Community Rapid Assessment of the Early Care and Education System in Galveston city in 2018

Executive Summary

Purpose: Community assessment is fundamental to local initiatives for improving the lives of infants, toddlers, and preschoolers. Objectives in the 2011 assessment in Galveston city were to provide information to (1) locate strengths of the local early care and education (ECE) system, (2) determine types and sizes of gaps in the system, and (3) establish baselines for tracking progress and measuring return on investment. The data sources were downloads of information from public internet sites and interviews with spokespersons at each ECE center-based facility licensed by the Texas Department of Family and Protective Services (TDFPS) and each school-based site of pre-kindergarten or ECE program. The 2018 assessment was supported with $7,350 contract award to Third Coast R&D, Inc. from Galveston Sustainable Communities Alliance (GSCA). The 2011 and 2018 assessments were supported in part by grants and contributions to GSCA from members of the Cynthia and George Mitchell Family.

Key Results:

In 2018 there were more than 340 persons employed in providing ECE at 28 school- or center-based facilities in Galveston city. Total enrollment was approximately 1,820 or **70% of Galveston city's resident population of children younger than 5 years of age**. Total of **children in need of ECE was 2,450 or 95% of the city's resident population younger than 5**. The total is a statistically unduplicated count across the 67% with need for additional nurturing to develop their readiness for success in school and the 57% with need for safe and enriching care while their parent(s) work or attend school or employment training.

Instead of an ECE system in Galveston city, **there is a constantly changing patchwork of ECE facilities serving different age, racial/ethnic, and special needs groups; offering different days and hours of operation with different child learning priorities and variable quality and price.**

- The number of facilities in 2018 was 28 compared to 29 in 2011 but with 50% turnover in the locations and operators of licensed facilities. Enrollment in 2018 included 26% of the numbers of resident infants, 54% of toddlers, and 115% of children 3 and 4 years of age.
- Only 10 of 24 facilities directly observed by the community assessment team in 2018 were seen to be providing clean, safe, and nurturing learning environments; 17 of 26 facilities were acceptable per State of Texas external monitoring or accountability information; and only about one-third provided opportunities for parents to volunteer with even fewer offering parent training or parent education programs.

Through June 2018, **no protocol, strategy, or partnerships had been established for tracking progress, evaluating return on investment, and using results to improve and maintain a successful ECE system** that benefits the children and their families, schools, and city.

Conclusions and Recommendations: These results indicate need to (1) leverage strengths of existing school- and center-based ECE to guide targeted training, financing, and mentoring that improves quality and accessibility so that the community can be confident children are in safe and nurturing learning environments; (2) build the system to reach infants and toddlers where they are, which more often is at home or in friend and family care than in school- or center-based settings; and (3) establish leadership, data systems, and other infrastructure to meet the immediate needs of families and children and generate longer-term outcomes that help schools to close egregious racial/ethnic disparities in proportions of children reading on grade level by the end of third grade. The National League of Cities has developed and made available online tool kits, progress tracking tools, and other resources to assist Mayors and community leaders in building early learning communities that promote positive child development.

Table of Contents

Background: There are at least five reasons why assessing, improving, and maintaining a successful system of Early Care and Education (ECE) is important work in any city, but especially so in the property wealthy, poverty populated, tourist destination city of Galveston, Texas.

1. ECE is good for children and is especially beneficial for those in families that are economically or educationally disadvantaged.

Head Start

Costs per participant: $7,000

Outcomes for participants versus comparison groups at age 30:

- More high school completions
- More college attendance
- Fewer times arrested

Return per dollar invested: $7.00

Ludwig J, Miller DL (2007) Does Head Start improve children's life chances? Evidence from regression-discontinuity design. *Quarterly Journal of Economics*, 12:159-208)

High/Scope Perry Preschool Program

Costs per participant: $15,166

Outcomes for participants versus comparison group at age 40:

- Less use of special education services
- More graduating high school on time
- More Income at age 27 and at age 40
- Higher prevalence of being married
- Lower rates of treatment for mental impairment
- Fewer times arrested
- Less time incarcerated

Return per dollar invested: $12.90

Schweinhart LJ et al (2007). *The High/Scope Perry Preschool Study Through Age 40: Summary, Conclusions and Frequently Asked Questions*, HighScope Press: page 4 accessible on-line.

Census estimates 2008-2012 for Galveston city situated on a narrow barrier island about two miles off the upper Texas Gulf Coast near Houston showed median unit value of housing $135k compared to $128k statewide but median income of only $38k compared to $52k statewide. Data aggregated across the Galveston Independent School District (Galveston ISD) and the two independent charter schools School Year 2017-18 (SY18) showed 71% of students eligible for free or reduced-price lunch. Census data showed only 29% of persons 25 and older in the city with bachelor's degree or higher. By contrast, in League City just a few miles up the road on the mainland, 43% of persons 25 and older have bachelor's degree or higher and only 28% of public school students were eligible for free- or reduced-price lunch in SY18. Because research demonstrates that mothers' education level and economic disadvantage are associated with disparities that are detectable as early as 9 months and widening thereafter in children's development of positive behavior and cognitive skills[1], estimates are that more than 60% of Galveston city's infants and toddlers but fewer than 20% of those in the League City area are in need of additional support to nurture their development of foundational skills for success in school and in life.

Data from local program evaluations support the estimate of excess prevalence of developmental delay in Galveston city – e.g., 60% of children less than 60 months old of 147 mothers or fathers who used the Reading is Fundament *Can Do* assessment at SMART Family Literacy events in Galveston city calendar years 2015 through 2017 had results indicating possible delay in the child's emergent literacy. Per the Texas Public Education Information Reports (TPEIR), only 33% of Galveston ISD's kindergarteners were "kindergarten ready" in SY17, the most recent year for which data are available. That number aligns with the local prevalence estimates of developmental delay and stands in contrast to the 59% of public school kindergartners statewide that were "kindergarten ready" in SY17. These circumstances indicate wide-spread need in Galveston city for a successful ECE system that reaches educationally or economically disadvantaged families with learning experiences and supports that prevent developmental disparities and promote young children's readiness for success at home, at school, and life-long.

[1] Halle et al (2009) Disparities in Early Learning and Development: Lessons from the Early Childhood Longitudinal Study – Birth Cohort (ECLS-B). Washington, DC: Child Trends.

2. A successful ECE system is essential for working families and helps the community to retain high skilled workers in the local economy during their procreative years.

Percent of children < 5 who regularly attend an organized ECE facility or school			
	Mother Employed	Not Employed	Total
Child < 1 year old	16%	3%	10%
Child 1-2 years old	29%	5%	18%
Child 3-4 years old	45%	24%	35%
Mother < high school	20%	10%	13%
Mother is high school grad	26%	10%	17%
Mother has some college	29%	14%	23%
Mother has Bachelors or higher	42%	16%	34%

Note: Data are from Survey of Income & Program Participation (SIPP) 2008-2011 panel published in 2013. Data from the SIPP panel initiated in February 2014 are not yet available.
See also *Unequal Access: Barriers to Early Childhood Education for Boys of Color*, RWJ Issue Brief, August 2016

Nationwide, the groups of children least likely to be regular participants in an organized ECE facility or school (e.g., nursery schools, Head Start, pre-kindergarten programs, center-based child care) are infants, toddlers, and those whose mothers' highest educational attainment is high school or less. Primary care for those children more often is at home with parent or grandparent or in other informal friend or kin care.[2] The group of young children most likely to be regular participants in organized ECE facility or school are those whose mothers are employed and have bachelor's degree or higher. These circumstances emphasize the importance of having a successful ECE system that meets the needs of working families and assists in retaining high skilled workers in the local economy during their procreative years.

3. A successful ECE system can help schools close achievement gaps. Programs with the highest return on investment are those that focus as much on the families as on the children.

Dollar value of the ratio: Public Benefit /Cost	
Perry Preschool: high risk families provided half-day ECE PLUS home visiting services (follow-up at age 27 for 58 in the participant group & 65 in the control group)	7.16
Chicago Child-Parent Centers: low-income families provided half-day ECE PLUS intensive parent involvement (follow-up at age 21 for 1,539 participants and a matched comparison group)	6.87
Abecedarian: high risk families provided full-day ECE for ages 6 weeks to 8 years (follow-up at age 22 for 60 participants and 60 control)	2.69

These summary data for 20-27 year follow-ups were compiled in Morrisy TW, Warner ME. (2007) Why early care and education (ECE) deserves as much attention, or more, than Prekindergarten alone. *Applied Developmental Science*;11(2):57-70.

Reading achievement gaps in Galveston city's public schools are horrible—e.g., failing the State of Texas Assessment of Academic Readiness (STAAR) in reading has become normative for our 3rd grade African American students. In SY17, only 49% of African American 3rd graders met the "approaches grade level"

[2] https://www.bridgespan.org/bridgespan/Images/articles/achieving-kindergarten-readiness/achieving-kindergarten-readiness-appendixc-ecls-b-technical-appendix.pdf

standard whereas 80% of White students met that standard. That same year only 24% of African American kindergarteners in Galveston ISD were "kindergarten ready" compared to 44% of their non-Hispanic White peers and 30% of their Hispanic peers.

Improving schools improves student achievement but does little to close achievement gaps.[3] For children to achieve their developmental potential, the evidence in the United States and internationally "strongly suggests that parents, caregivers, and families need to be supported in providing nurturing care and protection, especially for children younger than 3 years of age."[4] Reading to children has enormous benefits when they are young, yet more than 50% of parents in the United States do not read to their children regularly. Early screen time reduces children's cognition and attention span, but 90% of children regularly watch television before 2 years of age with the typical child beginning at age 4 months. Local evaluation during calendar years 2014 through 2017 showed 63% of 198 mothers, fathers, grandparents, friends and kin of local infants and toddlers answered the *Incredible Parent Training Group* pre-program questionnaire in ways that indicated lack of knowledge about child development (e.g., "Watching TV stimulates your baby's development similar to your own talking") and 31% attributed hostile intent to infant behavior (e.g., "Babies ignore their mothers in order to be annoying"), circumstances that can hinder the child's on-time development of cognitive skills and positive behavior. This situation emphasizes need for a successful ECE system in Galveston city that includes intensive focus on the children's families.[5]

4. A successful ECE system provides high-demand career opportunities on a career lattice for progressing from lower- to higher-skill and pay.

Texas Early Childhood Professional Development System

Resources provided include an Early Childhood Career Lattice for Practitioners and Administrators, a workforce registry, access to professional development, and other resources.

- The 5 Beginner levels in the Career Lattice start at "Entry" level which requires high school diploma or equivalent, and no-experience but 24 PD hours per annum.
- The 4 Intermediate levels start with Associate Degree in Early Childhood Education or equivalent, no experience, but 30 PD hours per annum.
- The 2 Advanced levels begin with Master's Degree in Early Childhood Education or equivalent, no experience, but 30 PD hours per annum.

Compensation Study 2013 showed Median Annual Paid Salary and time worked per week:

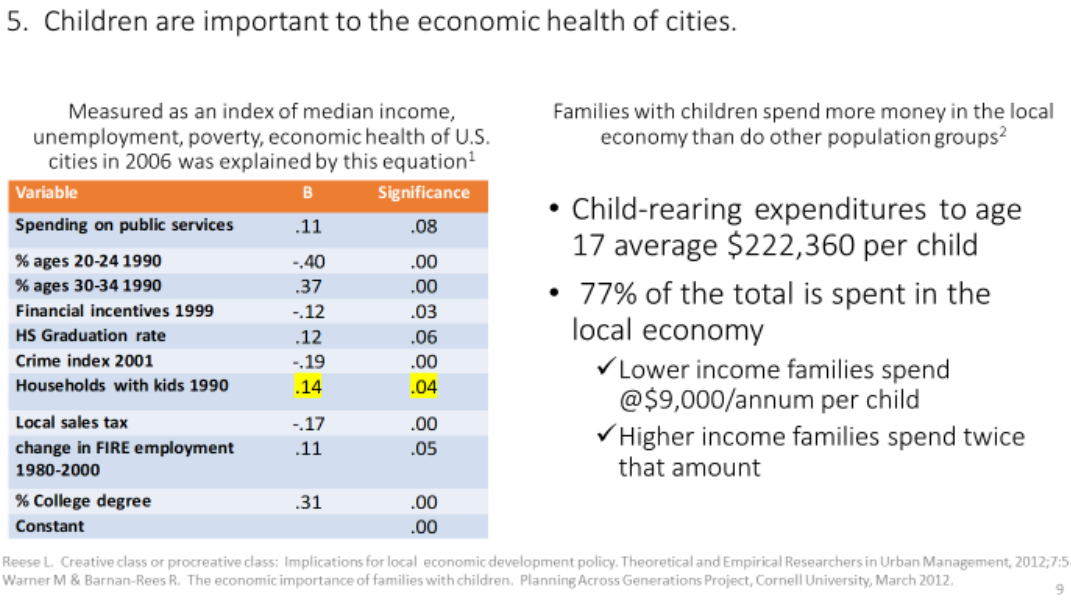
- Center Director: $34,000, 53 hours
- Center Provider, $26,000, 36 hours
- Home Provider, $18,660, 67 hours

[3] https://www.nationsreportcard.gov/reading_math_2015/#reading/gaps?grade=8

[4] Britto PR et al (2017) Nurturing care: Promoting early childhood development. The Lancet;389:91-102. See also, Brody et al (2017) Protective prevention effects on the association of poverty with brain development. JAMA Pediatr;171:46-52. See also Cristakis DA (2016) JAMA Pediatr;170:725-6.

[5] The National Academies of Sciences, Engineering, Medicine (2016). Parenting Matters: Supporting Parents of Children Ages 0-8 https://www.nap.edu/catalog/21868/parenting-matters-supporting-parents-of-children-ages-0-8

Opportunity for paid employment and career advancement at all levels of education and experience is an especially important reason for building a successful ECE system in Galveston city where there is widespread economic and educational disadvantage in the resident population of persons 25 and older. The local community historically has experienced higher rates of unemployment relative to statewide figures. In March 2011, the unemployment rate in Galveston city was 8.2% compared to 7.9% statewide; and in March 2018 the rates were 4.6% in Galveston city compared to 4.0% statewide.



Even though there is substantial research demonstrating that having more families with children in residence is an important contributor to the economic health of cities in the United States, Galveston city has allowed its child population to dwindle more than three times as fast as its adult population both before and since 2008's Hurricane Ike. Comparing the 2010 Census to the 1980 Census shows the population of children younger than five years of age at minus 40%, school age children and youth at minus 38%, and persons 25 and older at minus 12%. There is much speculation about why families with children have abandoned living in Galveston city—e.g., concerns about lack of affordable housing has been a frequent topic in local news and editorials during the summer of 2018. But there are indications that the community has tolerated or ignored the dwindling of the child population, perhaps because local leaders and planners think of children as a "cost center" rather than an "economic engine." Local evaluation of school-based Hurricane Ike recovery programs showed the group in Galveston city with the highest prevalence of losing both their home and their school to the storm was children of color in low-income families. But the city's 147-page *Community Long Term Recovery Plan* (2009) included the words "child" or "children" or "youth" only 9 times whereas the word "business" appeared 105 times. Since Ike, business has recovered, but our children still are fewer and more often disadvantaged.

Acknowledging that "early childhood learning, health, and well-being are in every sense building blocks for our nation's future," the National League of Cities in 2007, 2012, 2016, and 2017 published reports and toolkits for building early learning communities "to ensure that children have access to the opportunities, aligned services, and supports they need" to reach their full potential. High quality ECE is included in the continuum of "basic services that proactively promote and support health, learning, and family strengths." The Action Kit notes that "city officials are well positioned to spearhead or support community initiatives that help young children succeed" and that "Mayors and city council members can

play key roles in improving outcomes for young children and their families." A Progress Rating Tool[6] is available to assist the community in assessing where it is on its journey to becoming an Early Learning Community and identify action steps to reach new levels of success.

Assessment Questions and Methods: Aligned with the background presented above, community assessment of ECE in Galveston city was conducted to answer the following questions:

1. How many children younger than 60 months of age in Galveston city were estimated to need ECE for additional nurture to develop their readiness for success in school and life-long OR for safe and enriching care and education while their parent(s) work OR both?

2. What proportions of infants, toddlers, and preschoolers were participating in school-based or Texas Department of Family & Protective Services (TDFPS) licensed center-based ECE in Galveston city?

3. To what extent did the assessment results indicate school- and center-based ECE in Galveston city is sufficiently accessible, affordable, and of high enough quality to expect that the longer-term outcomes will assist schools in closing achievement gaps?

4. What were the numbers and qualifications of the early childhood workforce employed in school-based or TDFPS licensed center-based ECE in Galveston city?

5. To what extent did the assessment results indicate the system of ECE in Galveston city has sufficient infrastructure (e.g., leadership, financial backing, data systems) to expect that longer-term outcomes will contribute to the economic health of the city?

In 2011 and again in 2018, a small number of community leaders was recruited and trained to interview a spokesperson at each center-based facility licensed by TDFPS and at each school-based pre-kindergarten or ECE program. The interviews were based on the 2011 *Center-based Provider Questionnaire of the National Study of Child Care Supply and Demand* and updated in 2018 to include items from the 2017 *Texas Rising Star Assessment Record Forms*. Objectives of the 2011 assessment were to provide information to (1) locate strengths of the local ECE system, (2) determine types and sizes of gaps in the system, and (3) establish baselines for tracking progress and measuring return on investment. Results obtained in 2018 were compared to those reported to the community in 2012 based on the 2011 assessment.

The analytic framework was the *Six Guiding Principles for a Successful Early Childhood Education System* published in 2009 by the Business Roundtable™ and Corporate Voices for Working Families.[7] Separate appendices present the results specific to each of the principles: (1) Views children's LEARNING as the central mission; (2) Articulates STANDARDS for children's learning and program quality that align with State K-12 academic standards; (3) Ensures TEACHERS possess the skills, knowledge, and attitudes to help young children enter school prepared to succeed; (4) Supports PARENTS as their children's first teachers and provides high-quality program options to parents who choose to enroll their children; (5) Embraces ACCOUNTABILITY for measurable results; and (6) Builds cross-cutting PARTNERSHIPS to govern, finance, sustain, and improve the system.

[6] https://www.nlc.org/sites/default/files/users/user75/Progress%20Rating%20Tool.pdf

[7] Business RoundtableTM and Corporate Voices for working Families (2009) Why America Needs High-Quality Early Care and Education, https://files.eric.ed.gov/fulltext/ED512211.pdf accessed 5/9/18

The 2018 assessment was supported with $7,350 contract award to Third Coast R&D, Inc. from Galveston Sustainable Communities Alliance (GSCA). The 2011 assessment was similarly financed, and both projects were supported in part by grants and contributions to GSCA from members of the Cynthia and George Mitchell Family. The funds allocated to Third Coast R&D, Inc in 2018 were expended as follows:

- $720 paid to SMART Family Literacy for age appropriate children's books to deliver to the ECE centers and schools with the invitation to participate in the interview (3 books on first visit, 3 additional books after the interview was completed);
- $2,000 paid to Nia Cultural Center to assist with recruiting and training a diverse group of community leaders to visit the centers and conduct the interviews, manage the field data collection, compensate the interviewers per their individualized agreements, and participate in presenting results in community forum;
- $4,630 to pay personnel at Third Coast R&D, Inc for preparing the invitations and the assessment protocol, organizing and participating in training of the interviewers, conducting some of the interviews, setting up the database, key entry of the data, analyses, report writing, presentation of results in public forum, and filling special requests from GSCA for specific pieces of information from the database.

Results

1) How many children younger than 60 months of age in Galveston city were estimated to need ECE for additional nurture to develop their readiness for success in school and in life OR for safe and enriching care and education while their parent(s) work OR both?

ANSWER: The total of young children estimated to need ECE to develop their readiness for success in school and in life OR for safe and enriching care and education while their parent(s) work or both was 2,340 in 2018 compared to 2,543 in 2011. To some extent this difference is traceable to Galveston city's resident population of children younger than 60 months of age being smaller in 2018 compared to 2011.

1.1 Galveston's resident population of children younger than 60 months of age was smaller and more often economically or educationally disadvantaged[8] in 2018 compared to 2011.

Table 1.1a. Galveston city's resident population of children younger than 5 has been steadily shrinking

Population segment	Census 1990	Census 2000	Census 2010	Census estimate 2016
Children younger than 5	4,329	3,705	2,796	2,580
Ages 5 to 18	10,289	8,553	6,418	6,770
Total population all ages	59,070	57,247	47,743	50,550

Table 1.1b. Galveston city's resident population of children younger than 5 was more often economically and educationally disadvantaged in 2018 compared to 2011

Characteristics	Percent in 2011	Percent in 2018
Economic disadvantage	78%	88%
English Language Learner	20%	28%

[8] Hoff E (2013) Interpreting the early language trajectories of children from low SES and language minority homes: Implications for closing achievement gaps, Dev Psychol, 49:4-14.

1.2 The estimated number of children younger than 5 years of age with need for ECE was 2,450 in 2018 in Galveston city or 95% of the 2,580 resident children in that age range.

Table 1.2 Galveston city's numbers of children younger than 5 shown by age groups and need for ECE

Early childhood population segments in the City of Galveston	Number in 2011	Number in 2018
Total population of children younger than 5	2796	2580
• Infants (younger than 18 months of age)	806	740
• Toddlers (18-35 months of age)	853	790
• Preschoolers (36-59 months of age)	1137	1050
Children with need for ECE for additional nurturing to develop their readiness for success in school and in life (67% of the population younger than 5 because only 33% of kindergarteners enter Galveston public schools "kindergarten ready)	1901	1720
• Infants	548	490
• Toddlers	580	530
• Preschoolers	773	700
Children with need for safe and enriching ECE while their parents work or attend school or work force training (57% of the population of younger than 5 because 57% of women ages 16 and older in Galveston city are in the labor force)	1593	1470
• Infants	459	420
• Toddlers	486	450
• Preschoolers	648	600
Total of children in need of ECE adjusted with the assumption that half of those in need because of economic or educational disadvantage also are in the group in need of safe and enriching experiences while their parent(s) work or attend school or workforce training	2,543	2,450

2. What proportions of infants, toddlers, and preschoolers were participating in school-based or TDFPS licensed center-based ECE in Galveston city?

ANSWER: Enrollments in school- and center-based ECE in Galveston city increased to 71% of the resident child population younger than 5 years of age in 2018 compared to 59% in 2011. Infant enrollments increased to 26% in 2018 compared to 14% in 2011, but infants and toddlers remained the least frequent users of school- or center-based ECE. More pre-kindergarteners were enrolled than the estimated total resident population ages 36-59 months because enrollment at substantial numbers of ECE facilities in Galveston city included children whose residence was off the island.

Table 2.1 Numbers of children enrolled in school- or center-based ECE shown by age group and relative to total numbers in the resident population of children younger than 5 years of age

Children's age group	Numbers and percent of the resident population 2011	Numbers and percent of the resident population 2018
Infants (less than 18 months of age)	109/806 = 14%	190/740 = 26%
Toddlers (18-35 months of age)	341/853 = 40%	428/790 = 54%
PreK (36-59 months of age)	1197/1137 = 105%	1206/1050 = 115%
Total of children < 60 months of age	1647/2796 = 59%	1824/2580 = 71%

Table 2.2 Numbers of school- and center-based ECE facilities shown by proportion of currently enrolled infants, toddlers, and preschoolers that reside on Galveston Island per the reports from facility spokespersons that participated in the interviews

How many of the infants, toddlers, and preschoolers in your program live on the Island?	Number in 2011 (N=22))	Number in 2018 (N=21)
All	9	3
Nearly all (more than 80%)	11	14
50-80%	1	0
Less than half	1	4

3. To what extent did the assessment results indicate school- and center-based ECE in Galveston city in 2018 is sufficiently accessible, affordable, and of high enough quality to engender confidence that the longer-term outcomes will assist schools in closing achievement gaps?

ANSWER: Instead of an ECE system in Galveston city, there is a constantly changing patchwork of ECE facilities serving different age, racial/ethnic, and special needs groups; offering different days and hours of operation with different child learning priorities; and of variable quality and price.

- The 10 school-based facilities and 18 TDFPS licensed centers in 2018 was approximately the same numbers as in 2011, but there had been 50% turnover in the locations and operators of licensed facilities.
- In 2018, school- and center-based ECE facilities were concentrated in City Council Districts 1 and 5. Across all facilities that provided information regarding tuition and fees, dollars per hour per child ranged from $1.11 to $5.36 with medians of $3.00 for infants, $2.50 for toddlers, and $2.25 for preschoolers.
- Only 9 of 24 facilities directly observed in 2018 were seen to be providing clean, safe and nurturing learning environments; 17 of 26 facilities were acceptable per State of Texas external monitoring or accountability information; and the number of facilities with Texas Rising Star certification(s), or Texas School Ready classroom certification(s), or NAEYC or NECP accreditation had shrunk from 9 in 2011 to less than 5 in 2018.
- Despite research demonstrating the long-term return on investment is much greater when ECE focuses as much on the parents as on the children, only about one-third of ECE facilities in 2018 provided opportunities for parents to volunteer, and even fewer provided parent training or parent education programs.

3.1 The inventory of school- and center-based ECE facilities for infants, toddlers, or preschoolers or more than one of those age groups had shrunk from 29 in 2011 to 28 in 2018 and had turnover of 50% in operators and locations of the center-based facilities from fall 2011 to spring 2018.

Results presented in Table 3.1 were obtained via download of information on the *Search Texas Childcare* website maintained by the TDFPS and verified during in-person visits to the facilities by individual members of the trained cadre of community leaders that constituted the field data collection team. Ten of the 20 center-based facilities that were active in 2011 were no longer in operation in 2018. Of the 18 center-based facilities active in 2018, 8 had opened since the 2011 assessment. One of the private schools in Galveston city did not in 2011 but did in 2018 have an on-site pre-kindergarten program. In 2011 and 2018, one or more of the school-based pre-kindergarten programs operated in partnership with Head Start programs licensed by TDFPS.

Table 3.1 Numbers of ECE facilities in Galveston city 2011 compared to 2018 shown by type of facility

Type of ECE facility	Active in 2011	Active in 2018	Active 2011 & 2018
Center-Based	20	18	10
School-Based	9	10	9
TOTAL	29	28	19

In 2011 and again in 2018, the download of information from the Search Texas Website included licensed or registered home providers of ECE. Inspection of this information provided additional evidence of shrinkage in families' ECE options. In 2011, there were 8 licensed or registered home providers of ECE in the Galveston city, but in 2018 that number had shrunk to substantially less than 5. Thus, the range of ECE options including licensed or registered or school-based ECE facilities had shrunk from 29+8 = 37 in 2011 to approximately 30 total facilities in 2018.[9]

3.2 In 2018, school- and center-based ECE facilities were concentrated in City Council Districts 1 and 5. Across all facilities that provided information regarding tuition and fees, dollars per hour per child ranged from $1.11 to $5.36 with medians of $3.00 for infants, $2.50 for toddlers, and $2.25 for preschoolers.

Table 3.2.1 Numbers of ECE facilities shown by specific niche of family ECE needs accommodated

Facilities that provide:	Number in 2011 (N=29)	Number in 2018 (N=28)
ECE for infants	15	17
ECE for toddlers	19	18
ECE for preschoolers	28	28
Year-round ECE		10
School-year ECE		18
ECE 6 or 7 days per week		5
ECE weekdays only		23
Round-the-clock ECE		1
ECE full-day and evening hours		3

[9] Because the number of licensed or registered home providers of ECE in 2018 was substantially less than 5, home-based facilities were excluded from this report as a safeguard against inadvertent disclosure of identifying information about the home or the operator.

ECE full-day but no evening hours		14
ECE part-day only		11
ECE in City Council District 1		8
ECE in City Council District 2		2
ECE in City Council District 3		4
ECE in City Council District 4		5
ECE in City Council District 5		8
ECE in City Council District 6		1

Information presented in Table 3.2.1 shows that providing ECE for infants was a niche filled by 17 school- or center-based facilities in 2018, a slight increase from 15 in 2011. More than half of all facilities in 2018 followed a school-year calendar; 17 provided full-day ECE and 11 provided part-day only (e.g., children's school day schedule); and only 10 provided year-round ECE. Facilities were available in each City Council District but were concentrated in Districts 1 and 5.

Information presented in Table 3.2.2 is based on responses from the 19 facility spokespersons in 2018 who answered interview questions about tuition and fees. Several ECE spokespersons in 2018 described ways in which families can qualify for reduced tuition and fees. A total of 12 TDFPS licensed facilities accept subsidies that are administered through the Texas Workforce Commission. Head Start and Public Pre-Kindergarten is free to families that meet eligibility requirements.[10] In addition, spokespersons at several of the ECE facilities indicated all or many of the children they serve have tuition and fees reduced by 50-75% because of the work the facility's leadership does to find sponsors and scholarships for the children. Additional information about the nationwide situation and options for transforming the financing of early care and education is available elsewhere.[11]

3.2.2 Tuition and fees expressed as dollars per hour per child calculated from the many ways in which prices and schedules were described by spokespersons for the different facilities

Child's age group	Number of facilities	Lowest	Highest	Median
Infant	9	$1.58	$5.25	$3.00
Toddler	9	$1.50	$4.54	$2.50
Pre-Kindergartener	14	$1.11	$5.36	$2.25

3.3 Only 9 of 24 facilities directly observed by members of the trained cadre of community leaders that collected data from the school- and TDFPS licensed center-based facilities in 2018 were reported by the observer to be providing clean, safe, and nurturing learning environments; 17 of 26 facilities were acceptable per State of Texas external monitoring or accountability information; and the number of facilities with Texas Rising Star certifications(s) OR Texas School Reading Classroom certification(s) OR NAEYC or NECP accreditation had shrunk from 9 in 2011 to <5 in 2018.

3.3.1 Only 9 of 24 facilities directly observed by members of the trained cadre of community leaders that collected data from the school-based and TDFPS licensed centers in 2018 were seen to be providing clean, safe, and nurturing learning environments

[10] https://tea.texas.gov/ece/eligibility.aspx

[11] http://www.nationalacademies.org/hmd/Reports/2018/transforming-the-financing-of-early-care-and-education.aspx see also https://www.acf.hhs.gov/opre/resource/prices-charged-early-care-and-education-initial-findings-national-survey-early-care-education-nsece and https://www.acf.hhs.gov/opre/resource/characteristics-of-center-based-early-care-and-education-programs-initial-findings-from-the-national-survey-of-early

Information presented in table 3.3.1 was compiled from checklists the data collectors used as observation guides when they visited the facilities. The checklist was based on the 2017 Texas Rising Star Assessment Forms and included additional detail and examples of indicators that the facility met the criterion for the given indicators. Only 24 of the 28 facilities were observed because 4 declined to allow access when the assigned community leader visited the facility to leave the gift books and invitation to participate in the community collaborative ECE assessment. A total of 13 facilities received check marks for all indicators of clean, safe, and nurturing indoor learning environment; 12 received check marks for all the indicators for outdoor learning environment; but only 9 met all 10 of the indicators that the facility provides clean, safe, and nurturing learning environments.

Table 3.3.1 Number of facilities observed in 2018 to be providing children with learning space that is clean, safe, and nurturing

Aspects children's learning space observed by members of the assessment team in 2018	Number observed (N=24)
Indoor environment:	
• Is clean and in good repair	24
• Has space accommodating of active play and learning	20
• Has space accommodating of quiet play and learning	16
• Has equipment and materials readily available for equal participation by all children	16
• Has décor that portrays people in a manner that is culturally sensitive and non-stereotypical	15
All 5 of the above	13
Outdoor environment:	
• Is equipped to motivate physical activity	22
• Provides partial shade	19
• Provides opportunity for children to appreciate nature	18
• Provides opportunity for children to care for living things	13
• Invites social gathering and group games	19
All 5 of the above	12
All 5 of the indoor attributes and all 5 of the outdoor attributes	9

3.3.2 Only 17 of 26 facilities were acceptable per State of Texas external monitoring or accountability information in 2018 which was comparable to what was reported for 2011 (i.e., 13/21 = 0.62 in 2011 compared with 17/26 = 0.65 in 2018)

Table 3.3.2 Numbers of facilities that were acceptable per external monitoring or accountability system

Acceptable per external monitoring/accountability	Facilities in 2011 (N=21)	Facilities in 2018 (N=26)
Less than 12 TDFPS monitoring deficiencies in the last 18 months	9	11
School rated academically acceptable or higher by Texas Education Agency	5	6
At least one of the above	13	17

Information presented in Table 3.3.2 was compiled from details on the TXDFPS Search Texas Childcare website and from Texas Academic Performance Reports (TAPR) for public funded district and charter schools. The criterion of having less than 12 TDFPS monitoring deficiencies in the last 18 months was established in 2011 based on consensus of the community leaders who collected the data. The same criterion was maintained for 2018 although it was pointed out by one of the field team in 2018 that a minimum criterion for applying to participate in the Texas Rising Star Certifications program is fewer than 10 monitoring deficiencies in the last 18 months. Number of monitoring deficiencies across the 18 TDFPS licensed facilities in 2018 ranged from 0 to 55 with median of 9 compared with the range of 0 to 55 with median of 10 across the 20 TDFPS licensed facilities in 2011. There was, thus, a great deal of variation in the extent to which specific facilities were "acceptable" per external monitoring information.

3.3.3 The numbers of facilities with Texas Rising Star certification(s) OR Texas School Ready Classroom certifications (s) OR NAEYC or NECP accreditation had shrunk from 9 in 2011 to <5 in 2018

Table 3.3.3 Number of facilities shown by types of earned certifications or accreditations

Type of program certification or accreditation	Number of Facilities in 2011 (N=21)	Number of Facilities in 2018 (N=19)
Texas Rising Star certification(s)	<5	0
Texas School Ready classroom certification(s)	6	<5
NAEYC or National Early Childhood Program accreditation	0	<5
At least 1 of the above	9	<5

3.3.4 Only 12 of 19 facilities in 2018 had instructional staffing consistent with recommended standards for ratio of staff to children which was a notable decrease from 17 of 21 in 2011.

Table 3.3.4 Numbers of facilities with instructional staffing that meets recommended standards

Age group served	Number of Facilities in 2011 (N=21)	Number of Facilities in 2018 (N=19)
Infant program	7 of 9	6 of 10
Toddler program	9 of 11	9 of 11
Preschool program	18 of 20	18 of 18
All age groups the facility served	17 of 21	12 of 19

Instructional staffing rather than total staffing was the criterion used to categorize facilities as meeting recommended standards. Texas licensing standard is total staff to child ratio rather than instructional staff to child ratio. To assess the local ECE system the more rigorous criterion was used because safe staffing recommendations of the U. S. Department of Health and Human Services, the National Association for Education of Young Children, and Head Start are 1:3 for infants, 1:4 for toddlers, and 1:7 for preschool children in group settings which is more rigorous than the TDFPS minimums.

In 2018, all facilities that provided information about numbers of children enrolled and numbers of instructional staff met the 1:7 standard for preschoolers, nearly all met the 1:4 standard for toddlers, but a smaller proportion met the 1:3 standard for infants, and only 12 of 19 met the standard for all age groups served at their facility.

3.3.5 Zero of the 19 facilities that provided information about racial and ethnic diversity of the children enrolled in their programs in 2018 had enrollment profiles that approximated racial/ethnic diversity of Galveston city's resident population of children and there were facilities, and at some facilities the enrolled children were 100% non-Hispanic White, 100% Black, or 92% Hispanic.

Table 3.3.5 Numbers of ECE facilities with enrollments that approximated diversity in Galveston city's resident population of children younger than 5 years of age

Enrollment lower bounds shown by racial/ethnic groups	Number of Facilities in 2011 (N=21)	Number of Facilities in 2018 (N=19)
Asian > 2%	12	9
Black > 25%	15	9
Hispanic > 40%	10	7
Non-Hispanic White > 20%	6	12
Enrollment consistent with all lower bounds listed above	5	0

3.4 Longitudinal research regarding various types of ECE approaches demonstrate the long-term return on investment in ECE is much greater when the focus is as much on the parents as on the children. In 2018, however, only about one-third of facilities provided opportunities for parents to volunteer, and even fewer provided parent training or parent education programs.

Table 3.4.1 Number of facilities shown by strategies for communicating with parents and promoting parent involvement in supporting their child's learning

Type of strategy for interacting with and promoting parent involvement	Number in 2011 (N=20)	Number in 2018 (N=20)
Website	10	11
Email	13	10
Social media (e.g., Facebook, text messaging, app or software connect)	5	16
Newsletters	18	10
Bulletin board for parent information exchange	15	7
Social events (e.g., potlucks, holiday festivals, family fun nights)	14	11
Other communications (home visit*, phone calls, counter-top at sign-in)	9	9
Parent meetings or conferences*	17	15
Parenting training or parent education programs*	12	4
Opportunities for parents to volunteer*	14	8
More than 1 of the above	18	18
At least 1 of * above	13	15

3.4.2 A notable change from 2011 to 2018 was increased prevalence of ECE facility spokespersons indicating that parent training or parenting support is a primary need of their facility and increased prevalence of advising that strong families and parents informed about the importance of early childhood education is means to ensure all children in Galveston have the early childhood education opportunities needed for success.

Table 3.4.2.1 Numbers of facility spokespersons responding to the interview question that asked, "What are your facility's primary needs?" shown by their responses to the question

What are your facility's primary needs?	2011 (n=20)	2018 (n=22)
Funding for full day PreK	5	0
Educational materials (e.g., curriculum, motor lab, resources for afterschool programs)	7	9
Support for staff (training, funds for increase in pay)	3	7
Playground equipment (sun shades, play equipment, lights, for younger ages)	5	5
Parent training, parenting support	0	4
Books (for younger children, for children to take home)	4	3
Computers, electronics, technology for children	3	2
Other (i.e., transportation, supplies, toys, facility upgrade, full time counselor, consistent expectations for quality)	4	5
More than one of the above	9	8
Do not have any unmet needs (e.g., PTO gets us what we need, thanks to Collaborative	0	4

Table 3.4.2.2 Number of facility spokespersons responding to the interview question that asked, "What advice do you have for ensuring all children in Galveston have the early childhood education opportunities?" shown by their responses to the question

What advice do you have for ensuring all children in Galveston have the early childhood education opportunities needed to help them succeed in school and in life?	2011 (n=20)	2018 (n=19)
Funding for full-day PreK beyond this year	5	0
Forum for educator collaboration/Continued efforts to collaborate	5	0
Schools as hub for connecting families to resources they need	3	0
Parents informed about the importance of early childhood education	0	8
Strong families (stable homes, parent involvement in their children's education, child's basic needs met including love and mental well-being)	4	7
Better trained or more compassionate staff or salaries to retain qualified staff	2	6
High quality programs	4	2
Other (i.e., more child advocates, more funding, jobs for parents, research based reading program, community support, increased access to care not limited by cost)	3	3
More than one of the above	9	5

4. What were the numbers and qualifications of the early childhood workforce employed in school-based or TDFPS licensed center-based ECE in Galveston city?

ANSWER: The total of persons directly employed at the 19 facilities that provided information about staffing in 2018 was 347 including 248 instructional staff and 99 administrators and support staff. Only 14 of these 19 facilities had at least one member of total staff whose education included an early childhood specialization, a decrease compared to 19 of 21 in 2011. At more than half of facilities in 2011 and again in 2018, more than one-fourth of instructional staff had high school as highest level of educational attained. The number of facilities that provided funding for off-site training or professional development decreased from 17 of 20 in 2011 to 10 of 19 in 2018.

4.1 The largest concentrations of facilities with spokespersons who responded to the interview questions about staffing in 2018 were in City Council Districts 1 and 5, but responses across the 19 facilities with a

participating spokesperson indicated the highest concentrations of ECE workforce were in City Council Districts 2 and 5.

Table 4.1 Numbers of persons employed by school- and center-based ECE facilities shown by City Council District locations of the facilities

Location	Number of facilities with data	Number of ECE instructional staff	Number of ECE administrators & support staff	Total of employees
District 1	7	52	14	67
District 2	<5	64	34	98
District 3	<5	21	15	36
District 4	<5	15	25	40
District 5	5	92	11	103
District 6	<5	<5	<5	<5
TOTALS	19	248	99	347

Some of the spokespersons pointed out to their interviewers that the counts of employees do not include staff of contracted services at their ECE facilities such as providers of transportation, food service, security, janitorial, bookkeeping, counseling, or professional development services.

4.2 Only 14 of these 19 facilities that provided information about staffing in 2018 had at least one member of total staff whose education included an early childhood specialization, a decrease compared to 19 of 21 in 2011. At more than half of facilities in 2011 and again in 2018, more than one-fourth of instructional staff had high school as highest level of educational attained.

Table 4.2 Numbers of facilities shown by educational attainments of instructional staff

Levels of educational attainments	Number of Facilities in 2011 (N=21)	Number of Facilities in 2018 (N=19)
At least 1 instructional staff has doctorate degree	0	0
At least 1 instructional staff has masters as highest level of education	5	5
At least 1 instructional staff has bachelors as highest	13	12
At least 1 instructional staff has associates as highest	10	12
High school is highest education level of > ¼ of instructional staff	13	12
Bachelor's or master's is highest education level of >1/4	9	11
At least 1 member of total staff has early childhood specialization	19	14

4.3 The number of facilities that provided funding for off-site training or professional development decreased from 17 of 20 in 2011 to 10 of 19 in 2018. Providing staff support via mentoring or consultants who provide on-going training to staff also decreased from 16 of 20 facilities in 2011 to 9 of 19 facilities in 2018. None of the facility spokespersons cited the Texas Early Childhood Professional Development System as a resource for supporting staff professional development.

Table 4.3 Numbers of facilities shown by types of support for staff professional development

Types of support for staff professional development	Number of Facilities in 2011 (N=20)	Number of Facilities in 2018 (N=19)
Funding for off-site training or professional development	17	10
Paid time off to participate in off-site professional development	14	<5
In-service training or professional development opportunities	18	16
Mentoring or consultants who provide on-going training to staff	16	9
Online training (e.g., Child Care World Wide Institute or ELITE)	0	<5
More than 1 of the above	19	15

There were, thus, substantial numbers of persons employed in school- or center-based ECE in Galveston city in 2018, but support for professional development had shrunk since 2011. Staff may have lacked awareness of, or their facility may have decided not to take advantage of the resources provided through the Texas Early Childhood Professional Development System[12] to support individual workers' progress from lower to higher skilled and higher paid work in early childhood care and education.

5. To what extent did the assessment results indicate the ECE system in Galveston city has sufficient infrastructure (e.g., leadership, financial backing, data systems) to engender confidence that longer-term outcomes will contribute to the economic health of the city?

ANSWER: The Partnership Principle for high-quality early childhood education specifies that "a successful early childhood system builds crosscutting partnerships to govern, finance, sustain and improve the system" and that a first step is to "create effective and efficient governance mechanisms that support community planning, program development, and oversight." In 2018 there was no evidence that such infrastructure exists in Galveston city.

- The range of options and some aspects of quality of school-based and TDFPS licensed center-based ECE appear to have deteriorated rather than improved since the 2011 assessment—e.g., the number of facilities with Texas Rising Star certification(s), or Texas School Ready classroom certification(s), or NAEYC or NECP accreditation had shrunk from 9 in 2011 to less than 5 in 2018.
- School- and center-based ECE in Galveston city has been a constantly changing patchwork of independently owned and operated for-profit and non-profit facilities and facilities sponsored or collaborative with church or religious group, Head Start, and public or private schools with substantial variability in child learning priorities.
- Although there was slight increase from 2011 to 2018 in the numbers of ECE facilities that included "helping children learn so they can do well in school" among the facility's top priorities, there was decrease in number of facilities that used evidence- or research-based curriculum or guidelines.

[12] https://tecpds.org/About.aspx accessed 5/20/18 includes registries for trainers and training; career lattices, calendar of events, online registration for scheduled events, training record validation, and workforce registry that allows early childhood professionals to use web-based application to keep track of their education and employment history and clock hours of training

5.1 The patchwork school- and center-based ECE in Galveston city includes independently owned and operated for-profit and non-profit facilities as well as facilities that are sponsored or collaborative with church or religious group, Head Start, and public or private schools with various methods for providing access regardless of family Socio-Economic Status and self-determined methods for reaching out to recruit children to their programs.

Table 5.1.1 Numbers of ECE facilities shown by operating structure as reported by facility spokespersons

Operating structure	Number in 2011 (n=22)	Number in 2018 (n=22)
Independently owned & operated:		
• for profit	6	7
• non-profit	<5	<5
Non-profit sponsored or collaborative with:		
• Church or religious group	<5	<5
• Municipal government	0	>0
• Head Start, public school, other State/Federal entity	10	9

Table 5.1.2 Numbers of facilities shown by methods for ensuring families have access to their program regardless of Socio-Economic Status

Type of accommodation for low-income families	Number in 2011 (N=29)	Number in 2018 (N=28)
Public schools or Head Start facilities that provides PreK programs free of charge to families that meet eligibility requirements	8	8
Private facilities that accept TDFPS subsidies or provide scholarships or have sliding fee scale to accommodate needs of low-income families	14	15

Table 5.1.3 Numbers of facilities shown by methods for reaching out to recruit children into their program

Venues/methods for reaching out to recruit children into ECE	Facilities in 2011 (N=21)	Facilities in 2018 (N=20)
Ask friends and family to refer other families	14	13
Ask parents of currently enrolled children to refer other families	11	13
Post paper notes or advertisements announcing openings	15	7
Post electronic notices on the program's website or social media site	9	12
Flyers or other communication to churches	5	<5
Other (door-to-door in the neighborhood, open house, calling other facilities)	<5	<5
More than 1 of the above	18	15

5.2 Although there was slight increase from 2011 to 2018 in the numbers of ECE facilities that included "helping children learn so they can do well in school" among the facility's top priorities, there was decrease in number of facilities that used evidence- or research-based curriculum or guidelines.

Table 5.2.1 Number of facilities shown by spokespersons' answers to the question asking for description of the top three priorities of the program at their facility

Top priorities	Number of Facilities in 2011 (N=22)	Number of Facilities in 2018 (N=19)
Having a safe environment	13	16
Being warm and nurturing	12	4
Helping children learn so they can do well in school	14	17
Helping children learn how to get along with others	3	4
Helping children learn habits that support health and wellbeing	6	2
Helping children develop physical skills	2	1
Having a program that instills good character or moral values	5	11
Other (availability; parents happy; staff training, parent involvement)	5	3

Table 5.2.2 Number of facilities shown by type of instructional guidelines or curriculum

Type of instructional guidelines or curriculum	Number of Facilities in 2011 (N=21)	Number of Facilities in 2018 (N=19)
DLM Express* or Funshine or High Reach or Beyond Center	<5	<5
Frog Street Press*	5	<5
Head Start Guidelines*	<5	<5
Saxon Phonics*	<5	0
Texas Pre-K, Early Learning Guidelines, or both*	8	9
Texas Pre-K Scope and Sequence*	<5	<5
Texas Early Education Model (TEEM) Guidelines*	<5	<5
NAEYC Read and Write	<5	<5
A BEKA, ABC, Christian	<5	<5
Teacher developed curriculum	<5	8
More than 1 of the above	9	9
At least one of the * above	13	9
*marks evidence-based or research-based curriculum or guidelines		

Through June of 2018, there was no evidence of that protocols, strategy, or partnerships had been established for tracking progress, evaluating return on investment, and using results to improve and maintain a successful ECE system that benefits the children and their families, schools, and city. The community thus lacks infrastructure (leadership, financing, data systems) to estimate the extent to which the current configuration of school- and center-based ECE will influence economic health of the city.

Conclusions and Recommendations. Results of the 2018 community assessment of school- and center-based ECE in Galveston city indicate need to:

(1) leverage strengths of existing school- and center-based ECE to guide targeted training, financing, and mentoring that improves quality and accessibility so that the community can be confident children are in safe and nurturing learning environments;

(2) build the ECE system to reach infants and toddlers where they are, which more often is at home or in friend and kin care than in school- or center-based settings; and

(3) establish leadership, data systems, and other infrastructure to meet the immediate needs of families and children and generate longer-term outcomes that help schools to close horrible racial/ethnic disparities in proportions of children reading on grade level by the end of third grade.

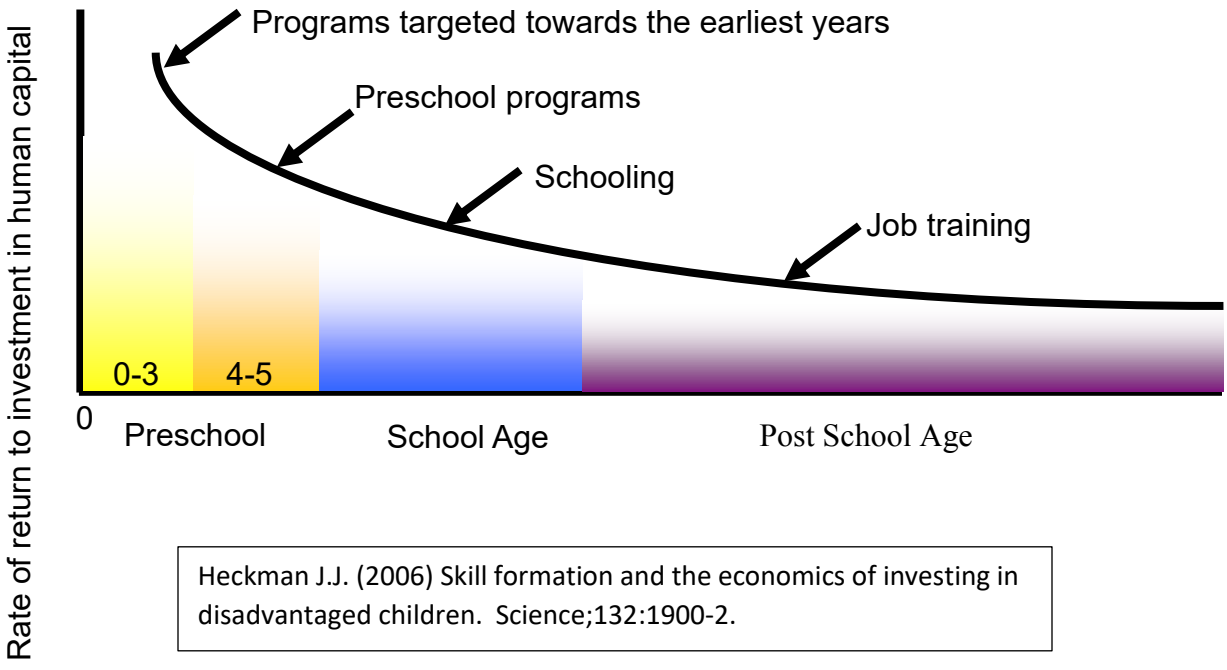
Resources to assist with building on strengths of existing facilities to guide targeted training, financing, and mentoring that improves quality and accessibility of school- and center-based ECE in Galveston city include recent grants from the Moody Foundation to local school districts and to the Moody Early Childhood Center to organize and provide professional development that is needed and easily accessible to school-, center-, and home-providers of ECE. Another strategy for leveraging strengths of the existing facilities is to develop and finance an advisory council of leaders including a few from newer and a few from the enduring center-based facilities to assist in planning next steps in the further development of the ECE system in Galveston city. Yet another resource is models that are being tested in other communities. **Wonderschool** (www.wonderschool.com), for example, is an enterprise whose stated mission is to provide high quality early care and education to every child in the world. The company's founders believe the best way to increase access for families is to grow supply through starting in-home childcare programs and preschools. They assist talented teachers with licensing, setting up a classroom, setting pricing, building a website, managing payments, and everything in between. Wonderschool's software allows teachers to manage students, parents, and school from one dashboard reducing administrative stress and burden and allowing teachers to do what they do best—care for and educate children. Parents come to Wonderschool to find programs, schedule visits, enroll their children, and make payments. Wonderschool has a network of more than 150 schools and programs throughout the country and is focused on partnering with additional talented educators to offer programs in their communities. Read more about this venture backed approach in *Tech Crunch*, *Business Insider*, *Forbes*, *Black Enterprise*, and *NYI*.[13]

Resources to assist with building the ECE system to reach infants and toddlers "where they are" include the **Incredible Babies** and **Incredible Toddlers** Parent Training groups initiated in Galveston city in 2013 through partnership of GSCA and Family Service Center of Galveston County. *Incredible Years* is an evidence-based program that topped the "effect size" chart in the 2012 *Child Trends* summary of effective social programs with positive cost-benefit impacts. Local evaluation through December 2017 showed the program annually enrolled approximately 80 mothers, fathers, grands, friends, and kin in 9 to 12 weekly 2-hour training sessions to increase knowledge of child development and strengthen parenting practices that help to prevent problem behaviors and build foundational skills for success in school and in life. In the most recent year, 95% of participants indicated high satisfaction with all or nearly all aspects of the program. The evaluation demonstrated systematic increases in knowledge of child development, decreases in hostile attribution to infant behavior, and increases in the regular practice of all 3 of the literacy development behaviors listed on the pre- and post-program questionnaire. Other parent support options are available through The Children's Learning Institute. The Pritzker Children's Initiative announced in April 2018 investment of $6.5 million in pilot-projects in 29 communities in the United States to support early childhood development from birth to age 3. The models and outcomes documented in the pilots will be another important resource to assist planning and action to reach infants and toddlers in Galveston city.

[13] https://techcrunch.com/2017/06/19/wonderschool-gets-2m-to-help-solve-americas-childcare-quandry/
https://techcrunch.com/2018/01/08/wonderschool-gets-2-1m-to-bring-its-early-childhood-programs-to-new-york-city/
https://www.forbes.com/sites/robynshulman/2017/06/20/how-this-startup-is-disrupting-preschool-and-turning-teachers-into-entrepreneurs/#1773ed13fcb

Resources to assist with establishing leadership, financing, and data systems to improve and sustain a successful ECE system in Galveston city include the array of online tool kits, progress tracking tools,[14] and other resources the National League of Cities has developed to assist Mayors and community leaders in building early learning communities that promote healthy child development. These are important resources to improve and sustain a successful ECE system in Galveston city that will meet the immediate needs of families and children and will generate longer-term outcomes that help schools to close egregious racial/ethnic disparities in proportions of children whose development reading on grade level by the end of third grade.

The best advice is to invest in our youngest learners to increase the flow of children whose cognitive and social-emotional development is on-schedule by age three and are "kindergarten ready" by age five. The economist James J Heckman and his associates at the World Bank and elsewhere have demonstrated that rates of return on human capital investment indicates overinvestment in schooling and post-schooling but underinvestment in preschool programs and programs targeted towards the earliest years. Heckman wrote that "early interventions targeted toward disadvantaged children have much higher returns than later interventions such as reduced pupil-teacher ratios, or public job training, or convict rehabilitation, or expenditure on police. Although investments in older disadvantaged individuals realize relatively less return overall, such investments are clearly beneficial. Advantages from early interventions are sustained best when they are followed by continued high-quality learning experiences. Simply stated, early investments pay the biggest returns but must be followed by later investments if maximum value is to be realized."



Heckman J.J. (2006) Skill formation and the economics of investing in disadvantaged children. Science;132:1900-2.

[14] https://www.nlc.org/sites/default/files/users/user75/Progress%20Rating%20Tool.pdf