Early Investment in Kids Can Pay Off

Inflation-adjusted rates of return estimated to reach 10 percent or higher*

BENEFITS FOUND IN LONG-TERM EARLY CHILDHOOD STUDIES

- Better prenatal health
- Higher high school graduation rates
- Reduced abuse and neglect
- Reduced special education
- Increased tax revenue
- Reduced crime
- Increased adult earnings

* Based on rigorous longitudinal studies of early childhood development programs that target vulnerable children and families.
Brains Are Built Through Experiences

700 to 1,000 new neural connections are formed each second in the infant brain.

Caregivers who are responsive to a child’s signals through “serve and return” interactions facilitate healthy brain architecture.

A child without supportive adults who experiences “toxic stress” can develop weakened brain architecture.

**CHILD SIGNALS:**
- Cries
- Gestures
- Babbles

**CAREGIVER RESPONSES:**
- Hugs
- Words
- Eye contact

**TOXIC STRESSORS INCLUDE:**
- Chronic neglect
- Exposure to violence
- Physical or verbal abuse
- Caregiver mental illness or drug abuse

Copyright 2017 Federal Reserve Bank of Minneapolis
For citations of the studies that support the key messages depicted in this image, visit minneapolisfed.org/2017FRSConference.
Valuable Skills Are Developed in Childhood

Early childhood and adolescence are critical times for forming capabilities employers need.

- Self-regulation
- Cognitive flexibility
- Teamwork
- Critical thinking
- Planning

Copyright 2017 Federal Reserve Bank of Minneapolis
For citations of the studies that support the key messages depicted in this image, visit minneapolisfed.org/2017FRSConference.
Housing and School Success Are Linked

Safe and affordable housing can improve educational outcomes

- Improved housing quality
- Increased housing stability

- Improved physical and mental health
- Decreased school absences

- Higher achievement test scores
- Reduced grade repetition

Children who live in poor housing conditions are more likely to experience:

- Asthma
- Lead poisoning
- Overcrowding
- Frequent moves

Copyright 2017 Federal Reserve Bank of Minneapolis
For citations of the studies that support the key messages depicted in this image, visit minneapolisfed.org/2017FRSConference.
Achievement Gaps Start Early and Persist

Children of color or low-income status are more likely to lag behind

- **PRE-K**
  - Hear 30 million fewer words

- **KINDERGARTEN**
  - Demonstrate less academic readiness

- **4TH GRADE**
  - Lower reading test scores

- **8TH GRADE**
  - Lower math test scores

- **HIGH SCHOOL**
  - Less likely to graduate

- **COLLEGE**
  - Less likely to enroll and finish

Copyright 2017 Federal Reserve Bank of Minneapolis
For citations of the studies that support the key messages depicted in this image, visit minneapolisfed.org/2017FRSCconference.
Community Development Investments Matter

Neighborhood assets can improve the futures of children and families

- Community Centers and Libraries
- Health Care Clinics
- Childcare Facilities
- Parks and Sidewalks
- Affordable Housing
- Healthy Food Outlets

Copyright 2017 Federal Reserve Bank of Minneapolis
For citations of the studies that support the key messages depicted in this image, visit minneapolisfed.org/2017FRSConference.