earlymatters greateraustin
EMGA

Workforce of Today and Tomorrow:
Ensuring Great Starts for our Youngest
This communication is divided into five sections and is meant to be a comprehensive template to be tailored to individual audiences:

1. **The science** underpinning how brains develop

2. **Detrimental effects** of brain underdevelopment

3. Ensuring **great starts** for our youngest

4. Significant **societal benefits**

5. The **role of businesses** in helping young families
Key Messages

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?
The Science
The Scientific Evidence is Clear – The First Few Years Matter!

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.

Source: Harvard Center On The Developing Child
Early Experiences Form Brain Architecture

Sensory Pathways (vision & hearing)

Number of connections

Language

Higher Cognitive Functions

CONCEPTION TO BIRTH  AGE IN MONTHS  AGE IN YEARS

Source: North Carolina Family Forward
Early Brain Development: More than 1 Million Neural Connections per Second

Source: Universe Review, StongNation.org/ReadyNation
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

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

**TOLERABLE**
Serious, temporary stress responses, buffered by supportive relationships.

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

Persistent Stress Changes
Brain Architecture

- **Normal**
  - Typical neuron—many connections

- **Toxic Stress**
  - Damaged neuron—fewer connections

Prefrontal Cortex and Hippocampus

Source: Harvard Center on the Developing Child
Detrimental Effects
Early Brain Development Ultimately Affects Workforce Capabilities and Society At Large

1. Early Brain Development Environment
   - Childcare Serve and Return Environment
   - Stress Environment

2. Affects Fundamental Abilities
   - Socio-Emotional Processing
   - Cognitive and Self Control
   - Language
   - Memory

3. 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
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
## STAAR Percent at Meets Grade Level or Above (All Grades)

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

## Kindergarten Readiness (2017-18)

<table>
<thead>
<tr>
<th>Category</th>
<th>Number Kinder-Ready*</th>
<th>Number Assessed</th>
<th>% Kinder Ready</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Assessed Kindergarteners</td>
<td>141,432</td>
<td>298,931</td>
<td>47.3%</td>
</tr>
<tr>
<td>Eligible, Attended Public Pre-K</td>
<td>63,870</td>
<td>136,182</td>
<td>46.9%</td>
</tr>
<tr>
<td>Eligible, Did Not Attend Public Pre-K</td>
<td>19,886</td>
<td>62,705</td>
<td>31.7%</td>
</tr>
<tr>
<td>Not Eligible</td>
<td>57,676</td>
<td>100,044</td>
<td>57.7%</td>
</tr>
</tbody>
</table>

Source: Texas Education Agency, 2017-18 Pocket Addition, Texas Public School Statistics
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

Source: CDC, Behavioral Risk Factor Surveillance System
Workforce and Societal Effects: Economic Impacts Run into Many Billion Dollars Annually

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, Washington and Indiana conducted reports and found they each lose over $1 billion annually in economic activity due to breakdowns 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

**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
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.

Source: North Carolina Family Forward
Examples of Actions to Build the Workforce of the Future

<table>
<thead>
<tr>
<th>Firm Level Actions</th>
<th>Healthy Beginnings</th>
<th>Supported Families</th>
<th>Quality Childcare</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Health Insurance</td>
<td>• Flexible Scheduling</td>
<td>• Subsidized or On-Site Childcare</td>
</tr>
<tr>
<td></td>
<td>• Family Leave</td>
<td>• Education on Tax and Available Subsidy</td>
<td>• Flexible Spending Accounts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Living Wage</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Gov’t Level Actions</th>
<th>Healthy Beginnings</th>
<th>Supported Families</th>
<th>Quality Childcare</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Medicaid</td>
<td>• Childcare Tax Credits</td>
<td>• Childcare Block Grants</td>
</tr>
<tr>
<td></td>
<td>• WIC</td>
<td>• EITC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Minimum Wage</td>
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Direct Business Benefits
- Decreased turnover
- Decreased absenteeism
- Increased ability to attract quality new employees
- Greater company morale
- Increased positive brand
4

Significant Social Benefits
“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

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*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.
The Role of Business
Summary of Economic, Societal, and Firm Effects

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

Source: Early Matters Greater Austin
Businesses Can Play a Three-Fold Role in Austin

**ENCOURAGING FAMILY-FRIENDLY WORKPLACE PRACTICES**
- Working to increase awareness about the benefits of family-friendly workplace policies through the Family-Friendly ATX campaign and online toolkit.
- We support, encourage, and recognize businesses that are committed to improving family-friendly practices.

**ADVANCING INNOVATION**
- Establishing Austin as a region positioned to incubate, pilot, and scale innovative solutions to challenges facing the early childhood sector.

**INFLUENCING PUBLIC POLICY**
- Advocating for effective early childhood public policy locally and statewide.
## Encouraging Family Friendly Workplace Practices: Austin Examples

<table>
<thead>
<tr>
<th>Impact Area</th>
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### Direct Business Benefits
- Decreased turnover
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- Increased positive brand

Source: Early Matters Greater Austin, North Carolina Family Friendly, Boston Consulting Group, ReadyNation
Businesses that Have Committed to Family-Friendly Workplace Practices Through EMGA’S Family-Friendly ATX Campaign

Source: Early Matters Greater Austin, North Carolina Family Friendly, Boston Consulting Group, ReadyNation
Advancing Innovation

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

earlymattersgreateraustin is developing a strategic innovation plan.
Influencing Public Policy: Examples from Austin (2019)

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

- 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 a key metric.

- Partnered with Children at Risk, the Austin Community Foundation, Mayor Steve Adler, and Council Member Pro-Team Delia Garza to highlight the need for high-quality child care as an economic development driver for women in Texas and Austin. EMGA was profiled as the convener of business leaders making the link between economic development and access to high-quality early education.

- Informed policymakers about EMGA’s goals and support for pre-k expansion during the 86th legislative session. This included participating in a press conference at the Capitol, acting as a reference and authority on early education and care for local media outlets, and also participating in Leadership Austin breakfast focused on the importance of early childhood as an economic development issue.

- Several bills EMGA championed passed into law during the 86th 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
• Helping advance innovation through developing and sharing new ideas, practices, and services
• Engaging as a policy advocate