

3Si



# Texas Early Childhood Data Landscape and Inventory

February 2023





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01

**Executive  
Summary**

Texas provides many early care and education services and publicly funded programs to different – and sometimes overlapping – populations of children, depending on their needs. These services and programs are delivered through multiple state agencies that operate their own data systems for managing and monitoring services and programs. Like most states, Texas has no single data system to provide a comprehensive overview of early childhood care and education system.

An Early Childhood Integrated Data System (ECIDS) would bring together data from multiple agencies' data systems to provide Texas with a comprehensive overview of their early childhood system. Third Sector Intelligence (3Si) conducted a high-level inventory of these early care and education data systems and the data within them to inform the state's efforts to create a roadmap exploring the potential of an ECIDS.<sup>1,2</sup>

To focus the assessment, Texas provided 3Si with four foundational business cases for an ECIDS:

**FOUNDATIONAL BUSINESS CASE 1** What is the total population of families and children birth to five?

**FOUNDATIONAL BUSINESS CASE 2** What is the population of families and children who are eligible for early childhood services and programs?

**FOUNDATIONAL BUSINESS CASE 3** What is the population of families and children who have access to early childhood services and programs?

**FOUNDATIONAL BUSINESS CASE 4** Which potentially eligible families and children are/are not being served by early childhood services and programs?

3Si found that sufficient data are available to support certain aspects of an ECIDS, but there are significant gaps in the availability and completeness of data that would need to be addressed to answer the foundational business cases. The following summarizes the key takeaways from 3Si's analysis:

- **Data to establish the identities of served children and providers serving these children:** Administrative data on children who are receiving services is generally high. However, some of these data are only available at the aggregate level, which will limit Texas's ability to produce reliable unduplicated counts of served children.

- **Data to facilitate matching records to produce unduplicated counts of children and providers:** Some unique child and provider IDs exist to support matching across disparate systems. In the absence of common unique IDs, child records can likely be matched by other common identifiers (child name, date of birth, etc.). Data on providers are generally available and can similarly be matched without common unique provider IDs.
- **Characteristics of all children and their households and providers in Texas, including both served and unserved children, to establish which children could be eligible but are not currently served:** Administrative data alone will not establish the total child population or program eligibility of unserved children because these data only include a fraction of the overall population of children ages birth to five. However, there is reliable information on children participating in publicly funded programs – for example, Temporary Assistance to Needy Families (TANF) – that lead to categorical eligibility for early childhood programs, which somewhat increases the reach of administrative data.

**While the gaps in data availability are significant, they would not preclude Texas from implementing an ECIDS. In 3Si's experience working with other states, these gaps in available data are typical and there are strategies to mitigate many of them. Understanding where these gaps exist is a critical first step.**

It is important to note that these conclusions are preliminary, for the following reasons:

- 1 3Si did not have access to actual data, as gaining access and implementing the necessary data security protocols would take considerable time and resources. Instead, 3Si developed the inventory based on interviews with agency staff and the documentation they provided.
- 2 3Si met with the highest priority agencies and focused on the highest priority data systems, but there are many other agencies with data that may be relevant to the foundational business cases.
- 3 Limited agency staff capacity sometimes hindered documentation collection or follow-up discussions.

Despite these limitations, 3Si was able to assess the general availability of data to support ECIDS implementation. Future analyses should include additional systems and a closer assessment of actual data to verify the findings from this inventory.

This high-level scan of various data systems is a critical first step in enhancing Texas's understanding of the extent to which data are available to support an ECIDS. Texas is in a position to make informed decisions about programs and policies that promote positive outcomes for young children and their families.

**Like most states,  
Texas has no single  
data system to provide  
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education system...**

**While the gaps in  
data availability are  
significant, they would  
not preclude Texas  
from implementing  
an ECIDS.**



# 02 Glossary



## Agency-owned data systems

The agencies included in this inventory provide programs and services to a number of populations and subpopulations, and therefore may own and manage multiple data systems.

## Business Case

A specific situation where the Early Childhood Integrated Data System (ECIDS) could be used.

## Child and Adult Care Food Program

The Child and Adult Care Food Program (CACFP) reimburses child care centers, day care home providers, adult day care centers, and afterschool at-risk programs for part of the cost associated with serving more than 400,000 approved meals and snacks to children and adults in Texas every day.

## Child Care Services (CCS)

CCS provides financial aid (also known as subsidies or scholarships) for low-income families who are working or attending workforce training or education activities. CCS is funded through the federal Child Care and Development Fund (CCDF), which is overseen by the U.S. Department of Health and Human Services' Office of Child Care. CCS benefits ensure high quality care for children while their parents or guardians are at work, in training, or receiving an education. CCS benefits may also be provided as part of a protective service plan to prevent abuse, neglect, or exploitation. The subsidy is paid directly to the child care provider on the family's behalf. The family may have a co-payment for the child care based on their income, the number of family members and the number of family member's needing services.

## Common determinants of program eligibility

Income, for example, is a common eligibility determinant for both SNAP and CCS.

## Early Childhood Integrated Data Systems (ECIDS)

Brings together data from multiple agencies' data systems to provide states with a comprehensive overview of their early childhood system.

## Data elements

Refers to types of data collected (e.g., child age, household income, etc.) from agency owned data systems.

## Data systems

The systems that reside within agencies that are used to collect, manage, store, and report on programs and services.

## Data standards

Data standards include a shared vocabulary and formatting rules for storing, sharing, and exchanging data so that people and machines have a common understanding about the meaning of information included in each system. Common adopted data standards include Ed-Fi and Common Education Data Standards (CEDS).

## Deduplication

The process of establishing unduplicated counts of children and providers across data systems.

## Head Start

Head Start is a program of the United States Department of Health and Human Services that provides comprehensive services to low-income children and families in the areas of early childhood education, health, nutrition, and parent involvement.

## Licensed child care

This refers to programs and providers that are permitted and regulated by the state licensing agency, deemed to meet minimum health, safety, and educational standards, and have been issued a license.

## Matching

A process that allows states to match records across data systems to maintain accurate data on individuals and early care and education providers across various agencies, departments, and programs common identifiers.

## Medicaid and the Children’s Health Insurance Program (CHIP)

Medicaid and the Children’s Health Insurance Program (CHIP) provide health coverage for low-income children, families, seniors, and people with disabilities. CHIP provides low-cost health coverage to children in families that earn too much money to qualify for Medicaid. CHIP is administered by the United States Department of Health and Human Services and provides matching funds to Texas for health insurance to families with children.

## Public pre-k

Free early childhood education available to eligible 3-year and 4-year-olds in Texas. Eligibility applies to 3-year-old students when a three-year-old program is available. Eligibility requirements include: unable to speak and comprehend the English language, eligible to participate in the National School Lunch Program, homeless, in foster care, or a child of an active-duty member of the armed forces, a peace officer, a firefighter, or an emergency medical first responder. Some schools offer tuition-based programs for children who are ineligible for free prekindergarten. More detailed eligibility criteria are available on the TEA website.

## Temporary Assistance for Needy Families (TANF)

Texas TANF provides financial and medical assistance to needy TANF dependent children and the parents or relatives with whom they are living. TANF is administered by the United States Department of Health and Human Services and provides flexible funds to Texas for operating programs.

## Supplemental Nutrition Assistance Program (SNAP)

SNAP provides nutrition benefits to supplement the food budget of needy families so they can purchase healthy food and move towards self-sufficiency. SNAP is administered by the United States Department of Agriculture.

## Unique ID

A distinct ID assigned to students and providers that can be used to accurately match data at the child-level across data systems.

## WIC

The Special Supplemental Nutrition Program for Women, Infants and Children, popularly known as WIC, is a nutrition program for pregnant, breastfeeding women and families with children younger than 5.



# Acronyms

## API

Application Programming Interface

## CACFP

Child and Adult Care Food Program

## CCS

Child Care Services

## CLASS

Child Care Licensing Automation Support System

## CLI

Children’s Learning Institute

## DFPS

Department of Family and Protective Services

**DSHS**

Department of State Health Services

**ECE**

Early Childhood Education

**ECDS**

Early Childhood Data System

**ECIA Work Group**

Early Childhood Inter-Agency Work Group (includes representatives from Texas Education Agency, Texas Workforce Commission, Texas Health and Human Services Commission, Texas Department of Family and Protective Services, and Texas Department of State Health Services)

**ECIDS**

Early Childhood Integrated Data System

**ELMS**

Texas Eligibility List Management System

**FPL**

Federal Poverty Level

**HHSC**

Health and Human Services Commission

**HS**

Head Start

**IMPACT**

Information Management Protecting Adults and Children in Texas

**PEIMS**

Public Education Information Management System

**PEIRS**

Prevention and Early Intervention Reporting System

**PIR**

Head Start Program Information Report

**SNAP**

Supplemental Nutrition Assistance Program

**SPPIs**

State Performance Plan Indicators

**TANF**

Temporary Assistance for Needy Families

**TDA**

Texas Department of Agriculture

**TEA**

Texas Education Agency

**TEDS**

Texas Education Data Standards

**TWC**

Texas Workforce Commission

**WIC**

Special Supplemental Nutrition Program for Women, Infants and Children

**TECPDS**

Texas Early Childhood Professional Development System

**TELC**

Texas Early Learning Council

**TEHDI**

Texas Early Hearing Detection and Intervention

**TIERS**

Texas Integrated Eligibility Redesign System

**TKIDS**

Texas Kids Intervention Data System

**TRS**

Texas Rising Star

**TSDS**

Texas Student Data System

**TWIST**

The Workforce Information System of Texas

**TxEVER**

Texas Electronic Vital Events Registrar

**TXUNPS**

Texas Unified Nutrition Program System



03

# **Purpose and Parameters of Engagement**

Under the direction of the *Early Childhood Inter-Agency Work Group* (ECIA Work Group) and with funding support from the Bill & Melinda Gates Foundation, Third Sector Intelligence (3Si) conducted a high-level inventory of early care and education data systems in the state of Texas to assess the potential for an Early Childhood Integrated Data System (ECIDS). This inventory includes a high-level analysis of the early childhood data landscape, identification of data linkages between Texas data systems, and evaluation of completeness of common data elements.<sup>3</sup> This inventory will also identify potential gaps in available data that Texas would need to address to implement an ECIDS. The results of this analysis will inform the work of the Texas Early Learning Council's (TELC) Data Roadmap Work Group, launched in April 2022, which is exploring a possible ECIDS in Texas.

To gather the information and documentation required for the inventory, 3Si engaged with the following state agencies and institutions over four months: Texas Education Agency (TEA), Texas Workforce Commission (TWC), Texas Health and Human Services Commission (HHSC), the Department of Family and Protective Services (DFPS), the Texas Department of Agriculture (TDA), and the Children's Learning Institute (CLI).<sup>4</sup>

Texas stakeholders defined four foundational business cases for an ECIDS, outlined in [SECTION 4](#). 3Si extrapolated high-level data requirements that Texas will need to fulfill these foundational business cases; these data requirements served as a basis for 3Si's interviews with agency staff and review of available documentation.

3Si's followed a three-step process to gather information for this analysis:

- 1 3Si convened a one-hour kick-off meeting with each relevant agency staff to learn more about the agency's data systems and identify available documentation to support the data inventory.
- 2 3Si reviewed the available documentation from each agency and identified data systems, tables, and/or data elements that will be available to support the foundational business cases.
- 3 3Si convened a follow-up discussion with relevant agency staff to answer any remaining questions.

These results are preliminary, for the following reasons:

- 1 3Si did not have access to actual data, as gaining access and implementing the necessary data security protocols would take considerable time and resources. Instead, 3Si developed the inventory based on interviews with agency staff and the documentation they provided.
- 2 3Si met with the highest priority agencies and focused on the highest priority data systems, but there are many other agencies with data that may be relevant to the foundational business cases.
- 3 Limited agency staff capacity sometimes hindered documentation collection or follow-up discussions.

Despite these limitations, the approach outlined for this initial data inventory allows 3Si to assess the general availability of data to support ECIDS implementation. It is a critical first step that enhances the ECIA and TELC Data Roadmap work groups' understanding of the current early childhood data landscape, including ways in which early childhood data are shared across data systems, common data that can be used to match data across disparate systems, and an analysis of data availability within systems to meet Texas's needs. 3Si believes this high-level analysis is appropriate at this stage of the project, especially given that a more comprehensive inventory—which requires establishment of data access and protocols necessary to access actual data—would take much longer to execute.





04

**Introduction  
to ECIDS and  
Foundational  
Business Cases**

An Early Childhood Integrated Data System (ECIDS) provides a holistic examination of child- and program-level indicators and outcomes by connecting data within data systems owned by multiple state agencies that provide early care and education services. An ECIDS collects, integrates, maintains, and reports information from these data systems.<sup>5</sup>

The universe of potential data that could be used in an ECIDS is vast. To avoid “boiling the ocean” and investing extensive resources to inventory data that may not be immediately useful, the TELC Data Roadmap Work Group established four high-value foundational business cases that could be asked of an existing ECIDS.<sup>6</sup>

**FOUNDATIONAL BUSINESS CASE 1** What is the total population of families and children birth to five?

**FOUNDATIONAL BUSINESS CASE 2** What is the population of families and children who are eligible for early childhood services and programs?

**FOUNDATIONAL BUSINESS CASE 3** What is the population of families and children who have access to early childhood services and programs?

**FOUNDATIONAL BUSINESS CASE 4** Which potentially eligible families and children are or are not being served by early childhood services and programs?

The data needed to address each business case overlap significantly, so it is simplest to define the types of data needed to address all four foundational business cases collectively. Based on our experience developing ECIDS business cases and implementing ECIDS with other states, **3Si determined that the following data will be needed to address all four foundational business cases:**

- **Data to establish the identities of children who are currently receiving early childhood services and the providers serving these children.**
- **Data to match records across disparate systems to produce unduplicated counts of served children and providers.**
- **Characteristics of all children — including unserved children, their households, and providers in Texas to establish which children could be eligible but are not currently served by various programs.**

3Si’s specific rationale and other details for each of these types of data are described below:

#### **A CURRENTLY SERVED CHILDREN AND PROVIDERS SERVING CHILDREN**

Texas will need data clearly indicating which children are served, how these children are served (e.g., full day or part day, etc.), and by which programs and providers. Much of this information may be available in administrative systems, but not all systems consistently collect child-level data on served children. Instead, they may offer only aggregate data such as enrollment, slot counts, or indirect measures such as licensed capacity.

Similarly, it will be essential to establish a clear picture of the providers offering these services. Knowing which providers are active, how many children they serve, their level of quality, and other characteristics will help determine how children are served and will mitigate any gaps in needed child-level data.

#### **B DATA TO FACILITATE MATCHING/DEDUPLICATION OF CHILDREN AND PROVIDERS**

Identification of served populations requires establishing a unique record to identify every child and every child care provider (public or private). By doing so, Texas can avoid double-counting and other errors. This approach is also important because some children are served by multiple programs.

This exercise is often referred to as establishing unduplicated counts of children and providers. While common identifiers (like consistent unique child IDs across systems) could enable Texas to produce unduplicated counts of children and providers, these common identifiers are not always possible for all systems. Fortunately, there are other techniques and technologies to match across data sources with sufficient common data. For instance, it may be possible for Texas to match children across two systems that each have child name, date of birth, and home address.

## C CHARACTERISTICS OF THE ENTIRE CHILD POPULATION

Identification of the entire birth to five population is necessary to determine the potential unmet demand for services. Failure to identify the entire population will also limit the usefulness of results. For example, without the ability to place served children within the context of the entire population, Texas stakeholders would be unable to compare service levels across geographies, ages, employment status, and other key factors. Defining the entire birth to five population as completely as possible will help to establish a common frame of reference across business cases and over time.

Population characteristics will also be needed to understand program eligibility. There are numerous programs that serve young children and families, each with its own eligibility criteria. In many cases, these eligibility criteria are quite complex, with multiple child and family characteristics factoring into eligibility. There are also instances where participation in one program activates eligibility in other programs,

known as categorical eligibility. Furthermore, children often qualify for multiple programs.

To understand which children are eligible for which combination of programs, Texas needs to identify common determinants of program eligibility for all children ages birth to five. For example, in most states, children below a certain income threshold qualify for both CCS and state-funded PreK. Therefore, income is a common determinant of eligibility. These specific elements are outlined below in [SECTION 5](#) but typically include child age, household income, parent/guardian work requirements, and disability status, among other eligibility criteria.

Demographic characteristics of served children will also be important to understand who the state is reaching with its services – and, ultimately, with other data and modeling – who the state is not reaching.

Lastly, geographic criteria estimating where a child lives and how many providers offer services near the child are also important to establish if programs are accessible to eligible children.

The ECIA Work Group also provided 3Si parameters to define the universe of programs to be included in this inventory. As noted in [SECTION 3](#), the full universe of early care and education agencies is broader than the scope of this project. Even within the five agencies included in the inventory, only programs that are offered in formal settings and include some need-based eligibility criteria are sufficiently straightforward enough to address the foundational business cases.





05

**Key Agencies  
and Their  
Data Systems**

Section 5 summarizes the five key agencies involved in early childhood care and education, the 12 data systems within the five key agencies, and their associated programs that are included in this inventory.

## A Introduction to Agencies

Table 5-1 includes a high-level overview of the agency-owned data systems included in the inventory. Like most state agencies, the agencies included in this inventory provide programs and services to a number of populations and subpopulations, and therefore may own and manage multiple data systems.

**TABLE 5-1 – KEY AGENCIES AND DATA SYSTEMS**

AGENCY	DATA SYSTEM NAME AND DESCRIPTION
Dept. of Family and Protective Service (DFPS) <sup>a</sup>	<ul style="list-style-type: none"> <li>• <b>PEIRS</b> (Prevention and Early Intervention Reporting System): Home visiting and other prevention program data</li> <li>• <b>IMPACT</b> (Information Management Protecting Adults and Children in Texas): Child welfare, protective services, and child care investigations data</li> </ul>
Health and Human Services Commission (HHSC) <sup>b,c</sup>	<ul style="list-style-type: none"> <li>• <b>TKIDS</b> (Texas Kids Intervention Data System): Early intervention services data</li> <li>• <b>CLASS</b> (Child Care Licensing Automation Support System): Child care licensing data</li> <li>• <b>TIERS</b> (Texas Integrated Eligibility Redesign System): Eligibility and benefit data for certain publicly funded programs, e.g., SNAP, TANF, CHIP, and Medicaid) data</li> </ul>
Texas Education Agency (TEA) <sup>b,d</sup>	<ul style="list-style-type: none"> <li>• <b>ECDS</b> (Early Childhood Data System): Public PreK and kindergarten assessment data</li> <li>• <b>PEIMS</b> (Public Education Information Management System): Education organization, finance, staff, student demographics and academic data</li> <li>• <b>Child Find</b>: Special education compliance indicators (SPPI-11 and SPPI-12) data</li> </ul>
Texas Workforce Commission (TWC)	<ul style="list-style-type: none"> <li>• <b>TWIST</b> (The Workforce Information System of Texas): Child care subsidy data<sup>e</sup></li> </ul>
Children’s Learning Institute (CLI) <sup>f</sup>	<ul style="list-style-type: none"> <li>• <b>Texas Rising Star</b>: State Quality Rating and Improvement System (QRIS) for child care providers<sup>g</sup></li> <li>• <b>Engage</b>: Birth–second grade professional development and child progress monitoring</li> <li>• <b>TECPDS</b> (Texas Early Childhood Professional Development System): Workforce and trainer professional development and educational attainment data</li> </ul>

a: There is a plan to upgrade DFPS’s IMPACT data system in 2025 that will allow for more automated data sharing.

b: The Texas Department of Agriculture agreed to participate in an interview to discuss the matching process their system—Texas Eligibility List Management System (ELMS)—uses to identify students eligible for Free and Reduced-Price Lunch with TEA and HHSC data (see [FIGURE 5-1](#) and [SECTION 6-B](#)). ELMS is not included in this table because 3Si did not collect documentation.

c: 3Si learned through the TELC Data Roadmap Work Group that HHSC’s WIC Management of Information System receives Medicaid, SNAP and TANF data from HHSC’s TIERS system to notify current WIC clients who are not yet enrolled in WIC of their potential eligibility. WIC MIS is not included in this table because 3Si did not collect documentation.

d: Private PreK program data for ECDS is voluntary. These systems are all housed in TEA’s Texas Student Data System (TSDS) for collecting and reporting education data for publicly funded schools in Texas. LEAs are required to report data on sixteen State Performance Plan Indicators (SPPIs) identified by the U.S. Department of Education’s Office of Special Education Programs. Three of the SPPI indicators are currently in TSDS. The others are in a different TEA application.

e: TWC is currently designing a new child care case management system that will replace TWIST beginning in FY2023.

f: 3Si only included the Texas Rising Star system in the full inventory but also reviewed the Engage and TECPDS data elements for fields relevant to the broader set of business cases (workforce and assessment fields).

g: While the data are maintained at CLI, TWC is the state entity that runs Texas Rising Star.

These systems do not reflect the entire universe of early care and education data systems. For example, the Texas Electronic Vital Events Registrar (TxEVER) and Texas Early Hearing Detection and Intervention (TEHDI) systems housed at Texas Department of State Health Services (DSHS) were out of scope for this project. These systems include vital statistics records (such as birth and death certificates) and newborn screening services for hearing and certain disorders. Likewise, while 3Si did connect with the Texas Department of Agriculture, it did not review the Texas Unified Nutrition Program System (TXUNPS) system, which includes information on the Child and Adult Care Food Program (CACFP).

The systems 3Si assessed include many of the key publicly funded programs available to children in Texas ages birth to five, such as child welfare, child care, and early education. Such systems include a rich set of data relevant to the foundational business cases, and even to the broader set of business cases Texas may consider adding ([APPENDIX A](#)).

## **B Texas Early Childhood Data Landscape**

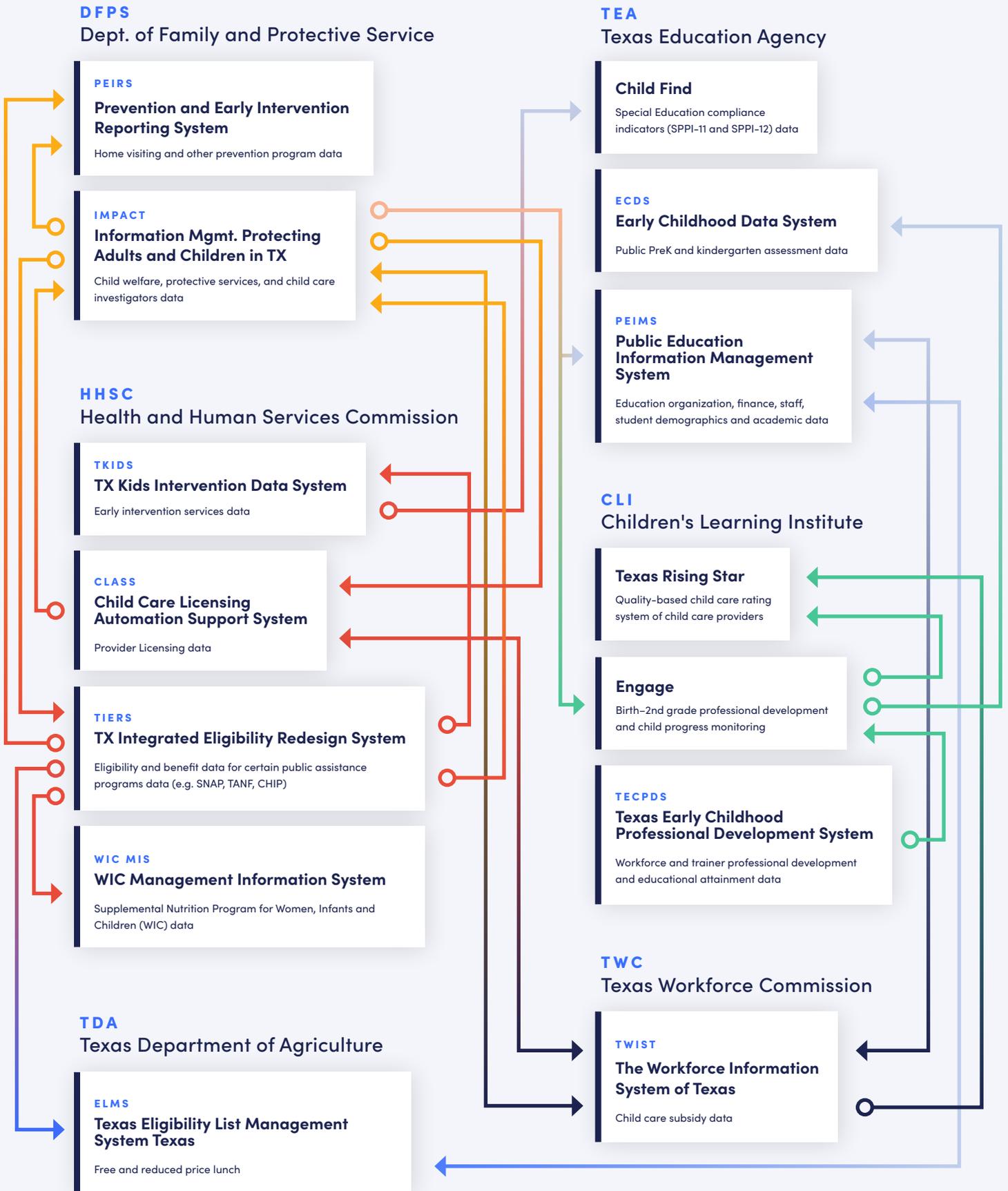
[FIGURE 5-1](#) is a data landscape map that shows how data currently flow between systems that are relevant to the foundational business cases. The data landscape map shows which data systems exist and are known to 3Si today, within the scope of this inquiry, but it is not intended to capture every data system or table in Texas related to early childhood care and education.

As shown, several of the data systems share data to determine program eligibility or otherwise coordinate services. Figure 5-1 shows that the agencies currently sharing data undergo various matching processes using common child- and provider-level data such as name, date of birth, social security number (SSN), and gender (see [TABLES 6-5](#) and [6-6](#) for more details).



**FIGURE 5-1 – DATA LANDSCAPE MAP<sup>a</sup>**

 ARROW DENOTES DIRECTION OF DATA SHARING ACROSS SYSTEMS



<sup>a</sup>: This figure outlines known, ongoing data sharing among agencies. The manner of data sharing varies from system connections (including APIs) to manual data pulls. See [APPENDIX B](#) for list of specific data elements shared between data system.

## C Program Eligibility

Foundational business cases #2, #3, and #4 pertain to program eligibility and require an analysis of which data will be needed to determine eligibility for different combinations of programs. To focus this inventory, Texas directed 3Si to prioritize programs that are offered in formal settings and include some need-based eligibility criteria.<sup>8</sup> In some cases, participation in publicly funded programs may indicate categorical eligibility for early childhood programs (e.g., families enrolled in TANF are categorically eligible for Head Start enrollment). This preliminary list of programs included in the data inventory includes early childhood care and education programs as well as broader social programs:

- Public PreK
- Child Care and Development Fund (CCDF)-funded Child Care (Child Care Services)
- Head Start/Early Head Start
- Supplemental Nutrition Assistance program (SNAP)
- Temporary Assistance to Needy Families (TANF)
- Children’s Health Insurance Program (CHIP)

**TABLE 5-2** includes the eligibility requirements for publicly funded programs administered by the agencies included in this inventory. These programs have distinct requirements to determine eligibility, such as income thresholds and participation in work, education, or training programs. Where possible, 3Si assessed the presence of data related to program eligibility – such as family income and work status – to clarify eligibility requirements for particular services.

In addition to child age, household income, and parent/guardian work status, 3Si assessed other program eligibility criteria to the extent possible, including participation in related programs (SNAP, TANF, etc.) and the presence of developmental delays. 3Si did not address all risk factors that impact program eligibility, such as children experiencing housing instability, for several reasons. First, based on 3Si’s experience working in other states, data completeness and quality for some of these additional risk factors are often low. Second, while there is value in identifying these characteristics, some of them will likely overlap with eligibility determinations based on other characteristics (e.g., housing instability and child poverty are likely to be highly correlated, for example).



**TABLE 5-2 – SUMMARY OF ELIGIBILITY REQUIREMENTS BY PROGRAM**

PROGRAM (AGENCY)	INCOME ELIGIBILITY	WORK/EDUCATION STATUS ELIGIBILITY	OTHER ELIGIBILITY REQUIREMENTS	AGE GROUP			
				BIRTH – 17m	18 – 35m	3 – 4y	5y
Public PreK (TEA)	Up to 185% FPL <sup>a</sup>	None	Unable to speak or comprehend English; homeless; in or has ever been in foster care; child of a member of the armed forces; child of a person eligible for the Star of Texas Award	-	-	Yes <sup>b</sup>	Yes <sup>c</sup>
Child Care Services (TWC)	Up to 85% SMI <sup>d</sup>	Working, searching for work, or attending education/training program for a min avg. of 25 hrs./week (single-parent) and 50 hrs./week (two-parents)	None	Yes	Yes		
Head Start/Early Head Start	<100% FPL. Up to 10% enrollees may have a family income above 100% FPL	None	Homeless or foster child; eligible for Supplemental Security Income (SSI), TANF, SNAP <sup>e</sup>	Yes	Yes	Yes	Yes
SNAP (HHSC)	Max monthly income \$2,518 (2-person)	Adult household members are required to participate in Employment and Training unless meeting the work requirement of 30 hours per week or otherwise exempt	Eligible for TANF or SSI <sup>e</sup>	Yes	Yes	Yes	Yes

**TABLE 5-2 – SUMMARY OF ELIGIBILITY REQUIREMENTS BY PROGRAM**

PROGRAM (AGENCY)	INCOME ELIGIBILITY	WORK/EDUCATION STATUS ELIGIBILITY	OTHER ELIGIBILITY REQUIREMENTS	AGE GROUP			
				BIRTH – 17m	18 – 35m	3 – 4y	5y
TANF (HHSC)	Max monthly income \$2,518 (2-person household), \$3,167 (3-person household). Max assets of \$5,000	Adult household members are required to participate in Choices (Texas’ TANF Employment and Training Program) unless otherwise exempt	Higher income limits for One Time TANF for relatives (200% of the Federal Poverty Limit)	Yes	Yes	Yes	Yes
WIC (HHSC)	Max monthly income \$2,823 (2-person household), \$3,551 (3-person household)	None	Eligible for Medicaid, SNAP or TANF	Yes	Yes	Yes	
CHIP (HHSC)	Max monthly income \$3,067 (2-person household), \$3,858 (3-person household)	None	-	Yes	Yes	Yes	Yes
Medicaid	144% for 1–5 year-olds and 198% for <1	None	-	Yes	Yes	Yes	Yes

Note: This table does not represent the whole of programs offered by the agencies included in this inventory. It excludes programs whose eligibility requirements vary by service, such as DFPS’s Prevention and Early Intervention (PEI).

a: FPL = Federal Poverty Level. In 2022, a family of one is considered to be below the federal poverty line if their income is at or below \$13,590, a family of two at or below \$18,310, and a family of three at or below \$23,030. For public school PreK, one qualifying criterion is “educationally disadvantaged” as defined by eligibility for free or reduced-price school lunch which is up to 185% FPL.

b: It is optional for local education agencies to offer PreK to 3 year-olds; it is required for them to offer PreK to 4 year-olds (as long as at least 15 eligible children are identified in the district)

c: Some five-year-olds may be served by Head Start or Public PreK if they turned five after the date of eligibility determination (in this case, September 1).

d: SMI = Estimated State Median Income. In 2022, SMI for a family of one is \$46,167 (85% is \$39,242), a family of two is \$60,373 (85% is \$51,317), and a family of three is \$74,578 (85% is \$63,391). Source: [https://www.acf.hhs.gov/sites/default/files/documents/ocs/COMM\\_LIHEAP\\_Att1SMITable\\_FY2023.pdf](https://www.acf.hhs.gov/sites/default/files/documents/ocs/COMM_LIHEAP_Att1SMITable_FY2023.pdf).

e: In some cases, participation in one program qualifies an individual for another program, known as categorical eligibility.

f: These income limits give an idea of the money a person or family can get and still be eligible for TANF.



06

**Inventory of  
Data Needed to  
Address Texas  
Business Cases**

As described in [SECTION 4](#), this section summarizes 3Si's analysis of the availability of data needed to address Texas's foundational business cases.

3Si performed this analysis with three objectives:

- 1 Determine the presence of data to establish and augment the identities and characteristics of children currently served and providers serving these children. [TABLES 6-3](#) and [6-4](#) summarize the availability of child- and provider-level data that 3Si determined would be necessary to establish the population of served children and providers.
- 2 Identify the data available to support matching of data across disparate systems. [TABLES 6-5](#) and [6-6](#) summarize the availability of common child- and provider-level identifying data collected within each data system that can be used for matching purposes to produce unduplicated counts of children and providers.
- 3 Determine the data to establish the full population of all children and providers in the state of Texas, including both served and unserved children. [TABLES 6-7](#) and [6-8](#) summarize the availability of data to establish counts and characteristics of the full population of children and to model program eligibility of all children ages birth to five in Texas. Child and family characteristics are needed to help identify program eligibility and establish which children could be but are not currently served by various programs.

The following section summarizes the availability of the data needed to address the foundational business cases. [APPENDIX C](#) and [APPENDIX D](#) include 3Si's detailed assessment of each needed data element, by system.



## **A Summary of Key Data Needed to Establish Served Children and Providers**

Based on the common attributes used to define program eligibility (summarized above in [TABLE 5-2](#)), 3Si produced a prioritized list of required data across child- and provider-level systems. [Tables 6-3](#) and [6-4](#) summarize the child- and provider-level data that 3Si determined relevant to the foundational business cases.

[Table 6-3](#) includes the primary data needed to establish children served, as well as additional data elements that are frequently used for analyses (gender, race and ethnicity, language, and location). The table denotes whether or not a field is mandatory or optional within each system. [Appendices C](#) and [D](#) show estimates of available data that are not mandatory.<sup>9</sup>

**TABLE 6-3 — SUMMARY OF KEY CHILD-LEVEL DATA RELATING TO CHILDREN SERVED<sup>a</sup>**

Bright blue denotes mandatory, light blue denotes not mandatory<sup>b</sup>

DATA ELEMENT	DFPS PEIRS	DFPS IMPACT	HHSC TKIDS	HHSC TIERS	TEA PEIMS	TEA Child Find	TEA ECDS	TWC TWIST
Child Age								
Child Disabilities								
Risk Factors (Program) <sup>c</sup>								
Household Size								
Household Income								
Work/School Status of Parent/ Caregiver								
Address								

*The following fields are not required for foundational business cases but included here to support future analysis*

Child Gender								
Child Race/ Ethnicity								
Child Language								

*a: HHSC's CLASS and CLI's Texas Rising Star systems collect provider-level data but not child-level data, so are excluded from this table.*

*b: Not mandatory = optional and/or conditionally mandatory.*

*c: Risk factors vary across data systems and depend on the at-risk population a program serves, so this category is a catch-all that consolidates each system's risk factor. For example, risk factors such as family conflict or substance abuse are collected for DFPS' early intervention and prevention services, which is managed by the PEIRS system, while TEA's PEIMS system collects information on homelessness and protective services status.*

The preliminary finding from [TABLE 6-3](#) is that Texas administrative data systems generally capture the types of data required to identify served children and providers serving children. The most important function for these data to support the foundational business cases is to have reliable child-level data on children being served by these programs. The programs listed in Table 6-3 all provide this needed level of detail, but there are two notable exceptions of needed program data that are not addressed in Table 6-3: data to identify specific children served by Head Start and children served by licensed, non-subsidy child care. While Head Start data are available but must be captured at the level of each individual Head Start grantee, licensed, non-subsidy child care data are not captured at all. This is true across all states. These data will need to be acquired from aggregate sources, as described in [TABLE 6-4](#).

Furthermore, the *scope* of data collected is insufficient to fully address the business cases. For example, while all Texas agencies collect information on child age, not all children in Texas – particularly children who have not received services from Texas agencies – are captured in these data. This limitation is also true across all states. The absence of these data could limit the utility of the ECIDS, especially for identifying and allocating resources to unserved or underserved populations. [TABLE 7-9](#) explains these gaps in further detail.

In addition to the child-level data elements outlined in Table 6-3, some data will be needed from providers to address the foundational business cases. For instance, Texas will need to access data from providers in the Texas Rising Star program (where possible) to better understand whether children are served and at what level of quality. Similarly, licensed, non-CCS providers do not provide child-level data to the state, therefore an ECIDS would not include these data at the child level. Finally, child-level Head Start data are collected and owned by the many individual grantees across the state. While this child-level data exists, it is unlikely that it would be made available for an ECIDS in the near term without newly established coordination among all grantees. Therefore, 3Si considers aggregated data originating from the Head Start State Collaboration Office to be the primary source of Head Start data for Texas.<sup>10</sup>

Table 6-4 includes provider-level data to determine how many children are being served by early childhood care and education programs, and by what types of programs. Once again, the table denotes whether a field is mandatory, with additional details included in [APPENDICES C](#) and [D](#).

**Table 6-3 finds that Texas administrative data systems generally capture the types of data required to identify served children and providers serving children, while the scope of data collected is insufficient to fully address the business cases.**



**TABLE 6-4 – SUMMARY OF KEY PROVIDER-LEVEL DATA RELATING TO ACTIVE PROVIDERS<sup>a</sup>**

Bright blue denotes mandatory, light blue denotes not mandatory<sup>b</sup>

DATA ELEMENT	HHSC CLASS	TEA ECDS/PEIMS	TWC TWIST	CLI Head Start <sup>f</sup>	CLI Texas Rising Star
Provider Name/DBA					
Provider Address					
Number of Children Served	(Only licensed capacity) <sup>d</sup>	N/A <sup>e</sup>			N/A <sup>e</sup>
Provider Type					
Quality Rating	N/A	N/A		N/A	

*a: HHSC’s CLASS and CLI’s Texas Rising Star systems collect provider-level data but not child-level data, so are excluded from this table.*

*b: Not mandatory = optional and/or conditionally mandatory.*

*c: Head Start includes Early Head Start, Migrant Head Start, and American Indian and Alaska Native (AIAN) Head Start. As noted above, Head Start grantees separately manage child-level data, typically operated by third-party vendors (e.g., Child Plus). For the purpose of this initial inventory, 3Si reviewed publicly available aggregate (site-level) data from the Head Start State Collaboration Office.*

*d: Licensed capacity is not an ideal measure of children served by licensed child care. Actual children served can differ from licensed capacity for several reasons. Firstly, providers may in reality have some level of vacancy such that they do not serve all children they are licensed to. Secondly, capacity does not account for practical limitations such as staffing, number of bathrooms, etc., and may therefore greatly overestimate the functional capacity of the provider. Lastly, functional capacity also differs based on age group served as well as scheduling considerations (e.g., morning and afternoon sessions could be sequenced to serve multiple children per “seat” in a single day), further muddling the connection between licensed capacity and actual children served. Texas should be aware of these limitations if it uses licensed capacity to estimate overall children served.*

*e: Where noted, provider-level information is not applicable. For instance, aggregate counts of children served by Public PreK are not needed since these are provided through existing child-level data. CLI data is not applicable to number of children served since the focus of CLI data in this instance is provider quality ratings, which only apply at the provider level.*



**Provider-level data to support the foundational business cases are generally available, but there are limitations, particularly with regards to counts of served children.**

**TABLE 6-4** demonstrates that provider-level data to support the foundational business cases are generally available. There are important limitations of provider-level data, however, particularly with regards to counts of served children. Cases where served children are only known at the aggregate (provider) level will present difficulty for Texas’s identification of which children are served by multiple programs. For instance, some children may be served by both Head Start and the Child Care Services subsidy program. Even with child-level data from Child Care Services, there will be no way to know definitively if such a child is also receiving Head Start service in the absence of child-level matching.

Data on licensed child care providers within the CLASS system also have limitations. Licensed child care represents a significant share of overall services statewide, but the CLASS system does not track distinct children served. As noted above in Table 6-4 (see *footnote d*), while CLASS records licensed capacity of these providers, that figure is likely to overestimate actual children served and will not facilitate child-level matching to determine program overlap.

## **B Summary of Key Data Needed to Establish Served Children and Providers**

A key aspect of an ECIDS is a matching process that allows states to match records across data systems to maintain accurate data on individuals and early care and education providers across various agencies, departments, and programs. Common identifiers also support deduplication processes to avoid double-counting when children or providers are represented in multiple data systems.

The ideal approach to data matching across systems is to use a common identifier. For instance, all children in TEA data systems receive a unique ID (“TX-UNIQUE-STUDENT-ID”) which can be used to accurately match data at the child level across any of TEA’s data systems. Not all data systems have common identifiers. It is a common challenge faced by states in ECIDS implementation; fortunately, a lack of common identifiers does not preclude child matching.

Of the 12 data systems included in the inventory, all assign a unique ID to each participating child, but just four systems share the same unique ID (PEIMS, Child Find, ECDS, and TWIST). Even without a single unifying unique ID across systems, however, Texas would still be able to match records to support ECIDS implementation. For example, in our discovery discussion with the Texas Department of Agriculture, we learned that the agency’s Texas Eligibility List Management System (ELMS) identifies students eligible for Free and Reduced-Price Lunch by participation in the Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), or some types of Medicaid. ELMS matches records with TEA and HHSC data using an algorithm that identifies a match in four out of five fields (in this case, based on first name, last name, date of birth, SSN, and gender).<sup>11</sup> Texas could use similar algorithms to match data across additional datasets in support of an ECIDS.

In four of the data systems included in the inventory, child care licensing ID (also called Child Care Operation Number) is collected.

**TABLES 6-5** and **6-6** summarize common child- and family-level identifying fields collected within each data system and distinguish between fields that are mandatory to collect and those that are not. **APPENDICES C** and **D** show estimates of available data that are not mandatory. It is important to note that while common identifiers may exist across systems, one system may have different rules for how data are entered, such as different categories for household income. These inconsistent definitions will need to be resolved before Texas can integrate these data sources.<sup>12</sup>

**TABLE 6-5 – SUMMARY OF COMMON CHILD-LEVEL IDENTIFIERS**

Bright blue denotes mandatory, light blue denotes not mandatory<sup>a</sup>

<b>DATA ELEMENT</b>	<b>DFPS PEIRS</b>	<b>DFPS IMPACT</b>	<b>HHSC TKIDS</b>	<b>HHSC TIERS</b>	<b>TEA PEIMS</b>	<b>TEA Child Find</b>	<b>TEA ECDS</b>	<b>TWC TWIST</b>
Unique ID	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue
Child First Name	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue
Child Last Name	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue
Generation Suffix	White	Light Blue	White	Light Blue	Light Blue	Light Blue	White	Light Blue
Child Date of Birth	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue	Bright Blue
Plural Birth Flag <sup>b</sup>	White	White	White	White	White	White	White	White
Child Gender	Bright Blue	Bright Blue	White	Bright Blue	Bright Blue	Bright Blue	Light Blue	Bright Blue
Child Race	Bright Blue	Bright Blue	Bright Blue	Light Blue	Bright Blue	Light Blue	Light Blue	Light Blue
Child Ethnicity	Bright Blue	Bright Blue	Bright Blue	Light Blue	Bright Blue	Light Blue	Light Blue	Light Blue
Child SSN	Light Blue	Light Blue	Bright Blue	Bright Blue	Light Blue	Light Blue	Light Blue	Light Blue
Phone	Bright Blue	Light Blue	White	Bright Blue	White	White	White	Light Blue
Address	Bright Blue	Light Blue	Bright Blue	Bright Blue	White	White	White	Bright Blue
Parent 1 Name	Bright Blue	Light Blue	Bright Blue	Bright Blue	White	White	White	Bright Blue
Parent 1 Date of Birth	Bright Blue	Light Blue	Light Blue	Bright Blue	White	White	White	Bright Blue
Parent 2 Name	Bright Blue	Light Blue	White	White	White	White	White	White
Parent 2 Date of Birth	Bright Blue	Light Blue	White	White	White	White	White	White
Mother Maiden	White	White	White	White	White	White	White	White

a: Not mandatory = optional and/or conditionally mandatory. HHSC's CLASS and CLI's Texas Rising Star systems collect provider-level data but not child-level data, so are not included in this table.

b: Plural birth flag can assist in child-level matching in instances where multiple children within a household have the same date of birth (e.g., twins).

**TABLE 6-6 — SUMMARY OF COMMON PROVIDER-LEVEL IDENTIFIERS**

Bright blue denotes mandatory, light blue denotes not mandatory<sup>a</sup>

COMMON IDENTIFIER	HHSC CLASS	TEA IMPACT	TWC TWIST	CLI Head Start <sup>b</sup>	CLI Texas Rising Star
Provider Name/ DBA					
Provider Address					
Licensing ID					
Other/ Proprietary ID					

*a: Not mandatory = optional and/or conditionally mandatory. HHSC's CLASS, TWC's TWIST, and TEA's ECDS systems are included in both Tables 6-5 and 6-6 because they collect child- and provider-level data.*

*b: Head Start includes Early Head Start, Migrant Head Start, and American Indian and Alaska Native (AIAN) Head Start.*

**TABLES 6-5** and 6-6 summarize common child- and family-level identifying fields collected within each data system and distinguish between fields that are mandatory to collect and those that are not. **APPENDICES C** and **D** show estimates of available data that are not mandatory. It is important to note that while common identifiers may exist across systems, one system may have different rules for how data are entered, such as different categories for household income. These inconsistent definitions will need to be resolved before Texas can integrate these data sources.<sup>12</sup>

### **C Summary of Key Data Needed to Establish Served Children and Providers**

To capture the entire population of Texas children age birth to five, 3Si assessed the extent to which these data systems cover the entire child population. For example, while demographic data like age and household income may be collected on every child served by Child Care Services (through the TWIST system), the TWIST system does not contain data on the entire population of children ages birth to 5. It is therefore important to look at the collection of required data with the dual lens of program coverage (i.e., the fraction of served children for whom the system collects data) and *population coverage* (the fraction of the total population encompassed in the system). 3Si has included the collective population coverage of Texas's administrative systems in order to emphasize that full population coverage will vary by data element (e.g., data on child age is collected more reliably than household income) and will typically not be comprehensive. 3Si expects this finding to remain true, even if additional data sources are added to this analysis in a future data inventory.



Table 6-7 summarizes program and population coverage of the datasets included in this inventory relative to the data needed to address the foundational business cases. This table and [TABLE 6-8](#) convey data coverage as Harvey balls, which show the completeness of administrative data available to address each needed data element.<sup>13</sup> See [APPENDIX C](#) and [D](#) for a breakdown of data elements by system as well as more information about how to interpret Harvey balls.

**TABLE 6-7 – SUMMARY OF DATA TO ESTABLISH CHARACTERISTICS OF SERVED CHILDREN AND FULL CHILD POPULATION**

Summary of systems in Appendix C with detail on coverage for program and total population

 High Coverage 
  Medium-High Coverage 
  Medium Coverage 
  Low Coverage

DATA ELEMENT	ESTIMATED DATA COVERAGE		NOTES
	PROGRAM	FULL CHILD POPULATION	
Age			While collection of data on child and family characteristics is generally high among served children, these data will be unavailable for children who are not currently served by early childhood programs.
Disabilities			
Risk Factors			
Household Size			
Income			
Work/School Status of Parent/Caregiver			
Location			

*The following fields are not required for foundational business cases but included here to support future analysis*

Gender			Data on child characteristics that will be useful for cross-cutting analysis (e.g., service saturation by race and ethnicity, etc.) is generally available for served children but largely unavailable for the child population as a whole.
Race/Ethnicity			
Language			
Overall Summary			Data availability is high for children currently receiving services, but there are significant gaps in data required to model the entire child population.

**TABLE 6-8 — SUMMARY OF DATA TO ESTABLISH FULL ELIGIBLE POPULATION BY PROGRAM**

Summary of systems in Appendix D with data to model children served and total population eligible by program

● High Coverage   ● Medium-High Coverage   ● Medium Coverage   ● Low Coverage

PROGRAM	ESTIMATED DATA COVERAGE		LIMITATIONS AND OTHER NOTES
	PROGRAM	FULL CHILD POPULATION	
Public PreK	●	●	Private PreK providers who are not in partnership with local education agencies are not required to submit data through ECDS. Some data for Private PreK are available but do not provide a complete picture. Overall availability of data on characteristics of the entire child population is low.
Child Care Services	●	●	Records of all children served are in the TWIST system. As TWIST covers only a fraction of the total child population in Texas, overall availability of data on the entire child population is low.
Head Start	●	●	Currently, only aggregate data are available on served children at the state level, limiting accuracy and ability to account for children who are served by multiple programs. Accessing child-level information would require connections with individual Head Start grantees. Overall availability of population characteristics is low.
Licensed Child Care	●	N/A	Only aggregate data are available on licensed capacity, limiting accuracy and ability to account for children who are served by more than one program. Program eligibility is not applicable for licensed child care, since this program has no specific eligibility requirements.
SNAP	●	N/A	Participation in SNAP, TANF, and CHIP is considered for this analysis insofar as these services indicate categorical eligibility for other early childhood programs. Estimating the overall population eligible for these programs is outside the scope of this analysis.
TANF	●	N/A	
CHIP	●	N/A	
Summary	●	●	Availability of data on served children is high. There are some notable exceptions, particularly in the case of Head Start, for which there is only likely to be aggregate data, which will limit accuracy of results and preclude child-level matching necessary to produce unduplicated counts. Overall availability of data to model total populations eligible for these programs is low, with relatively few children from the total eligible population likely to be represented in administrative data systems.

Table 6-8 indicates that while there are ample data on children currently served in early childhood programs, there is very low availability of administrative data to account for the total population of children ages birth to five eligible for these programs.<sup>14</sup> [SECTION 7](#) further discusses this finding.



While there are ample data on children currently served in early childhood programs, there is very low availability of administrative data to account for the total population of children ages birth to five eligible



07

**Summary of  
Preliminary  
Findings**

Section 7 summarizes preliminary findings on the availability of administrative data to address the foundational business cases. The Data Availability column in Table 7-9 combines 3Si's analysis of the availability and completeness of data within each data system needed to support the foundational business cases. See [APPENDIX D](#) for a full summary of availability and completeness of individual data elements by agency.

**TABLE 7-9 – SUMMARY OF DATA AVAILABILITY FOR FOUNDATIONAL BUSINESS CASES**

DATA NEEDED TO ADDRESS FOUNDATIONAL BUSINESS CASES	DATA AVAILABILITY	LIMITATIONS AND OTHER NOTES
<p><b>A</b> Data to establish the identities and characteristics of children currently served and providers serving these children.</p>	<p>Medium</p>	<p>Availability of administrative data on served children is generally medium to high. However, some data are not available at the child level (for Head Start and Licensed Child Care), which will limit Texas’s ability to produce reliable unduplicated counts of served children.</p>
<p><b>B</b> Data to facilitate matching records of children currently served and providers serving these children across disparate systems to produce unduplicated counts of served children and providers.</p>	<p>Medium</p>	<p>Some unique child and provider IDs exist to support matching across disparate data systems. Child records can likely be matched even in the absence of common unique IDs by other common identifiers (child name, date of birth, etc.). Data on providers is generally available and can similarly be matched even without common unique provider IDs.</p>
<p><b>C</b> Characteristics of all children and their households and providers in the state of Texas, <b>including unserved children</b>, to establish which children could be eligible but are not currently served by various programs.</p>	<p>Low</p>	<p>Administrative data only includes a fraction of the overall population of children ages birth to 5. There is insufficient administrative data to establish the total child population or overall program eligibility of unserved children. However, there is reliable information on children participating in programs that indicate they have categorical eligibility for early childhood programs (e.g., TANF, etc.), which somewhat increases the utility of administrative data.</p>

Table 7-9 shows that sufficient data are available to support certain aspects of ECIDS implementation but there are significant gaps. There is generally medium to high availability of data on children served and providers serving children, as well as availability of identifiers to support matching of child- and provider-level data with reasonable accuracy. Some data on children served is aggregated, which may limit Texas’s ability to produce unduplicated counts of children served. For these reasons, 3Si assessed only “Medium” availability of needed data to establish children served and match across disparate datasets (A and B).



The overall availability of data describing the entire population of children ages birth to 5 (C) is low, given that children currently served or otherwise present in administrative data systems constitute only a fraction of the total child population. Likewise, there is low availability of data to model program eligibility of the entire population. While there are some additional administrative data to support eligibility estimation among the larger population, namely participation in publicly funded programs (e.g., TANF, etc.) that lead to categorical eligibility for other early childhood programs, these programs do not constitute the entire eligibility pathway for early childhood programs.

**While the gaps in data availability are significant, they do not preclude Texas from implementing an ECIDS. In 3Si's experience, these gaps in available data are typical and there are strategies to mitigate them. Understanding where these gaps exist is a crucial first step.**

3Si acknowledges that given the scope of this preliminary analysis, it misses some administrative systems that contain records for many children. For example, DSHS's vital records system covers a much higher fraction of the overall child population, though inclusion of this program will likely not be a panacea. These records exclude children born outside of Texas, which may disproportionately exclude immigrant and migratory populations. Moreover, health data may not contain all of the child and family characteristics (e.g., household income, risk factors) needed to determine program eligibility among the larger population. Nevertheless, future analysis should include additional systems and a closer assessment of actual data to verify the findings from this high-level inventory. As Texas explores business cases beyond the three included in this analysis (such as those listed in Appendix A) new systems and/or data elements will likely be relevant, so the scope of this inventory will need to expand accordingly.

## 08 Appendices



### Appendix A: Broader Set of TELC Data Roadmap Work Group Business Cases

In addition to the assessment specific to the foundational business cases, the TELC Data Roadmap Work Group established a broader set of business case questions as shown below. 3Si collected limited information related to the relevant linkages, common identifiers, and data elements associated with these more extensive business cases.

Because these business cases were out of scope of this analysis, it will be necessary to assess in more detail should Texas take further steps towards an ECIDS.

- 1 Which characteristics of various early childhood programs are associated with positive outcomes for which children?
- 2 Is the number of quality services and programs increasing over time?
- 3 What policies and investments lead to a skilled, stable, and effective early care and education workforce?
- 4 What are the educational and economic returns on early childhood investments?
- 5 Are the state's children, starting at birth, healthy and on track to succeed?

## Appendix B: Data Elements Shared Between Data Systems

The following list reflects the specific data shared between systems. This system-level sharing is visualized in [FIGURE 5-1](#) (Data Landscape Map) but specific data elements are not shown. As noted in [SECTION 5](#), these data elements and systems reflect what is known to 3Si today, within the scope of this inquiry, but are not intended to capture every data element and system in Texas related to early childhood care and education. Note that for the purposes of this inventory, sharing can occur in a range of ways, from regular integration through APIs (Application Programming Interfaces) to sharing an occasional flat CSV file, and the data shared could range from a few fields to dozens or more.

### DFPS — IMPACT System<sup>15</sup>

- IMPACT sends HHSC's CLASS child care abuse and neglect investigations data. CLASS sends some data back to IMPACT (specific data elements unknown).
- IMPACT sends TEA's PEIMS ID, name, locations, DOB, SSN to match students in prevention and early intervention programs while enrolled in school.
- IMPACT sends HHSC's TIERS ID, name, locations, DOB, and SSN to verify eligibility for Medicaid that is specifically for children in conservatorship.
- IMPACT sends provider-level data to CLI's Engage.
- DFPS and TWC exchange information about children served via spreadsheets and email forms. There is a plan to upgrade the IMPACT data system and that will allow for more automated sharing in 2025.
- IMPACT can share information with DFPS's PEIRS.

### HHSC — TKIDS System

- TKIDS sends TEA's Child Find first name, last name, and DOB if a child is referred to Part B (early childhood special education program for 3 - 5 years) after aging out of Part C (early childhood intervention program for birth to 2 years).

### HHSC — CLASS System

- CLASS sends some data to DFPS's IMPACT (specific data elements unknown). IMPACT sends CLASS child care abuse and neglect investigations data.
- CLASS sends TWC's TWIST center and relative-only provider operation information. TWIST sends CLASS data on providers who accept child care subsidies to update the application that identifies providers that accept subsidies and those whose subsidy agreements have ended.

### HHSC — TIERS System

- TIERS sends TDA's ELMS TANF, SNAP, and Medicaid data for a matching process to determine eligibility for Free and Reduced Price Lunch (FRPL). ELMS then sends the matching list to TEA's PEIMS where it adds student unique ID numbers. PEIMS sends this data back to ELMS.
- TIERS sends HHSC's TKIDS periodic Medicaid data that allows HHSC's Early Childhood Intervention (ECI) to identify children who are enrolled in Medicaid but not currently identified as such in the TKIDS system. This matching facilitates ECI programs' ability to follow up with these families for consent to bill HHSC Medicaid for ECI services.
- TIERS sends HHSC's WIC MS data on Medicaid, SNAP, and TANF to notify current recipients of their potential eligibility in WIC.

### TDA — ELMS System<sup>16</sup>

- ELMS sends to TEA's PEIMS a list of students that PEIMS assigns a unique ID who are eligible for Free and Reduced Price Lunch (FRPL) based on TANF, SNAP, and Medicaid recipient data from HHSC's TIERS in a matching process between ELMS, TIERS, PEIMS.

### TEA — PEIMS System

- TEA's PEIMS sends TWC's TWIST a TEA-assigned unique child ID after TWIST sends PEIMS child-level info for a matching process.
- PEIMS sends to TDA's ELMS a unique student ID to students eligible for Free and Reduced Price Lunch (FRPL) that it received from HHSC's TIERS on TANF, SNAP, and Medicaid recipients for a matching process.

## TWC – TWIST System<sup>17</sup>

- TWIST sends TEA's PEIMS child-level info. PEIMS sends TWIST an existing unique child ID if they find a match or creates a new one if not.
- TWC and DFPS exchange information about children served via spreadsheets and email forms. There is a plan to upgrade the IMPACT data system and that will allow for more automated sharing in 2025.
- TWIST sends HHSC's CLASS data on providers who accept child care subsidies to update the application that identifies providers that accept subsidies and those whose subsidy agreements have ended. CLASS sends TWIST center and relative-only provider operation information.
- TWIST sends Texas Rising Star data to CLI's Engage.

## CLI – Engage

- CLI's Engage sends TEA's ECDS school readiness assessment data.
- CLI's Engage sends data to CLI's Texas Rising Star.

## CLI – TECPDS

- TECPDS sends data to CLI's Engage.

## Appendix C: Data Inventory by Data System and Data Element – Population

**APPENDIX TABLE C** measures and illustrates the availability of program and population data by data system needed to address the foundational business cases (**TABLE 6-7** summarized this appendix by reporting on the aggregate availability of these data across all systems).<sup>18</sup>

Data availability is illustrated by Harvey balls, which show the completeness of available data needed to represent the population for each data component.<sup>19</sup> Availability is measured both by the extent of data available for a particular program and for the full population of children birth to five. For example, while demographic information like age and household income may be collected on every child in the TWIST system (denoted by a full ball), the TWIST system will not contain information on the entire population of children (served and unserved) birth to five (denoted by a quarter ball).



Each data element’s measure of availability (program and population) by data system is summarized (once again, these summaries are reported in [TABLE 6-7](#)). Note that these summaries require some extrapolation, since multiple systems often report similar data. It is known that there will be some overlap in the children represented in multiple systems and the extent of overlap is unknown. For instance, if one data source represents 25 percent of the population and another represents 50 percent, is the overall coverage 25 percent, 50 percent, or 75 percent? 3Si took this into consideration in the summary section of each table. While the specific overlap across these systems is unknowable without extensive analysis, the highest estimated coverage in the table will represent a minimum level of overall coverage listed in the summary for each table.

**APPENDIX TABLE C – AVAILABILITY OF POPULATION DATA**  
Systems with data and detail on population coverage

*Note: Gender, race and ethnicity, language, and location are not required for foundational uses cases, but are included here to support analysis.*

 High Coverage
  Medium-High Coverage
  Medium Coverage
  Low Coverage
  Unknown

<b>CHILD AGE</b> <i>Systems with data and detail on population coverage</i>				
AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
DFPS	PEIRS	●	◐	
DFPS	IMPACT	●	◐	
HHSC	TKIDS	●	◐	
HHSC	TIERS	●	◑	
TEA	PEIMS	●	◑	
TEA	Child Find	●	◑	
TEA	ECDS	●	◑	
TWC	TWIST	●	◑	
SUMMARY		●	◑	

<b>DISABILITIES</b> <i>Systems with disability data and detail on population coverage (Population: Children 0-5)</i>				
AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
DFPS	PEIRS	●	◐	

DFPS	IMPACT	●	◐	
HHSC	TKIDS	●	◐	
HHSC	TIERS	●	◐	
TEA	PEIMS	●	◐	
TEA	Child Find			Not collected
TEA	ECDS			Not collected
TWC	TWIST	◐	◐	
Summary		◐	◐	

### RISK FACTORS

*Systems with risk-factor data and detail on population coverage (Population: Children 0-5)*

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
DFPS	PEIRS	●	◐	
DFPS	IMPACT	●	◐	
HHSC	TKIDS	●	◐	
HHSC	TIERS			Not collected
TEA	PEIMS	●	◐	
TEA	Child Find			Not collected
TEA	ECDS			Not collected
TWC	TWIST	◐	◐	
Summary		◐	◐	

**HOUSEHOLD SIZE***Systems with household size data and detail on population coverage (Population: Children 0-5)*

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
DFPS	PEIRS	●	🕒	
DFPS	IMPACT	●	🕒	
HHSC	TKIDS	●	🕒	
HHSC	TIERS			Not collected
TEA	PEIMS			Not collected
TEA	Child Find			Not collected
TEA	ECDS			Not collected
TWC	TWIST	●	🕒	
Summary		🕒	🕒	

**HOUSEHOLD INCOME***Systems with income data and detail on population coverage (Population: Children 0-5)*

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
DFPS	PIERS	●	🕒	
DFPS	IMPACT	●	🕒	
HHSC	TKIDS	●	🕒	
HHSC	TIERS	●	🕒	
TEA	PEIMS			Not collected
TEA	Child Find			Not collected
TEA	ECDS			Not collected
TWC	TWIST	●	🕒	
Summary		🕒	🕒	

**WORKING/ENROLLED IN SCHOOL***Systems with work/school status data and detail on population coverage (Population: Children 0-5)*

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
DFPS	PEIRS			Not collected
DFPS	IMPACT			Not collected
HHSC	TKIDS			
HHSC	TIERS			
TEA	PEIMS			Not collected
TEA	Child Find			Not collected
TEA	ECDS			Not collected
TWC	TWIST			
Summary				

**CHILD LOCATION***Systems with location data and detail on population coverage (Population: Children 0-5)*

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
DFPS	PEIRS			
DFPS	IMPACT			
HHSC	TKIDS			
HHSC	TIERS			
TEA	PEIMS			Not collected
TEA	Child Find			Not collected
TEA	ECDS			Not collected
TWC	TWIST			
Summary				

**CHILDREN SERVED***Systems with data on children served and detail on population coverage (Population: Children 0-5)*

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
DFPS	PEIRS	●	N/A	
DFPS	IMPACT	●	N/A	
HHSC	TKIDS	●	N/A	
HHSC	TIERS	●	N/A	
TEA	PEIMS	●	N/A	
TEA	Child Find	●	N/A	
TEA	ECDS	●	N/A	
TWC	TWIST	●	N/A	
Summary		●	N/A	

**LICENSED PROVIDERS AND PROVIDER CHARACTERISTICS***Systems with provider-level data and detail on population coverage (Licensed Providers)*

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
HHSC	CLASS	●	N/A	
CLI	Texas Rising Star	●	N/A	
Summary		●	N/A	

**PUBLIC PreK***Systems with Public PreK data and detail on population coverage (Population: Children enrolled in PreK)*

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
TEA	ECDS	●	🕒	Note that private PreK program data for ECDS is voluntary
TWC	TWIST	🕒	🕒	TWC also maintains data for PreK-aged students served through CCS
Summary		●	🕒	

**CHILD CARE SERVICES**

Systems with Child Care Services data and detail on population coverage (Population: Children enrolled in Child Care Services)

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
TWC	TWIST	●	N/A	
Summary		●	N/A	

**HEAD START**

Systems with Child Care Services data and detail on population coverage (Population: Children enrolled in Child Care Services)

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
CLI	N/A <sup>20</sup>	●	🕒	

**SNAP**

Systems with SNAP data and detail on population coverage (Population: Children 0–5 enrolled in SNAP)

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
HHSC	TIERS	●	🕒	
Summary		●	🕒	

**TANF**

Systems with TANF data and detail on population coverage (Population: Children enrolled in TANF)

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
HHSC	TIERS	●	🕒	
Summary		●	🕒	

**CHILDREN'S HEALTH INSURANCE PROGRAM (CHIP) AND MEDICAID**

Systems with Medicaid data and detail on population coverage (Population: Children enrolled in Medicaid or CHIP)

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
HHSC	TIERS	●	🕒	
Summary		●	🕒	

**GENDER***Systems with gender data and detail on population coverage (Population: Children 0–5)*

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
DFPS	PEIRS	●	🕒	
DFPS	IMPACT	●	🕒	
HHSC	TKIDS	●	🕒	
HHSC	TIERS	●	🕒	
TEA	PEIMS	●	🕒	
TEA	Child Find	●	🕒	
TEA	ECDS	●	🕒	
TWC	TWIST	●	🕒	
Summary		🕒	🕒	

**RACE AND ETHNICITY***Systems with race and ethnicity data and detail on population coverage (Population: Children 0–5)*

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
DFPS	PEIRS	●	🕒	Optional field, but only 2% of population declined to answer
DFPS	IMPACT	●	🕒	
HHSC	TKIDS	●	🕒	
HHSC	TIERS	?	🕒	
TEA	PEIMS	●	🕒	
TEA	Child Find	🕒	🕒	
TEA	ECDS	●	🕒	

TWC	TWIST			
Summary				

**LANGUAGE**

*Systems with language data and detail on population coverage (Population: Children 0–5)*

AGENCY	SYSTEM	EST. DATA COVERAGE (PROGRAM)	EST. DATA COVERAGE (POPULATION)	NOTES
DFPS	PEIRS			
DFPS	IMPACT			
HHSC	TKIDS			
HHSC	TIERS			
TEA	PEIMS			
TEA	Child Find			Not collected
TEA	ECDS			Not collected
TWC	TWIST			
Summary				



## Appendix D: Data Inventory by Data System and Data Element – Eligibility

**APPENDIX TABLE D** measures and illustrates the availability of specific eligibility criteria by program needed to address the foundational business cases (**TABLE 6-8** summarized this appendix by reporting on the aggregate availability of all *eligibility criteria by program*).<sup>21</sup>

Availability is illustrated by Harvey balls, which show the completeness of available data needed to represent the population for each data component.<sup>22</sup> Availability is measured both by the extent of eligibility criteria data that are available for served children as well as the overall availability of population characteristics needed to model the total eligible population for each program. For example, while eligibility criteria (income and work or school status) are available for all children served in the TWIST system (denoted by a full ball in the estimated data availability for served children), the TWIST system will not contain eligibility criteria information on the entire population of children (served and unserved) birth to 5 (denoted by a quarter ball in the eligibility summary’s estimated data availability).

As noted in **APPENDIX C**, the summaries included in **APPENDIX TABLE C** require some extrapolation since multiple systems often report similar data, and it is known that there will be some overlap in the children represented in multiple systems while the extent of overlap is unknown. Those summaries are reflected in the estimated data availability by eligibility criteria in Appendix Table D. For example, in Appendix Table C, the summary of available income data among all systems is represented by a half ball, and therefore, any instance in which income is listed as criteria for eligibility in Appendix Table D is also represented by a half ball.

Summarizing the aforementioned to model eligibility for an entire program is even more subjective, as the importance of different components of eligibility data vary depending on the specifics of the program. For instance, the primary criteria for Head Start eligibility is household income so it is designated as high priority, while a relatively small number of children will qualify based on certain risk factors so they are designated as lower weight for the sake of this inventory. These designations allow 3Si to assess the availability of data needed to model the Head Start eligible population without being limited by the low availability of a specific component. Each case is subjective, and 3Si welcomes input on this imperfect process.



## APPENDIX TABLE D – AVAILABILITY OF NEEDED ELIGIBILITY DATA

Systems with data to model program eligibility, and population served summary

 High Coverage
  Medium-High Coverage
  Medium Coverage
  Low Coverage
  Unknown

<b>PUBLIC PreK</b> Systems with data to model PreK eligibility and population served summary (Population: Children enrolled in PreK)			
	CATEGORY	WEIGHT FOR ELIGIBILITY	EST. DATA COVERAGE
ELIGIBILITY	Age	High	
	Income	Medium	
	Risk Factors	High	
ELIGIBILITY SUMMARY	ECDS includes a mandatory 'ECONOMIC-DISADVANTAGE' field that identifies a family's financial conditions, but data on the overall population is still likely to be low.		
SERVED	Records of all children served on public PreK are in the ECDS system. Note that some data on private PreK and PreK Partnerships may be unavailable or of low quality.		
<b>CHILD CARE SERVICES</b> Systems with data to model Child Care Services eligibility and population served summary (Population: Children enrolled in Child Care Services)			
	CATEGORY	WEIGHT FOR ELIGIBILITY	EST. DATA COVERAGE
ELIGIBILITY	Age	Low	
	Income	High	
	Risk Factors	High	
ELIGIBILITY SUMMARY	Overall availability of population data indicating eligibility for Child Care Services is low.		
SERVED	Records of all children served are in the TWIST system.		

**HEAD START**

*Systems with data to model Head Start eligibility and population served summary  
(Population: Head Start)*

	CATEGORY	WEIGHT FOR ELIGIBILITY	EST. DATA COVERAGE
ELIGIBILITY	Age	High	
	Income	High	
	Risk Factors	Low	
ELIGIBILITY SUMMARY	Overall availability of population data indicating eligibility for Head Start/Early Head Start is low.		
SERVED	Only aggregate provider-level data are realistically available, which will limit ability to accurately model served children and program overlap for children served by multiple programs.		

**SNAP**

*Systems with SNAP data and detail on population coverage  
(Population: Children enrolled in SNAP)*

	CATEGORY	WEIGHT FOR ELIGIBILITY	EST. DATA COVERAGE
ELIGIBILITY	Income	High	
ELIGIBILITY SUMMARY	SNAP participation is considered for this analysis insofar as it indicates categorical eligibility for other early childhood programs. Estimating overall population eligible for SNAP is outside the scope of this analysis.		N/A
SERVED	Records of all children served are in the TIERS system.		

<b>TANF</b> <i>Systems with TANF data and detail on population coverage (Population: Children enrolled in TANF)</i>			
	<b>CATEGORY</b>	<b>WEIGHT FOR ELIGIBILITY</b>	<b>EST. DATA COVERAGE</b>
<b>ELIGIBILITY</b>	Income	High	●
	Work/School or Training Status	High	●
<b>ELIGIBILITY SUMMARY</b>	TANF participation is considered for this analysis insofar as it indicates categorical eligibility for other early childhood programs. Estimating overall population eligible for TANF is outside the scope of this analysis.		N/A
<b>SERVED</b>	Records of all children served are in the TIERS system.		●

<b>CHILDREN'S HEALTH INSURANCE PROGRAM (CHIP)</b> <i>Systems with CHIP data and detail on population coverage (Population: Children enrolled in CHIP)</i>			
	<b>CATEGORY</b>	<b>WEIGHT FOR ELIGIBILITY</b>	<b>EST. DATA COVERAGE</b>
<b>ELIGIBILITY</b>	Income	High	●
	Work/School or Training Status	High	●
<b>ELIGIBILITY SUMMARY</b>	CHIP participation is considered for this analysis insofar as it indicates categorical eligibility for other early childhood programs. Estimating overall population eligible for CHIP is outside the scope of this analysis.		N/A
<b>SERVED</b>	Records of all children served are in the TIERS system.		●

## Appendix E: Documentation of Existing Data Standards Used by Agencies

The following summary includes information 3Si learned during our interviews about which, if any, data standards have been adopted by the five key agencies for the ten data systems they own. Data standards include a shared vocabulary and formatting rules for storing, sharing, and exchanging data so that people and machines have a common understanding about the meaning of information included in each system. Common adopted data standards include Ed-Fi and Common Education Data Standards (CEDS).

According to the limited information 3Si gleaned from agency interviews, only TEA's Texas Student Data System (TSDS) is based on Ed-Fi data standards, and data that CLI extracts to TEA's ECDS conforms with TEA's standards.

Additional details from 3Si's inquiry by agency and system are as follows:

**Department of Family and Protective Service (DFPS)**

- PIERS – No documentation provided.

**Health and Human Services Commission (HHSC)**

- TKIDS – Nothing official according to agency staff. They cited stipulations that exist in contracts around security and how to enter information.
- CLASS – Agency staff did not believe data standards exist.

**Texas Education Agency (TEA)**

- PEIMS, Child Find, and ECDS – The Texas Education Data Standards (TEDS) is a collection of data standards for transferring data to the Texas Student Data System (TSDS) based on the national Ed-Fi XML core with the addition of Texas specific requirements in the Texas Core Extension. The Texas Web-Enabled Data Standards (TWEDS) is a web-based version of TEDS. These standards describe the data reporting requirements, responsibilities, and specifications.<sup>22</sup>

**Texas Workforce Commission (TWC)**

- TWIST – Agency staff did not believe data standards exist.

**Children's Learning Institute (CLI)**

- According to agency staff, exports to TEA's ECDS conform with TEDS Ed-Fi data standards.



# 09 Endnotes



- 1 This inventory was conducted under the direction of the Early Childhood Inter-Agency Work Group (ECIA Work Group), with funding support from the Bill & Melinda Gates Foundation.
- 2 In consultation with the Texas Education Agency (TEA) and Texas Workforce Commission (TWC), 3Si prioritized data systems from the following state agencies: TEA, TWC, Texas Health and Human Services Commission (HHSC), Department of Family and Protective Services (DFPS), Texas Department of Agriculture, and the Children’s Learning Institute (CLI). Within these agencies, 3Si prioritized the following need-based early childhood programs: Public PreK, Child Care Services, Head Start/Early Head Start, and licensed child care. These are site-based programs that offer regular care (i.e., daily or multiple times per week) that address the needs of children and allow parents to work outside of the home. 3Si also considered social programs including SNAP, TANF, and CHIP for this analysis, since these programs lead to eligibility for one or more early childhood programs.
- 3 For the purposes of this analysis, “data elements” refers to types of data collected (e.g., child age, household income, etc.). This analysis focuses on whether the data elements Texas would need to address its foundational business cases exist. A more comprehensive inventory involving access to actual data would be necessary to confirm these preliminary findings.
- 4 CLI, which is housed at McGovern Medical School at The University of Texas Health Science Center at Houston (UTHealth) is a formal partner with the state of Texas, and not an official “agency”. For simplicity, we will refer to “agencies” going forward in this document. See more information here: <https://childrenslearninginstitute.org/about-us/>.
- 5 Regenstein, E. (2022). Foresight Law and Policy. The Importance of Modernizing Technology in Developing Early Childhood Integrated Data Systems: [https://www.flpadvisors.com/uploads/4/2/4/2/42429949/flp\\_importancemodernizingtechdevelopingecintegrateddatasystems\\_21june2022.pdf](https://www.flpadvisors.com/uploads/4/2/4/2/42429949/flp_importancemodernizingtechdevelopingecintegrateddatasystems_21june2022.pdf).
- 6 The TELC Data Roadmap Work Group also established a broader set of business cases that address child outcomes, early care and education workforce, and program evaluation (**APPENDIX A**). Although these business cases were not the focus of this inventory, 3Si collected some information on data to address them.
- 7 Programs without eligibility requirements, such as licensed unsubsidized child care, are still included in the data inventory but not the analysis of eligibility criteria.
- 8 3Si investigated whether agencies collect each data element as mandatory or optional fields. Mandatory data should be available for all records in a given system (e.g., all children in TEA systems will have a child ID). In some cases, data might be conditionally mandatory but not present for all children in a system. An example of this would be if DFPS collected disability status for all children in a specific program reported within the IMPACT system, but not for all children in the IMPACT system. Lastly, some data elements are optional. In 3Si’s experience, it is common for data on child race and ethnicity to be self-reported and optional, which means that some records in child-level systems will have no child race and ethnicity data.
- 9 Other aggregate sources of information may be useful to Texas in the absence of perfect child-level information. For instance, the Head Start Program Information Report (PIR) provides aggregated statewide breakdowns of the characteristics of children served by Head Start programs. Texas could use this information in conjunction with provider-level data from the Head Start State Collaboration office to better estimate the characteristics of the total child population served by Head Start (for example, how many children are four years old vs. three years old, etc.). Similarly, the Texas Open data portal (accessible at <https://data.texas.gov>) provides various aggregate reports from the CLASS system that could inform ECIDS modeling. Other sources of aggregate data may be useful for this purpose, though aggregate data was not the primary focus of 3Si’s inventory, so these examples are not intended to be exhaustive.
- 10 See **APPENDIX B** for more information on data connections and matching across agencies and systems.
- 11 See **APPENDIX E** for information on data standards used by Texas agencies.
- 12 We chose Harvey balls for this visualization because they are appropriately general. Using a more granular metric, like a percentage, would imply a false level of precision.

- 13 3Si included social support programs (SNAP, TANF, and CHIP) in this analysis since participation in these programs indicates categorical eligibility for one or more of the other early childhood programs. 3Si did not estimate the availability of data to identify the entire population eligible for these social programs (e.g., children not enrolled in TANF that could meet eligibility requirements).
- 14 There is a plan to upgrade DFPS's IMPACT data system in 2025 that will allow for more automated data sharing.
- 15 See more on the matching process between ELMS, TIERS, and PEIMS to determine eligibility for FRPL through Medicaid, SNAP, and TANF participation: [https://squaremeals.org/Portals/8/files/ARM/ARM\\_Section4\\_Eligibility\\_220929.pdf](https://squaremeals.org/Portals/8/files/ARM/ARM_Section4_Eligibility_220929.pdf).
- 16 TWC is currently designing a new child care case management system that will replace TWIST beginning in FY2023.
- 17 See [APPENDIX TABLE D](#) for availability of eligibility data, which are also required to address the foundational business cases.
- 18 We chose Harvey balls for this visualization because they are appropriately general. Using a more granular metric, like a percentage, would imply a false level of precision.
- 19 See [APPENDIX TABLE C](#) for availability of program and population data, which are also required to address the foundational business cases.
- 20 For the purposes of this data inventory, 3Si is considering aggregated data from the Head Start State Collaboration Office.
- 21 We chose Harvey balls for this visualization because they are appropriately general. Using a more granular metric, like a percentage, would imply a false level of precision.
- 22 TEA, TSDS. Texas Education Data Standards (TEDS) Overview. See here for more information, including updates occurring in 2023/2024 school year, such as the use of APIs and "a goal of reducing redundant data collections": [https://www.texasstudentdatasystem.org/TSDS/TEDS/1920A/Texas\\_Education\\_Data\\_Standards\\_Overview](https://www.texasstudentdatasystem.org/TSDS/TEDS/1920A/Texas_Education_Data_Standards_Overview).

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