



earlymattersgreateraustin  
(EMGA)

Strategic investments in early childhood development and learning are critical for supporting the workforce of today and preparing the workforce of tomorrow.

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Spring 2021

This communication is divided into five sections and is meant to be a comprehensive template to be tailored to individual audiences:

**The science** underpinning how brains develop

**Detrimental effects** of brain underdevelopment

Ensuring **great starts** for our youngest

Significant **societal benefits**

The **role of businesses** in helping young families

# Key Messages

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## **THE SCIENCE UNDERPINNING HOW BRAINS DEVELOP IS COMPELLING.**

- Brain Architecture – Brains are built, not born
- Serve and Return child engagement builds brains and skills
- Toxic Stress derails health brain development



## **THERE ARE SIGNIFICANT DETRIMENTAL WORKFORCE, ECONOMIC AND SOCIETAL EFFECTS OF BRAIN UNDERDEVELOPMENT.**

- Underdeveloped brains risk gaps in language, memory, socio-emotional processing and cognitive control/self-regulation
- There can be profound detrimental effects to education progress
- There can also be profound health (physical and mental) costs
- Finally, U.S. society can be deeply held back – our workforce and our productivity



## **THE GOOD NEWS IS THAT THERE ARE MANY WAYS TO ENSURE GREAT STARTS FOR OUR YOUNGEST, OUR FUTURE WORKFORCE.**

- Healthy Beginnings: Keep family health and development on track, starting at birth
- Supported Families: Ensure children live in safe, stable, and nurturing families and communities.
- Quality Childcare: Ensure high quality birth-through-age-eight learning environments



## **THESE ARE GREAT INVESTMENTS: THE SOCIETAL AND WORKFORCE INVESTMENTS HAVE ROI'S THAT HAVE PROVEN TO BE EXTRAORDINARY.**

- Economic capital created is better than private investment, 13.7% ROI for quality interventions
- Benefits are immediate and long lasting



## **BUSINESSES CAN PLAY SEVERAL ROLES IN HELPING YOUNG FAMILIES.**

- Encouraging family friendly workplaces
- Advancing innovation
- Influencing public policy

Today's discussion, **Workforce of Today and Tomorrow: Ensuring Great Starts for our Youngest**, outlines how to achieve this value creation:

WHAT IF...

Your business  
could achieve  
a **13.7% IRR**  
over **30 years?**

+

Each year  
add **\$200B** to  
**\$1T** in  
economic  
value?

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# The Science





# The Scientific Evidence is Clear – The First Few Years Matter!

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1

## **EARLY EXPERIENCES BUILD BRAIN ARCHITECTURE**

Early experiences affect the development of brain architecture, which provides the foundation for all future learning, behavior, and health. Brains are built, not born.

2

## **SERVE AND RETURN INTERACTION SHAPES BRAIN CIRCUITRY**

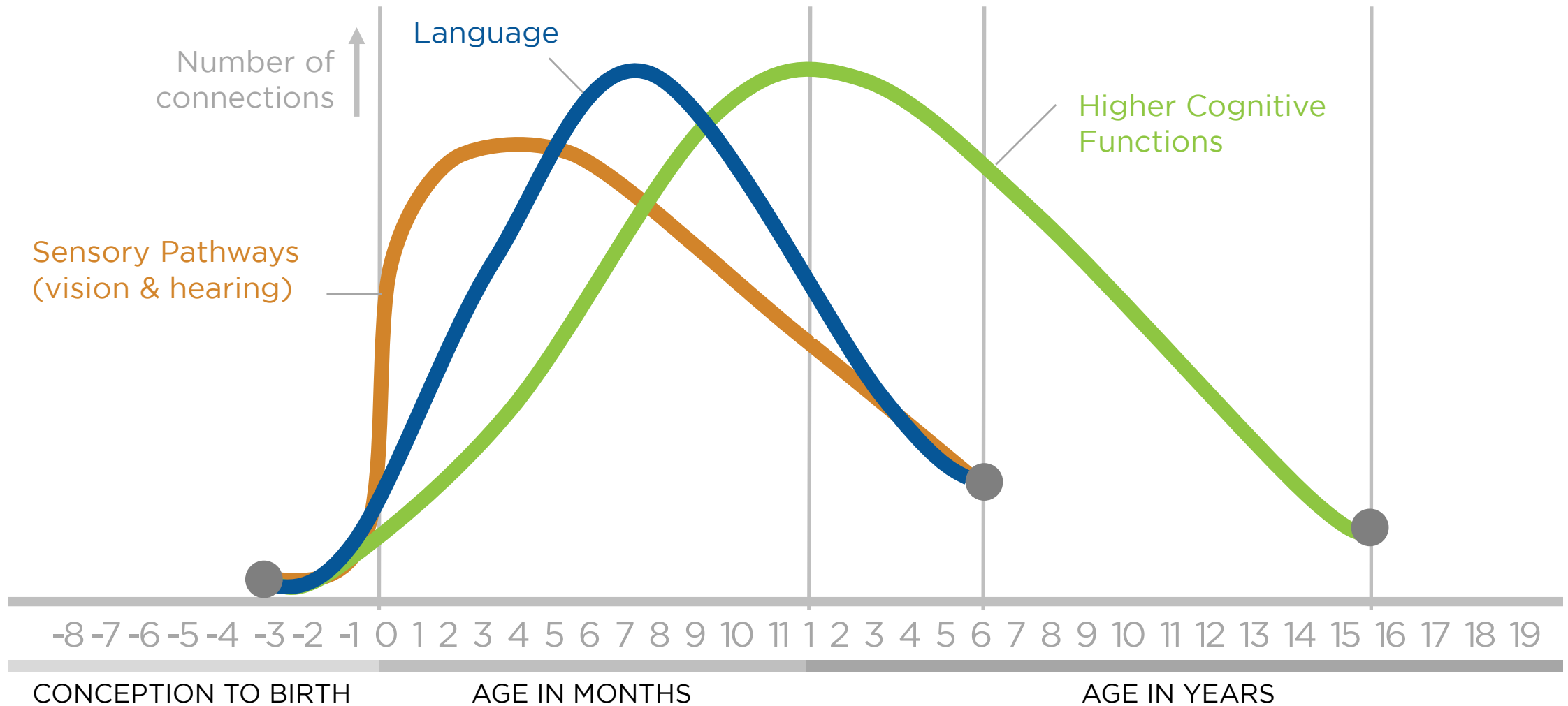
Serve and return interactions shape brain architecture. When an infant or young child babbles, gestures, or cries, and an adult responds appropriately with eye contact, words, or a hug, neural connections are built and strengthened in the child's brain that support the development of communication and social skills.

3

## **TOXIC STRESS DERAILS HEALTHY DEVELOPMENT**

While moderate, short-lived stress responses in the body can promote growth, toxic stress is the strong, unrelieved activation of the body's stress management system in the absence of protective adult support. The unrelenting stress caused by extreme poverty, neglect, abuse, or severe maternal depression can weaken the architecture of the developing brain, with detrimental long-term consequences for learning, behavior, and both physical and mental health.

# Early Experiences Form Brain Architecture





# Early Brain Development: More than 1 Million Neural Connections per Second

**Newborn**

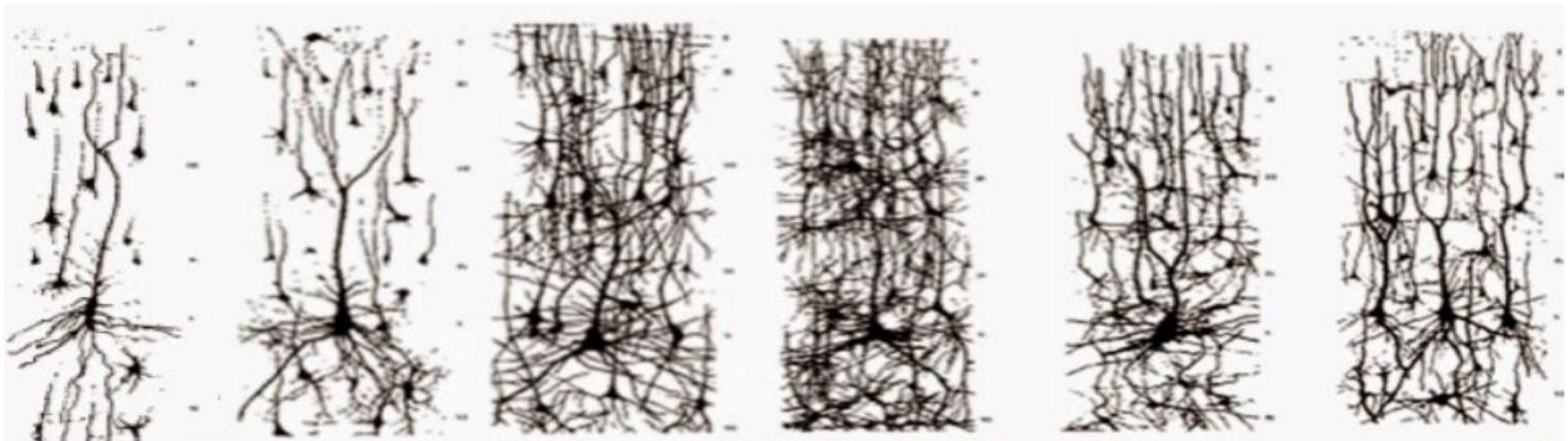
**3 months**

**6 months**

**2 years**

**4 years**

**6 years**



**Synapse Formation**

**Synapse Pruning**

# Serve and Return: Positive Interactions Build Sturdy Brain Architecture

Young children naturally reach out through babbling, facial expressions and gestures.



Serve and Return works like an imaginary tennis match between a child and a caregiver, passing communications between the two.

# Toxic Stress Derails Health Development

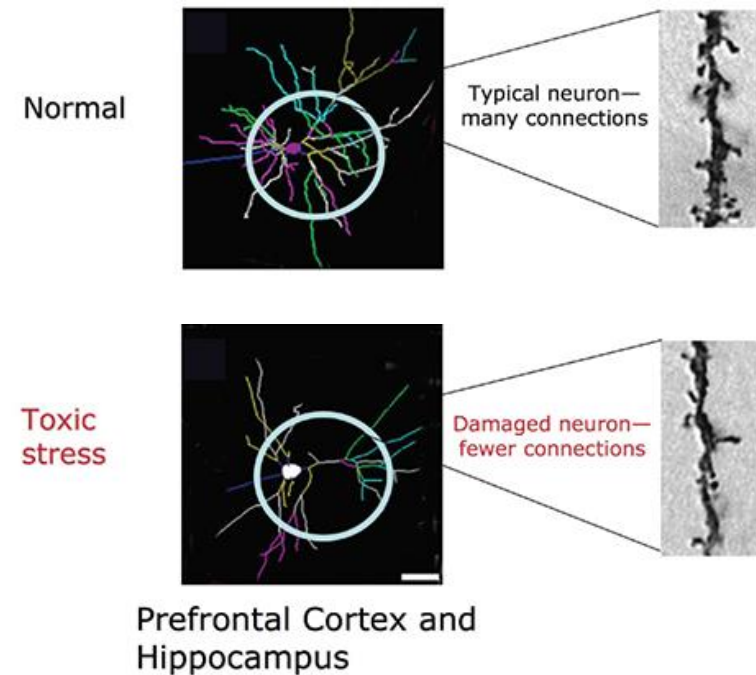


Brief increases in heart rate, mild elevations in stress hormone levels.

Serious, temporary stress responses, buffered by supportive relationships.

Prolonged activation of stress response systems in the absence of protective relationships.

## Persistent Stress Changes Brain Architecture





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## Detrimental Effects

# Early Brain Development Ultimately Affects Workforce Capabilities and Society At Large

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## Early Brain Development Environment

- Childcare Serve and Return Environment
- Stress Environment

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## Affects Fundamental Abilities

- Socio-Emotional Processing
- Cognitive and Self Control
- Language
- Memory

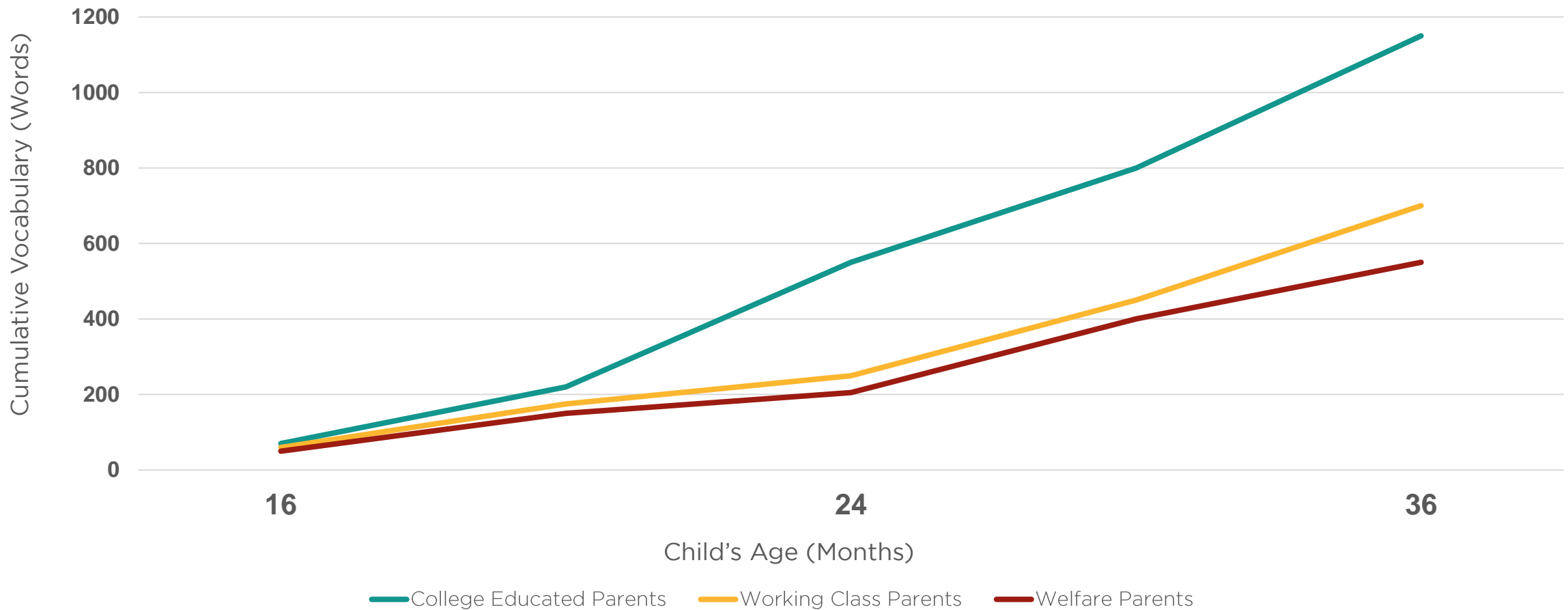
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## Which Affects the Workforce of Today and the Future

- Health
- Education
- Workforce
- Society

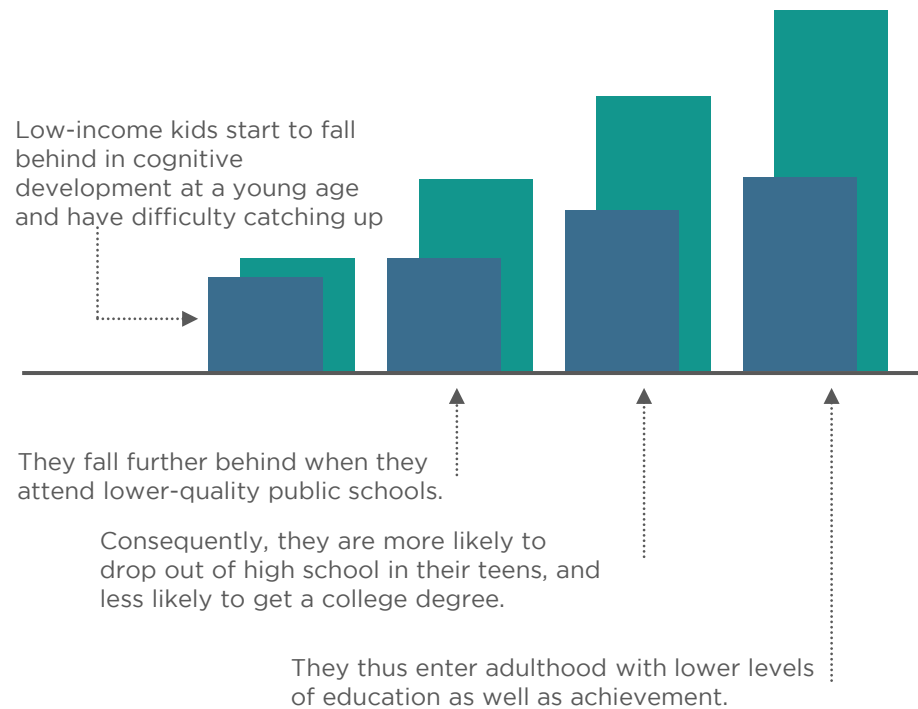
# Educational Effects: Owing to Undeveloped Brain Architecture, Many Children Enter School Behind Their Peers

## Children's Cumulative Vocabularies Differ By Household Experience



# Educational Effects: Children Who Start Behind Often Stay Behind

Poverty puts children at a disadvantage  
Research shows that, all else being equal...



Research shows that access to high-quality early childhood development and learning can dramatically reduce the inequality of and transform the future economic trajectory of children who grow up living with poverty.

Students living in poverty who **do not** receive high-quality ECD are less likely to be productive citizens and workers.

They are:

- **25% more likely to drop out of school**
- **40% more likely to become a teen parent**
- **50% more likely to be placed in special education**
- **60% less likely to attend college**



# Education Effects: Texas Education Statistics

## STAAR Percent at Meets Grade Level or Above (All Grades)

	ALL	Reading	Math	Writing	Science	Social Studies
ALL	48%	46%	50%	41%	51%	53%
African American	35%	34%	34%	30%	36%	42%
American Indian	46%	44%	47%	40%	49%	54%
Hispanic	79%	76%	83%	75%	81%	80%
Pacific Islander	42%	39%	44%	34%	43%	46%
White	50%	47%	52%	43%	53%	56%
Pacific Islander	62%	61%	61%	54%	66%	65%
Two or More Races	57%	57%	56%	50%	61%	62%
Econ. Disadv.	38%	36%	40%	31%	40%	42%

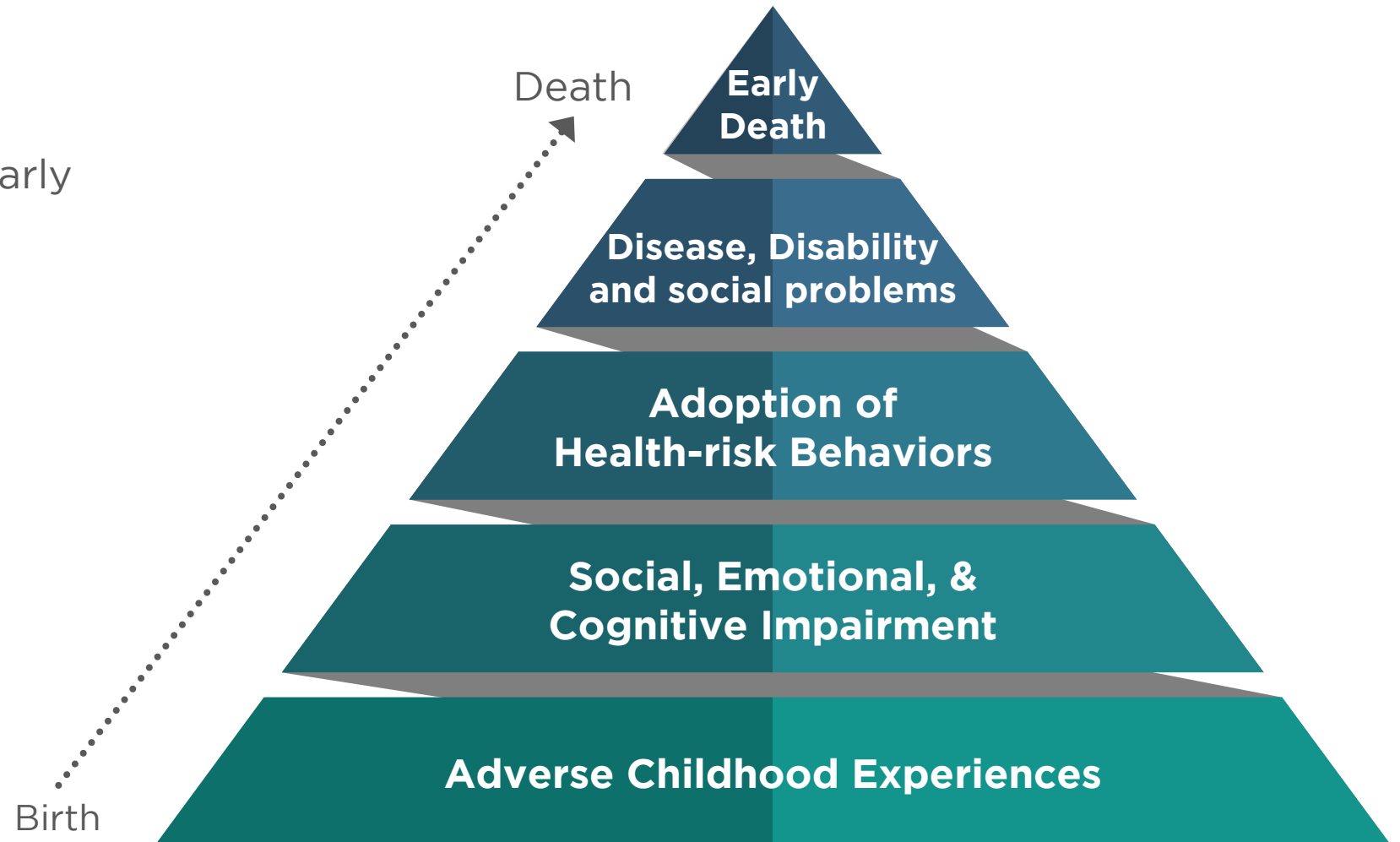
## Kindergarten Readiness (2017-18)

	Number Kinder-Ready*	Number Assessed	% Kinder Ready
All Assessed Kindergarteners	141,432	298,931	47.3%
Eligible, Attended Public Pre-K	63,870	136,182	46.9%
Eligible, Did Not Attend Public Pre-K	19,886	62,705	31.7%
Not Eligible	57,676	100,044	57.7%



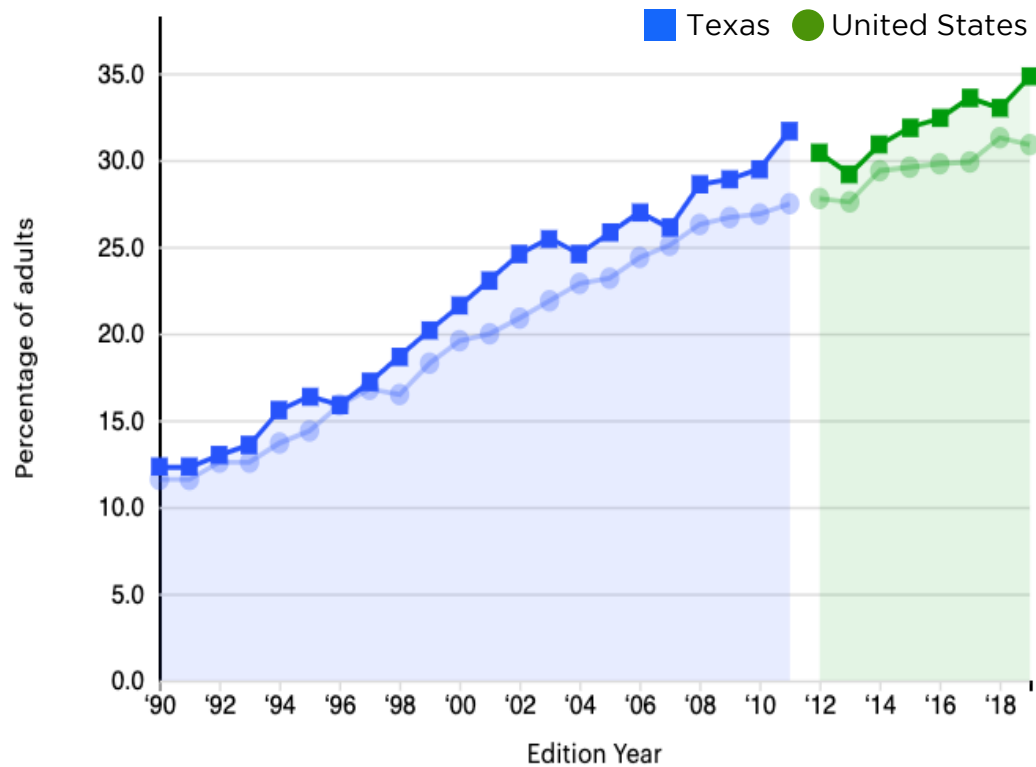
# Health and Behavioral Effects of Toxic Stress are also Well Documented

Relationship between early childhood trauma and health and well-being problems later in life.

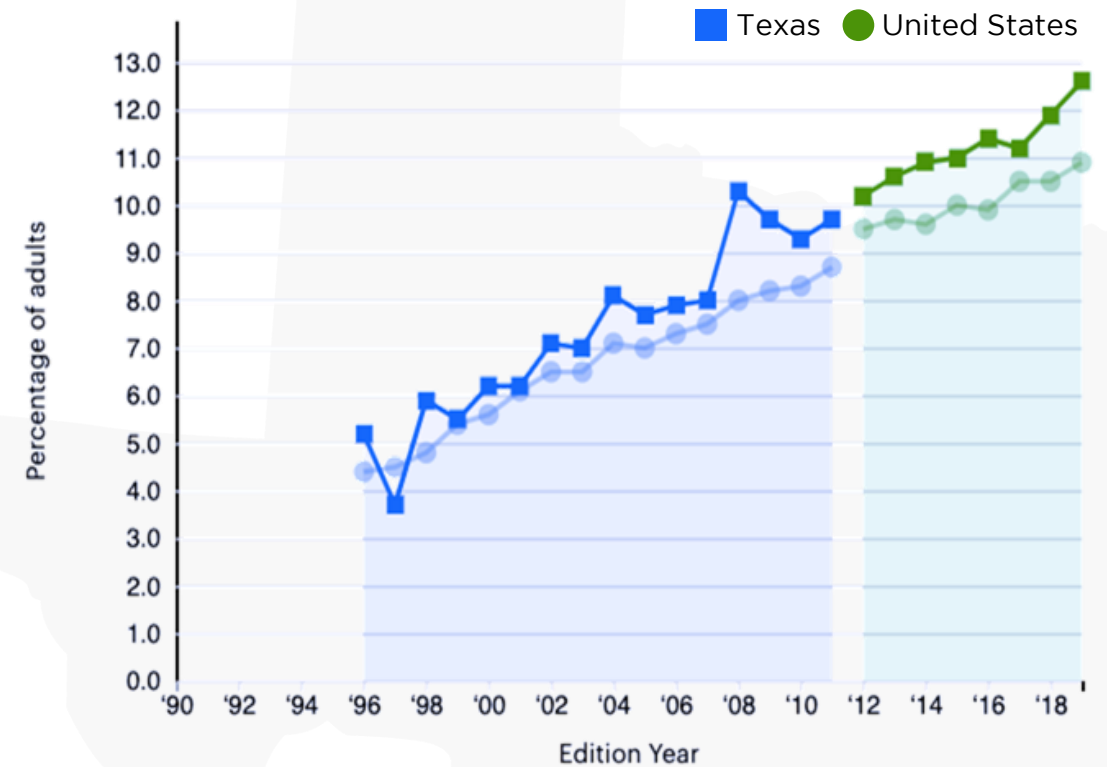


# Health Effects: Selected Texas Healthcare Statistics

## Trend: Obesity



## Trend: Diabetes



# Workforce and Societal Effects: Economic Impacts Run into Many Billion Dollars Annually

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McKinsey  
& Company

The long run economic impact of the school achievement gap is the “equivalent of a permanent recession”



Having family friendly policies in place for families with the very youngest children:

- Increase the ability to attract employees
- Reduce Turnover
- Reduce Absenteeism



Louisiana, Maryland, Georgia, Washing and Indiana conducted reports and found the they each lose over \$1 billion annually in economic activity due to break downs in childcare”

”\$3 billion in revenue is lost annually due to absenteeism as the result of childcare breakdowns”

# Workforce and Societal Effects: Economic Impacts Run into Many Billion Dollars Annually

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**Michigan:** “Access to high-quality childcare is the primary barrier to workforce participation”

**Louisiana:** “Inadequate childcare costs the state of Louisiana \$2 billion per year due to employee absences and lost workplace productivity”



“Working families across the country lose \$57 billion in wages, productivity and revenue annually due to inadequate childcare access”



Estimates that Toxic Stress causes **\$112.5 billion of economic impact annually**



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# Ensuring Great Starts for Our Youngest



# Ensuring Great Starts for Our Youngest

## The Good News: It's Achievable

Each child can have equality of early childhood development opportunity with aligned state and local policies, firm/business level actions and practices rooted in child development, including:



### HEALTHY BEGINNINGS

Keep family health and development on track, starting at birth.



### SUPPORTED FAMILIES

Ensure children live in safe, stable, and nurturing families and communities.



### QUALITY CHILDCARE

Ensure high quality birth-through-age-eight learning environments with regular attendance.





# Examples of Actions to Build the Workforce of the Future

	Healthy Beginnings	Supported Families	Quality Childcare
Firm Level Actions	<ul style="list-style-type: none"> <li>• Health Insurance</li> <li>• Family Leave</li> </ul>	<ul style="list-style-type: none"> <li>• Flexible Scheduling</li> <li>• Education on Tax and Available Subsidy</li> <li>• Living Wage</li> </ul>	<ul style="list-style-type: none"> <li>• Subsidized or On-Site Childcare</li> <li>• Flexible Spending Accounts</li> </ul>
Gov't Level Actions	<ul style="list-style-type: none"> <li>• Medicaid</li> <li>• WIC</li> </ul>	<ul style="list-style-type: none"> <li>• Childcare Tax Credits</li> <li>• EITC</li> <li>• Minimum Wage</li> </ul>	<ul style="list-style-type: none"> <li>• Childcare Block Grants</li> </ul>



## Direct Business Benefits

- Decreased turnover
- Decreased absenteeism
- Increased ability to attract quality new employees
- Greater company morale
- Increased positive brand



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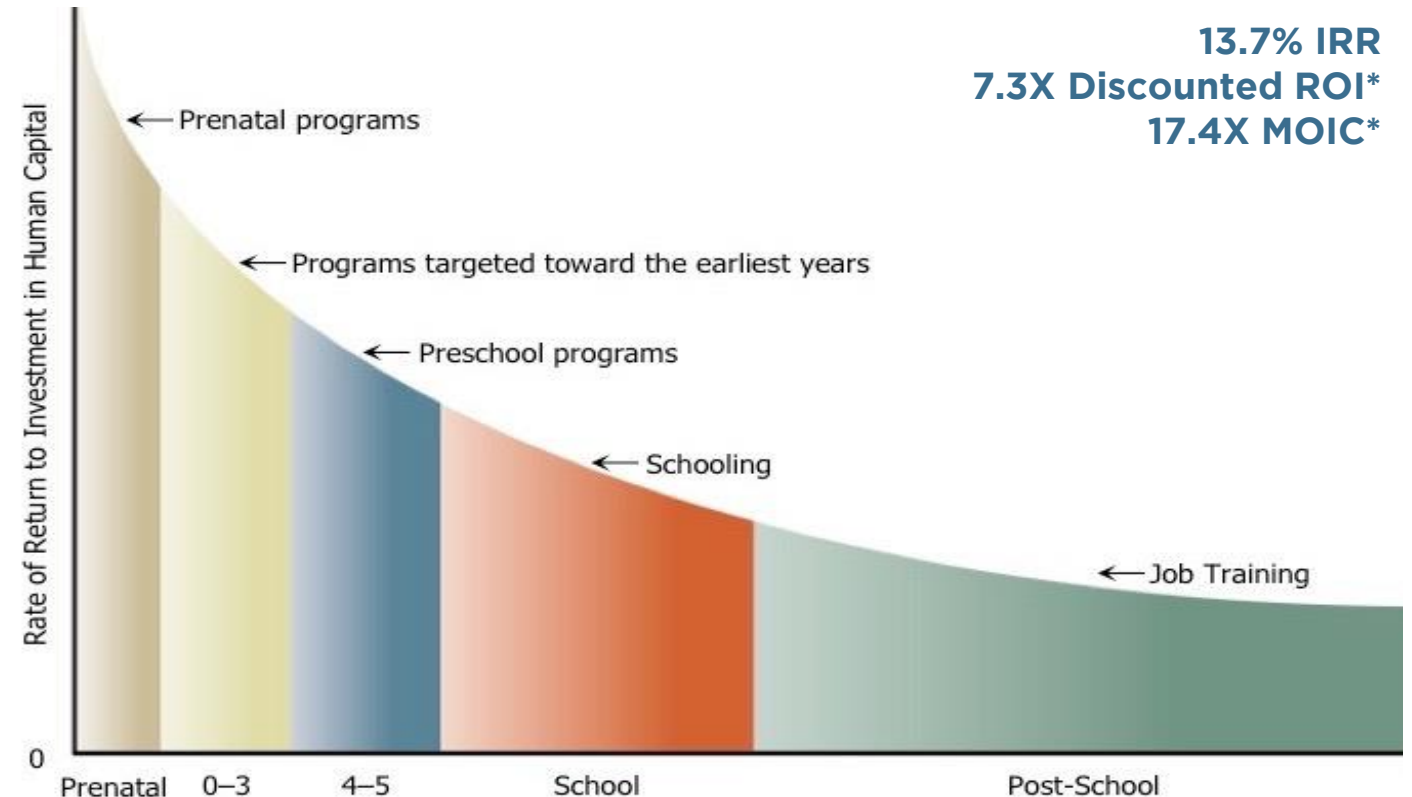
## Significant Social Benefits

# Human Capital Creates Economic Capital With Returns Beating Private Equity Returns



“The foundation for school, career and life success is largely determined through the development of cognitive and character skills beginning in children’s earliest years.”

**Professor James Heckman**  
Nobel Laureate



\* Discounted ROI is the discounted value of the intervention divided by discounted cost of the intervention, MOIC undiscounted multiple on invested capital

# Benefits are Immediate and Long-Lasting\*



- Healthier pregnancies
- **Reduced child abuse and neglect**
- Fewer emergency room visits
- Increased earnings and less welfare for parents

- **Increased kindergarten readiness**
- Fewer developmental delays
- Reduced school and parental work absenteeism

- Reduced grade retention and special education placement
- **Increased reading and math proficiency**
- Better health outcomes and lower costs

- **Higher graduation rates**
- Reduced crime
- Higher earnings
- Less reliance on social services

\* Benefits outlined in Heckman's work. Excludes many firm level benefits of employee attraction, retention and productivity.



An aerial photograph of a city skyline, featuring numerous high-rise buildings and a river with a bridge. The image is overlaid with a semi-transparent blue filter. The number '5' is centered in the upper half of the image, with a horizontal line underneath it.

5

# The Role of Business

# Summary of Economic, Societal, and Firm Effects

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## More Rapidly Grow the Economy

- More Workers
- More Skills



## Decrease Dependency on the Government

- Reduced Healthcare Costs
- Fewer Special Ed Students
- Less Incarceration



## Make Your Company More Competitive

- More Skilled Workers
- Easier to Attract Talent
- Less Absenteeism
- Less Turnover

# Businesses Can Play a Three-Fold Role in Austin

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## ENCOURAGING FAMILY-FRIENDLY WORKPLACE PRACTICES

- Working to increase awareness about the benefits of family-friendly workplace policies through the Best Place for Working Parents online assessment and EMGA's online toolkit.
- We support, encourage, and recognize businesses that are committed to improving family-friendly practices.



## ADVANCING INNOVATION AND EDUCATION

- Establishing Austin as a region positioned to incubate, pilot, and scale innovative solutions to challenges facing the early childhood sector.
- Working to increase awareness about the importance of investing in early childhood development.



## INFLUENCING PUBLIC POLICY

- Advocating for effective early childhood public policy locally and statewide.



# Encouraging Family-Friendly Workplace Practices: Austin Examples

Impact Area	Actions - Examples
<ul style="list-style-type: none"><li>• Healthy Beginnings</li></ul>	<ul style="list-style-type: none"><li>• Health Insurance</li><li>• Maternity/Family Leave</li><li>• Breastfeeding Benefits</li></ul>
<ul style="list-style-type: none"><li>• Supported Families</li></ul>	<ul style="list-style-type: none"><li>• Flexible Scheduling</li><li>• Living Wage</li><li>• Working Remotely</li></ul>
<ul style="list-style-type: none"><li>• Quality Childcare</li></ul>	<ul style="list-style-type: none"><li>• Subsidized or On-site Childcare</li><li>• Child Care Assistance</li></ul>



## **Direct Business Benefits**

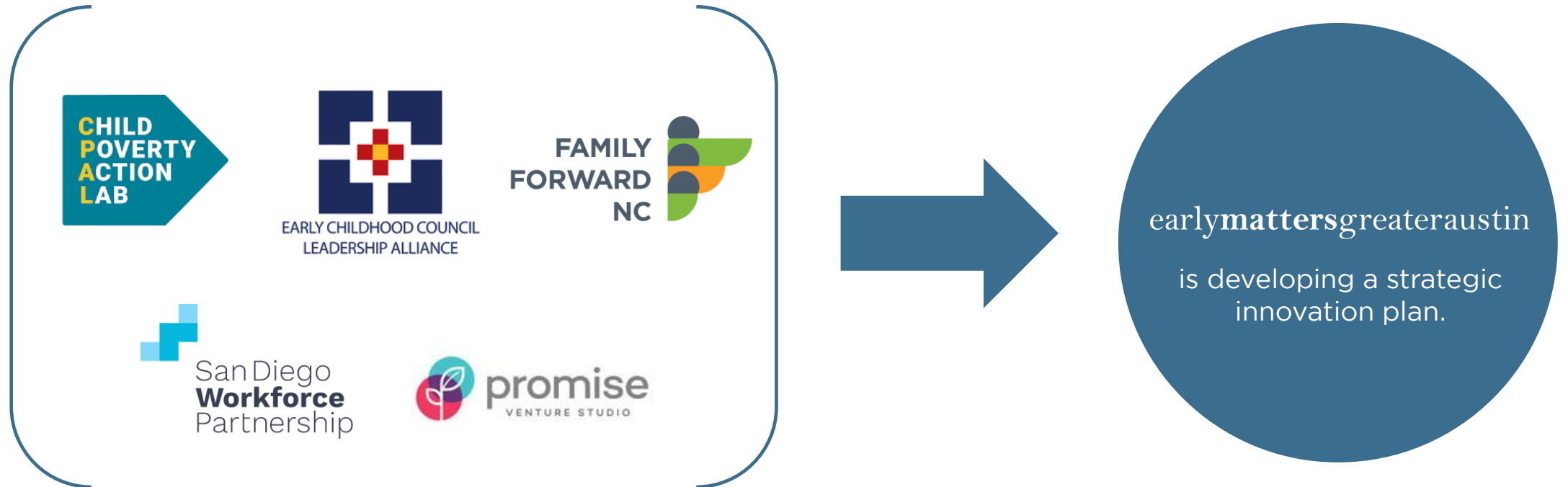
- Decreased turnover
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- Increased ability to attract quality new employees
- Greater company morale
- Increased positive brand

# Businesses that received the designation as a Best Place for Working Parents™

- 4th Tap Brewing Co-op
- ABC Home & Commercial Services
- Aero Capital Solutions, Inc.
- AffiniPay
- AIBA
- AlertMedia
- Amplify Credit Union
- Angels Care & Learning Center
- Antonelli's Cheese Shop
- Any Baby Can
- Atlassian
- Austin Board of Realtors
- Austin Community College
- Austin Partners In Education
- Austin PBS
- Austin Private Wealth, LLC
- Austin Young Chamber
- Baker Botts LLP
- Bank of America
- Baylor Scott & White Health
- Board.org
- Bright Beginnings
- Britt Design Group
- Business and Community Lenders of Texas
- Cain & Skarnulis PLLC
- Capital One
- Central Texas Food Bank
- Central Texas Pediatric Orthopedics
- ChalkCast
- Chameleon Hospitality
- City of Austin
- Civilitude
- Communities In Schools of Central Texas
- Community Impact Newspaper
- Con Mi MADRE
- Dell Technologies
- Dillon Joyce Ltd
- DLA Piper LLP (US)
- Dochen Realtors
- E3 Alliance
- Elizabeth Christian Public Relations LLC
- Encotech Engineering Consultants, Inc.
- Endeavor Real Estate Group
- Enoch Keever PLLC
- Enverus
- Epoch Coffee
- Force Point
- Farmers Insurance
- Genuine Article Bookkeeping
- Google
- Greater Austin Chamber of Commerce
- Greater Austin Hispanic Chamber of Commerce
- Hahn Public Communications
- IBM
- INK Communications Co.
- Intertech Flooring
- Jones-Dilworth Inc.
- Kendra Scott
- Kerby Lane Cafe, Inc.
- KUT Public Media
- KVUE
- Live Oak
- Lively Video
- Luminex Corporation
- Macmillan Learning
- Marvel Marketers
- Maxwell Locke & Ritter
- MAYA Consulting
- McGinnis Lochridge
- McKinsey & Company
- National Instruments
- Nelsen Partners, Inc.
- Notley Ventures
- O'Connell Robertson
- Office of U.S. Congressman Lloyd Doggett
- Olamaie Restaurant Holdings LLC
- Osano, Inc., a Public Benefit Corp
- Patagonia
- Procure Technologies
- Quack's 43rd Street Bakery LLC
- RetailMeNot
- Saucedo Industries
- Sense Corp
- Shalom Austin
- SKG Inc.
- Skimmer Inc.
- Slalom
- St. David's Foundation
- Superior HealthPlan
- Sweet Ritual
- Tecovas
- Texas Mutual Insurance Company
- Texas Workforce Commission
- The Butler Bros
- The Center for Health, Work & Environment
- The Girls' School of Austin
- Thinkery
- United Way for Greater Austin
- United Ways of Texas
- University Federal Credit Union
- Velocity Credit Union
- Verb, Inc.
- Walsh Gallegos Trevino Russo & Kyle, P.C.
- Wittliff Cutter
- Workforce Solutions Capital Area - Workforce Board

# Advancing Innovation

Throughout the nation, businesses are joining with governments and community organizations to develop innovative Early Childhood Development Solutions.



# Influencing Public Policy: Examples from Austin (2019-2020)

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Advocate for local and statewide policy and funding to increase access to high-quality early education.

- In October 2020, the City of Austin establishes a \$15M SAVE(S) fund to provide relief to vital economic sectors, which included \$5M for child care, \$5M for restaurants and bars, and \$5M for music venues.
- In May 2020, the City of Austin creates a \$1 Million Child Care Relief Support Fund to provide grants to childcare centers in Austin that (1) serve families that receive childcare subsidies (2) have at least a 2-Star quality rating and (3) have not received PPP money through CARES. Austin one of the few Texas cities to establish a grant focused on emergency relief for child care providers.
- The City of Austin incorporated equitable access to quality Early Childhood Education into its 2023 Strategic Plan and will measure the number and percentage of children enrolled in quality early childhood education programs as a key metric.
- Several bills EMGA championed passed into law during Texas' 86th Legislative Session, including: HB3; HB680; SB568; SB706; and SB708.



# How Businesses Can Get Involved in Austin

We ask the business community to support EMGA's efforts to strengthen outcomes for young children.

Join EMGA and become a Champion for Children by getting involved in one or more of these efforts:

- Allowing EMGA to use your name and/or corporate logo (if possible) to help raise awareness
- Informing your networks about the importance of high-quality early learning
- Committing to strengthen your organization's family-friendly workplace policies and practices by taking the [Best Place for Working Parents™](#) assessment
- Helping advance innovation through developing and sharing new ideas, practices, and services
- Engaging as a policy advocate

*earlymattersgreateraustin*

*Join us in investing in our youngest community members.*

*Help create the workforce of tomorrow.*

A photograph of two young children playing on a playground. The child in the foreground is a young girl with a pink hair clip, wearing a dark jacket over a floral t-shirt and pink pants, standing on a tire. The child in the background is a young boy wearing a red t-shirt with the number 18 and dark pants, also on a tire. The background shows a playground with trees and a building. The entire image has a blue tint.

earlymattersgreateraustin

[EARLYMATTERSGREATERAUSTIN.ORG](http://EARLYMATTERSGREATERAUSTIN.ORG)

# Appendix

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**Case Studies on Businesses**