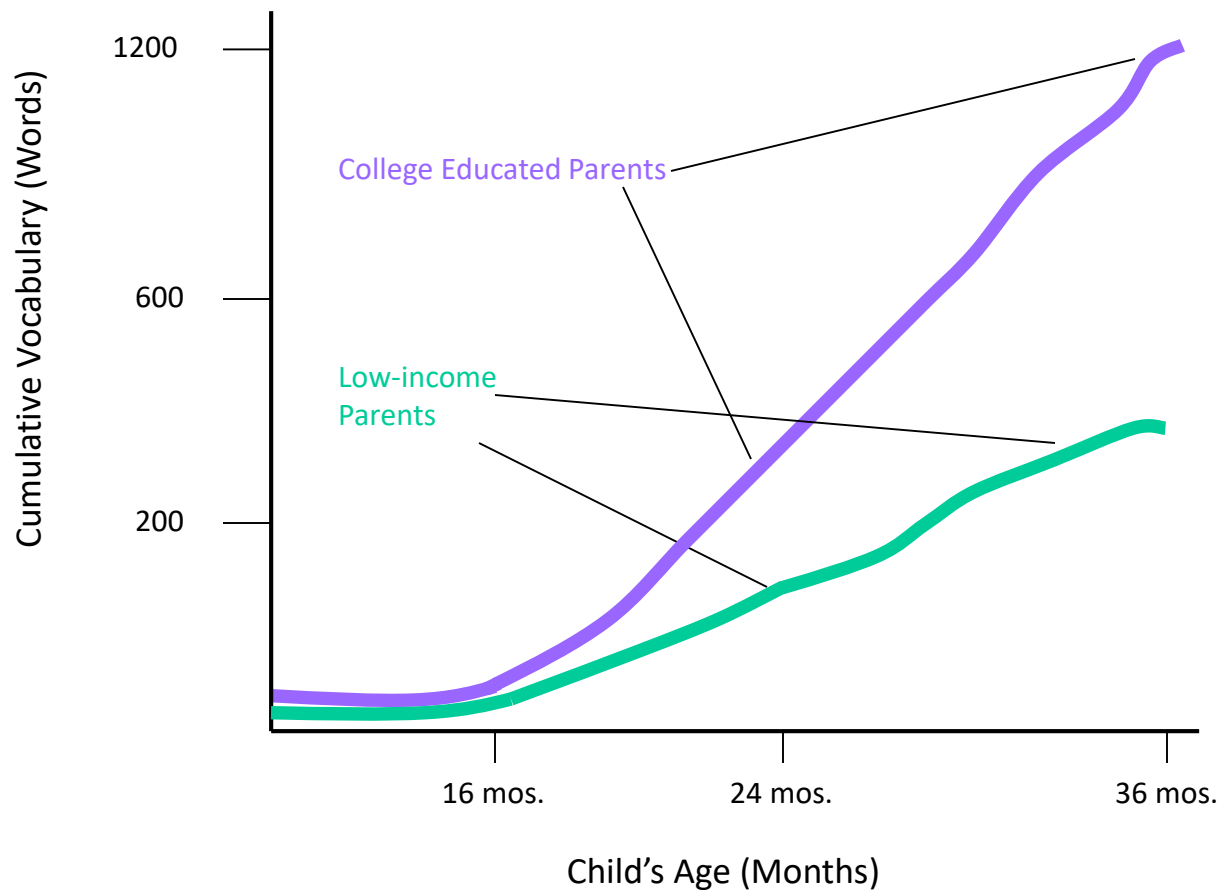


At **14** Years Old



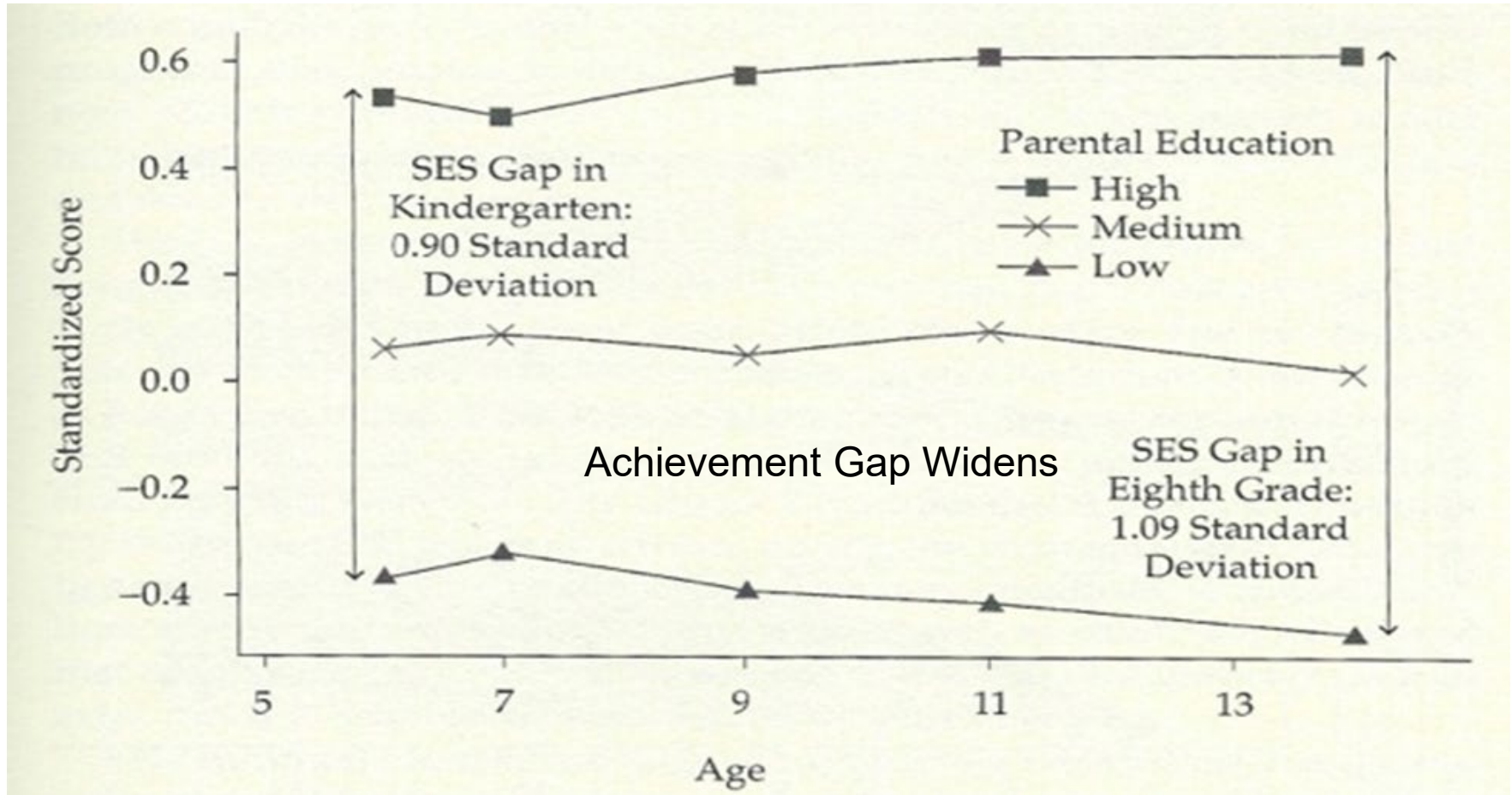


Barriers to **Social Mobility** Emerge at a **Very Young Age**

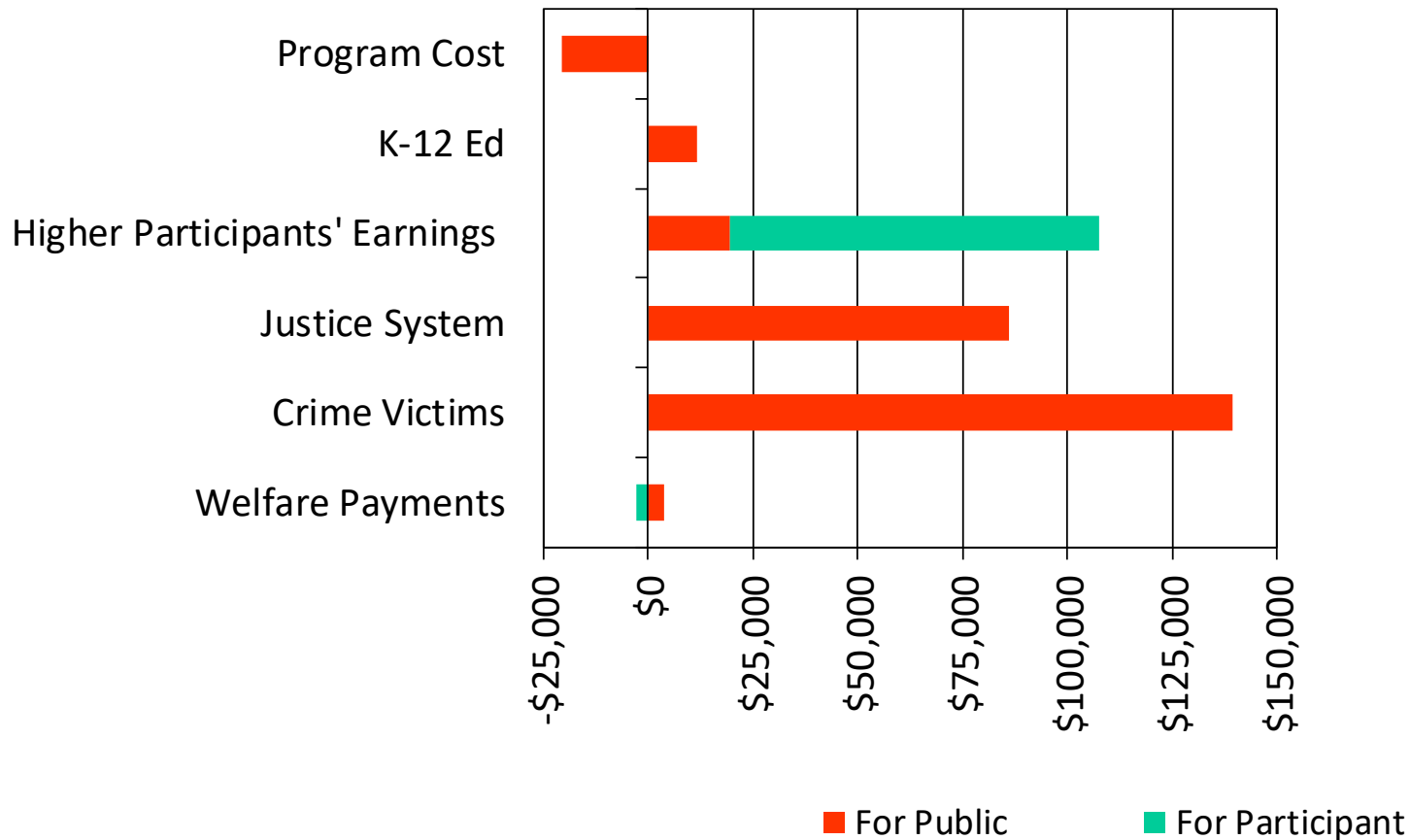


Source: Hart & Risley (1995)

Average reading scores of U.S. children by socio-economic status group (parent education)



Perry Preschool—Costs and Benefits Over 62 Years



Source: Schweinhart, et al. (2005)

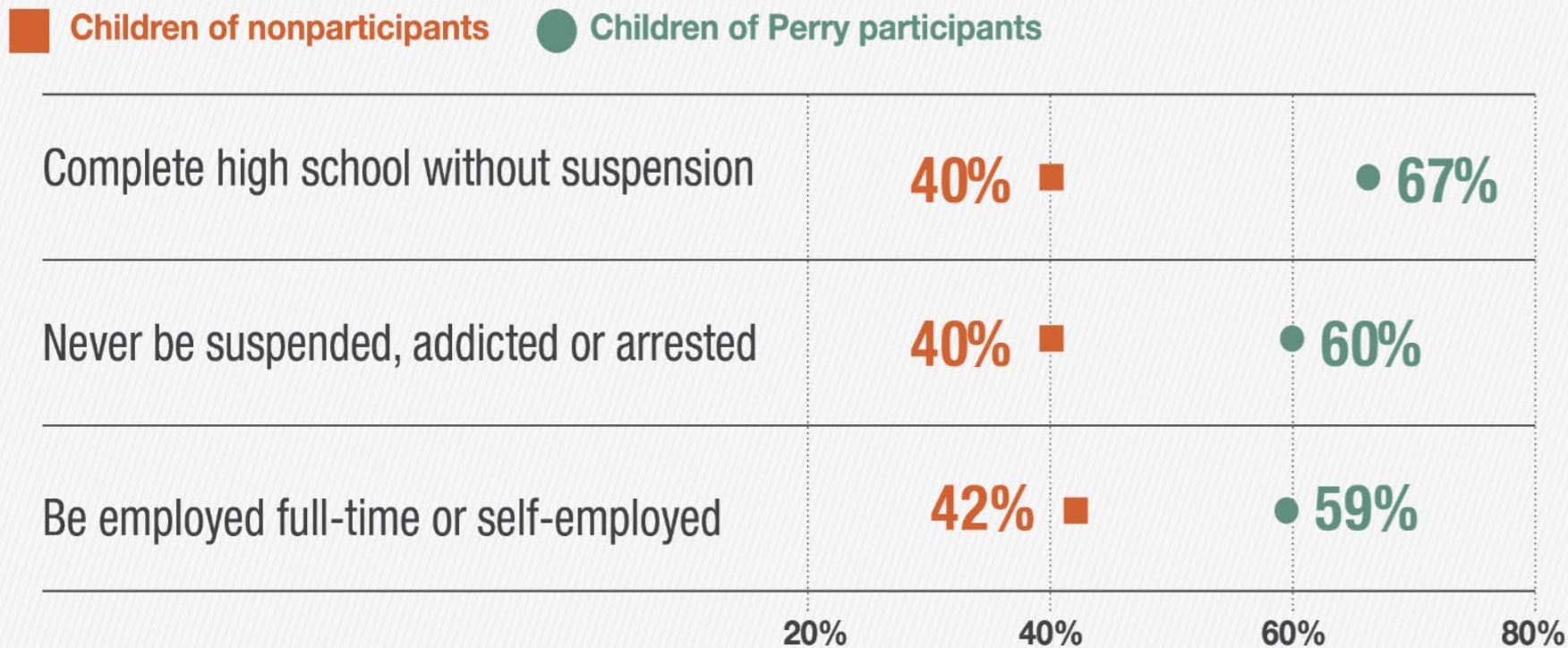
Perry Preschool—Estimated Return on Investment

- Benefit-Cost Ratio = \$16 to \$1
- Annual Rate of Return = 18%
- Public Rate of Return = 16%
- Heckman Reanalysis = 10%



Sources: Schweinhart, et al. (2005); Author's calculations; Heckman, Moon, Pinto, Savelyez, & Yavitz (2010)

Perry Preschool: Intergenerational Effects



Benefit-Cost Ratios for Other Longitudinal Studies



- Abecedarian Educational Child Care
 - \$7 to \$1
- Chicago-Child Parent
 - \$10 to \$1
- Elmira Prenatal/Early Infancy Project
 - \$5 to \$1

Sources: Garcia, Heckman, Leaf, & Prados (2016); Reynolds, Temple, White, Ou, & Robertson (2011); Karoly, et al (1998)

High return principles

- Invest in quality
- Engage parents
- Start early
- Bring to scale
- Match services to risk profile

Early childhood development investment opportunities

- Home visiting programs for families with pregnant women and young children
- Early health, nutrition, and dental care
- Access to high-quality early care and education programs
- Parent education
- Intersection between child protection system and early childhood services, including mental health services

■ Early childhood investments by government jurisdiction

	Federal	State	County	City	School District
Home visiting					
Health & nutrition					
ECE programs					
Quality Rating and Improvement					
Parent education (group)					
Child welfare system					

■ Government cost savings or increased revenue associated with early childhood investments

	Federal	State	County	City	School District
Medicaid and unpaid medical care					
TANF					
Child welfare system					
Education					
Criminal justice system					
Increased tax revenue					

Early care and education market participants

ECE providers

Parents

Businesses

**Government and
taxpayers**

Licensed ECE providers

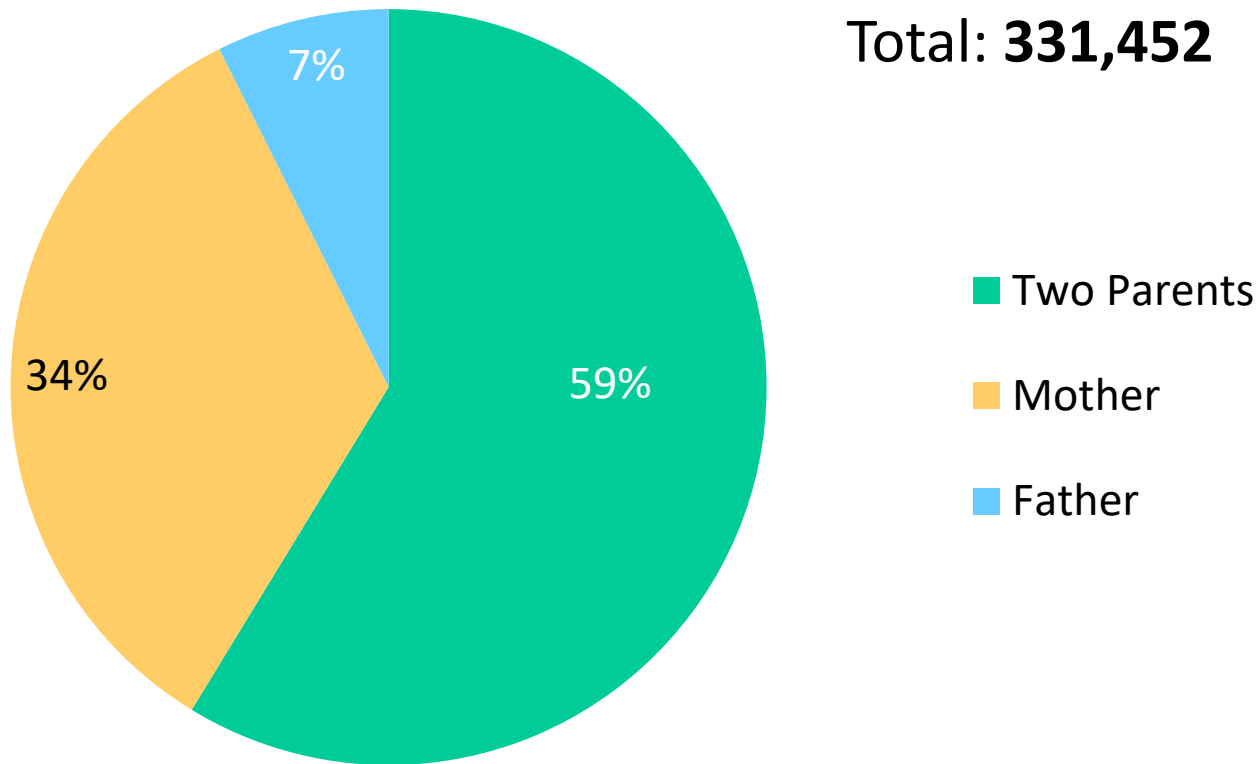
- Home-based or family child care
- Center-based child care
- Private preschool
- Public preschool
- Head Start and Early Head Start

Non-licensed providers refer to informal arrangements with a family member, friend, or neighbor

Parents: Decision to trade off parental care for child care

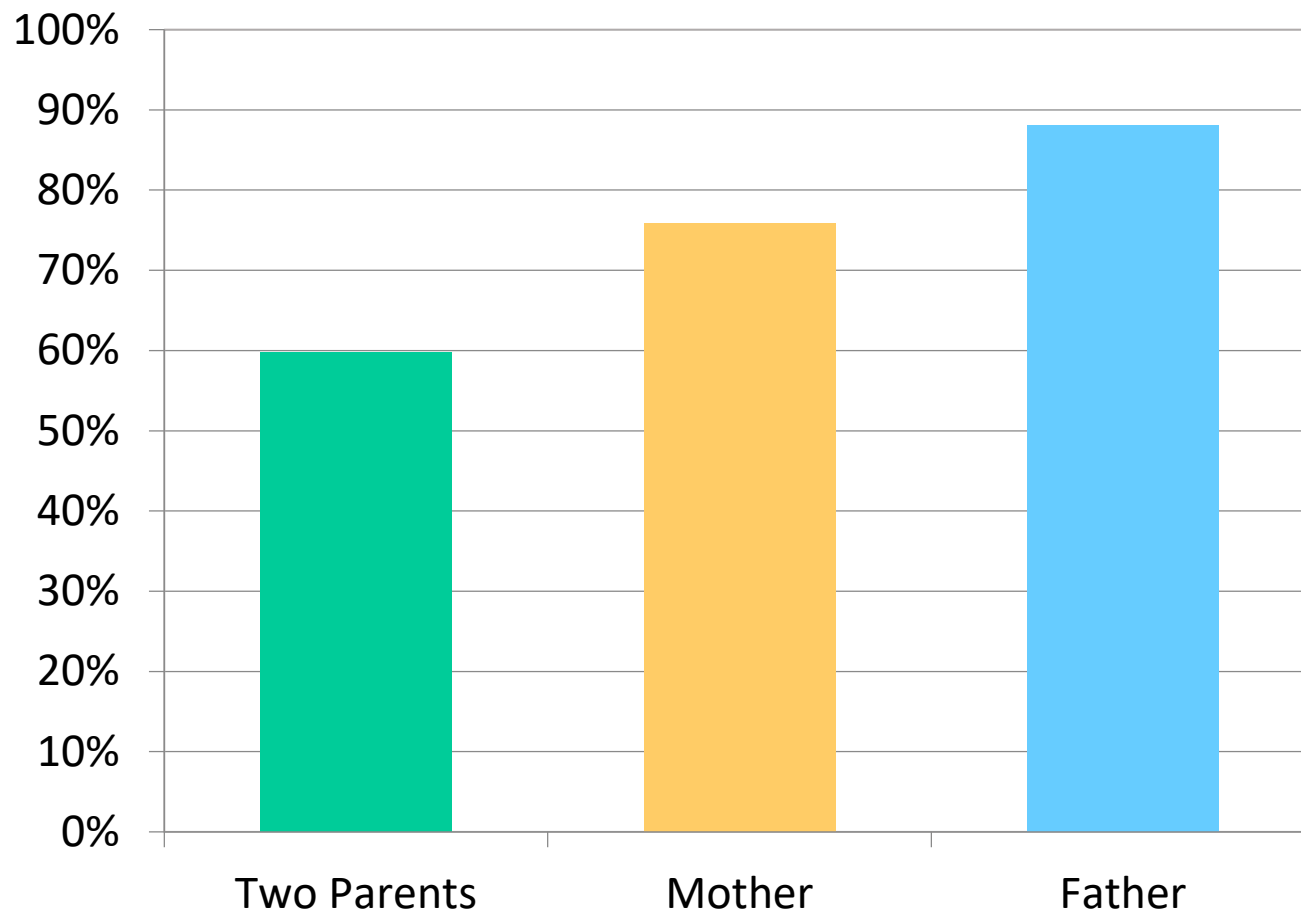
- Work vs. parental care preferences
- Wages, benefits, and job conditions
- Quality child care threshold
- Cost of child care

South Carolina Children Under Age 6 Living with Two Parents, Mother, or Father



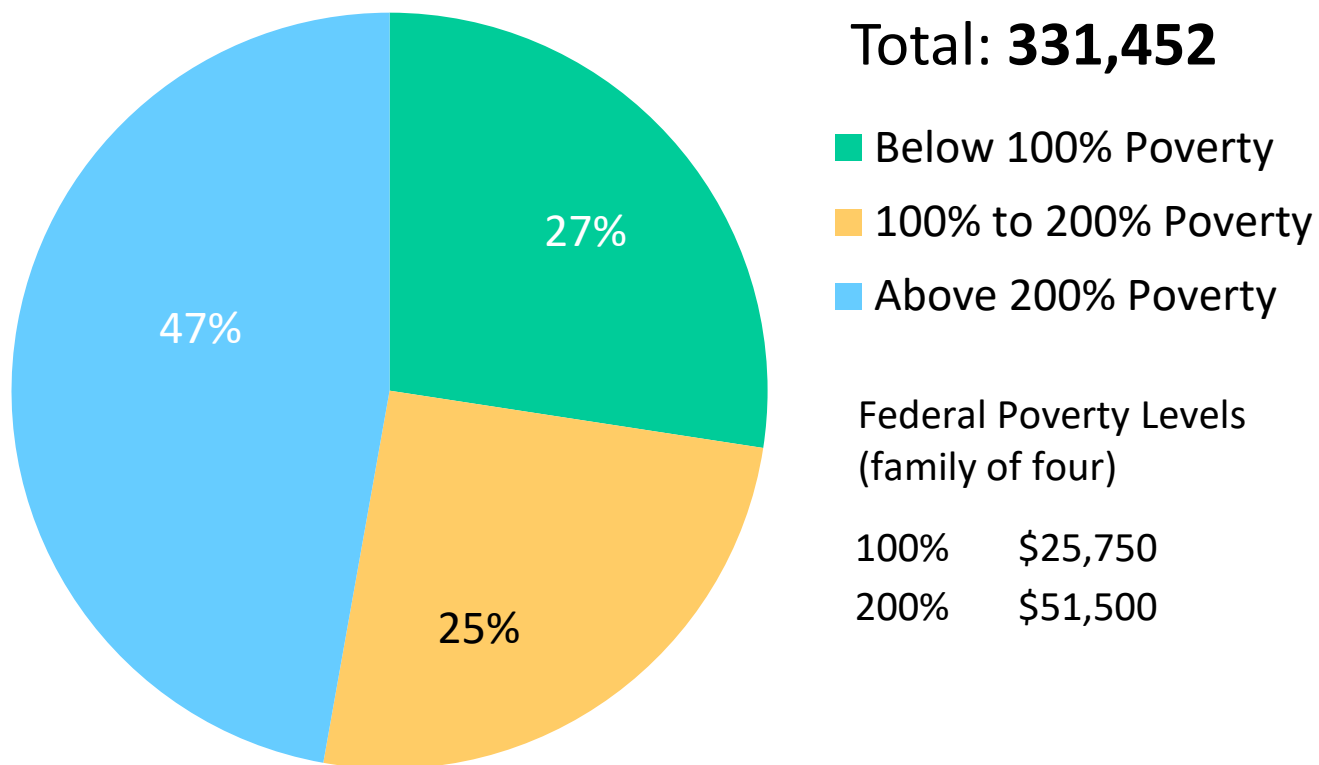
Source: American Community Survey, 2013–2017 5-Year Estimates

South Carolina Children Under Age 6, Percent of Parents in Labor Force by Living Arrangement



Source: American Community Survey, 2013–2017 5-Year Estimates

South Carolina Children Under Age 6 by Poverty Level



Source: American Community Survey, 2013–2017 5-Year Estimates

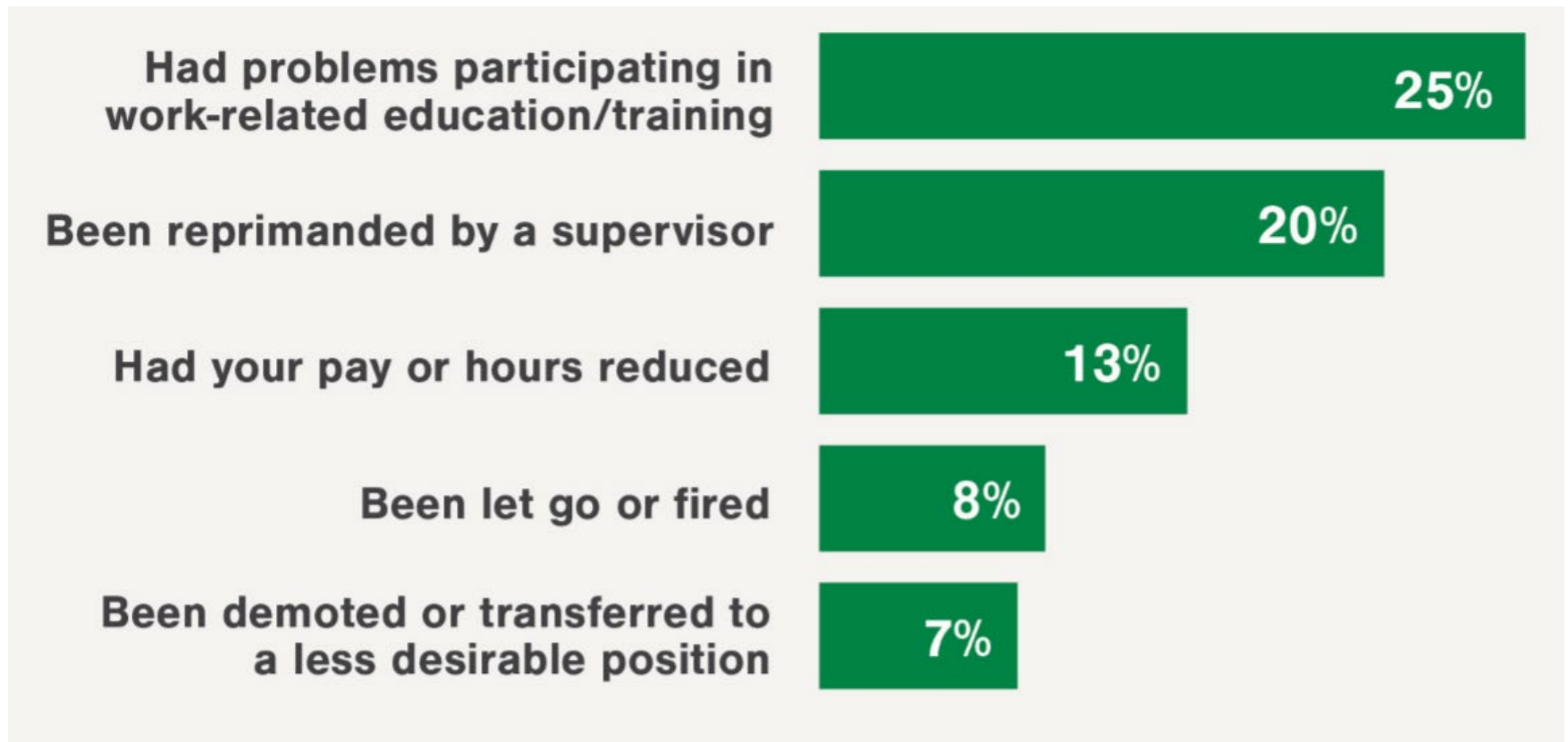


Businesses: Decision to provide support for employees to access child care

- Availability of workers
- Costs to recruit and retain employees
- Employee productivity

Productivity and Performance at Work

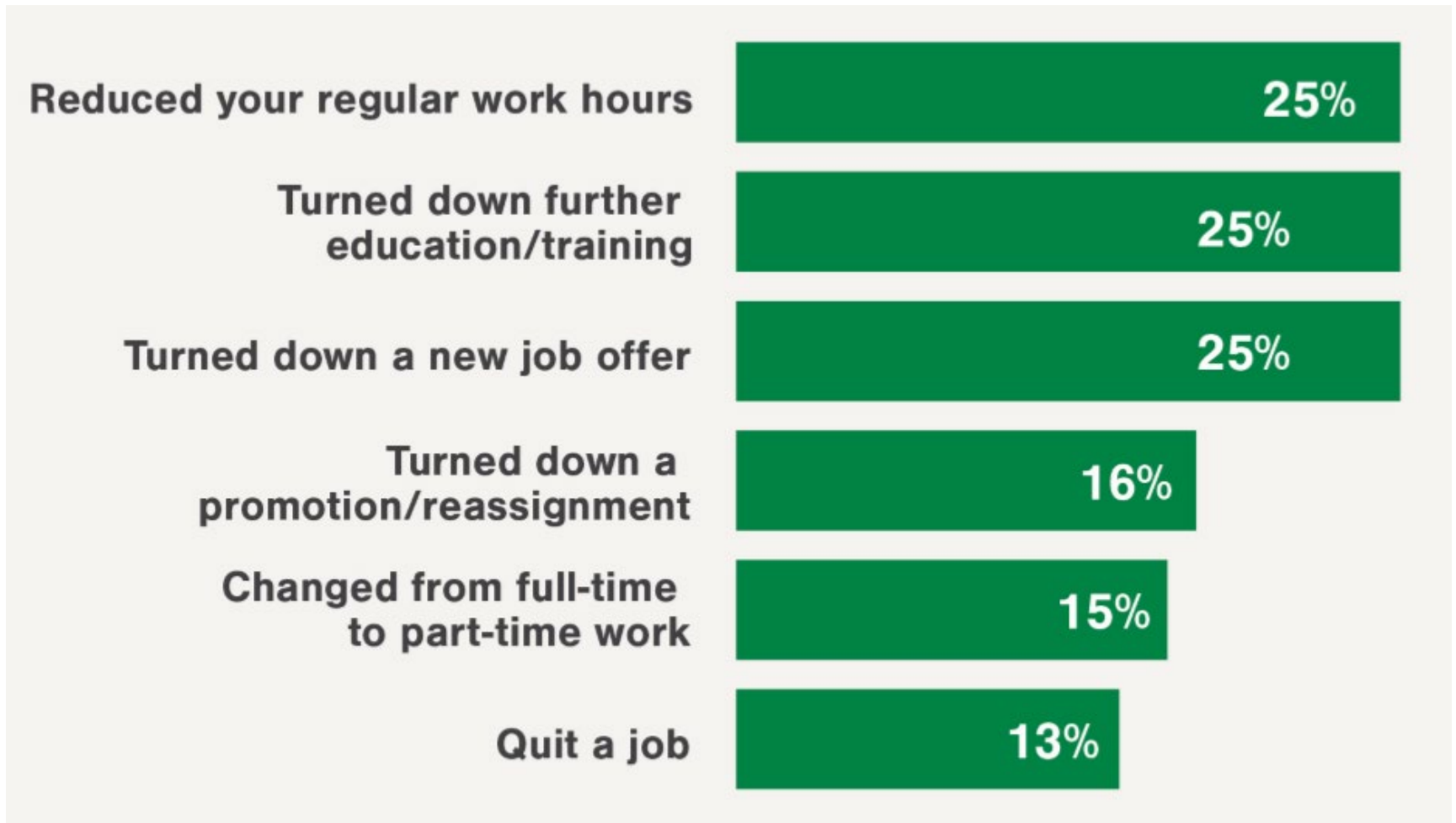
As a result of child care (age 0-2) problems have you ever:



Source: Belfield (2018)

Career Pathways

As a result of child care (age 0-2) problems have you ever:



Source: Belfield (2018)

Based on the parent survey results, a model generates the following annual average cost estimates:

- Working parents lose \$37 billion (lost earnings and extra costs of job search)
- Businesses lose \$13 billion (lost revenues and extra costs to rehire)
- Taxpayers lose \$7 billion (lower income tax and sales tax)

Minnesota Early Learning Scholarships

- \$70 million annually
- Attend QRIS-rated providers
- Eligibility
 - Children ages 3 and 4 below 185% poverty and younger siblings
 - Children ages 0 to 2 who have a teen parent, homeless, child welfare services, or foster care

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- Early education and health investments can yield high public returns when reaching disadvantaged children.
- High-quality early care and education (ECE) supports child development and parental employment.
- ECE public policy: Provide resources to low- to moderate-income families to access a variety of high-quality ECE programs.



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