



Numbers, Numbers, Numbers

Why Data Matter for Early Childhood Systems Delivery

Early Childhood Fellows Program

Tuesday | 09.13.22

Question:

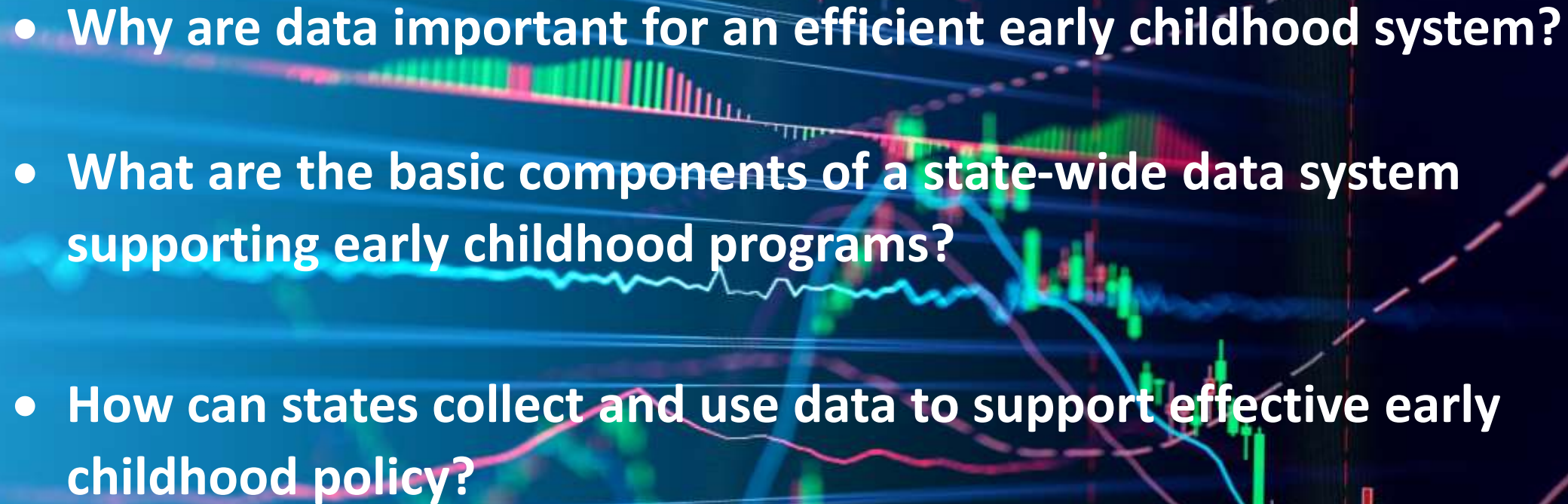
Which state is the home to the most “American Idol” finalists?





Answer:
North Carolina

Today's Agenda

- 
- **Why are data important for an efficient early childhood system?**
 - **What are the basic components of a state-wide data system supporting early childhood programs?**
 - **How can states collect and use data to support effective early childhood policy?**

Speakers



Carlise King

Executive Director, ECDC
Child Trends



Heather Rouse, Ph.D.

Assistant Professor,
Iowa State University
Director, I2D2



Early Childhood Integrated Data Systems 101

September 13, 2022



Early Childhood Data Collaborative

The **Early Childhood Data Collaborative (ECDC)** promotes policies and practices to support policymakers' development and use of coordinated state early care and education (ECE) data systems.

Guiding Principles:



From fragmented data systems to coordinated data systems



From compliance-driven to improvement-driven data systems



From "snapshot" data to longitudinal data systems



ECDC Advising Partners

Center for the Study of Child Care Employment at UC Berkeley

Council of Chief State School Officers

Data Quality Campaign

National Conference of State Legislatures

National Governors Association Center for Best Practices



A close-up photograph of a woman with long, dark, curly hair holding a baby. The woman is smiling and looking at the baby. The baby is wearing a white sweater and looking towards the camera. The background is softly blurred, suggesting an indoor setting with natural light.

Why Early Childhood Data Matters

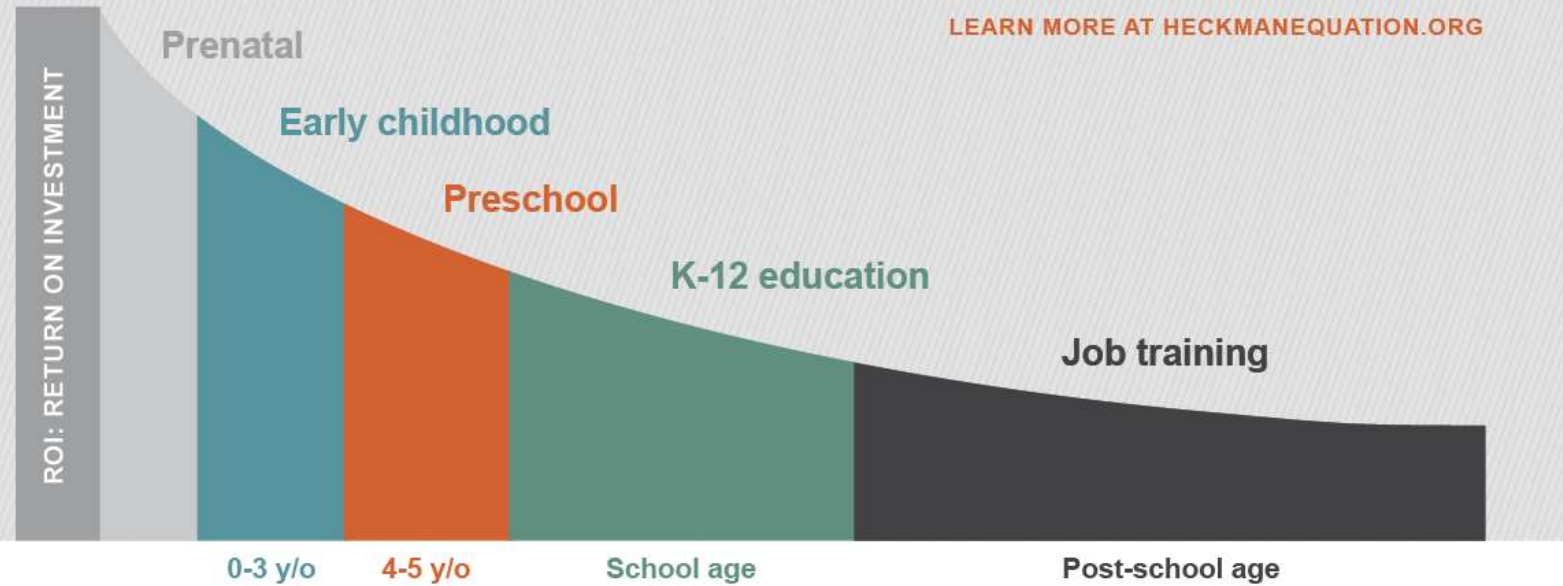


Benefits of early learning investments



Return on Investment

Economic impact of investing in early childhood learning.



QUALITY EARLY CHILDHOOD DEVELOPMENT

PRODUCES LONG-TERM BENEFITS

- Cognitive skills
- Social-emotional skills
- Earnings
- Inequality

Source: www.heckmanequation.org

Why Are Early Childhood Data Important?



Children

1. Do **systems** support all *children's development* for success at school entry and beyond?



Programs

2. Are **programs** *easily accessible and designed to meet children and families needs*?

3. Is the number of **programs** *increasing or decreasing*?

4. Which **program characteristics and policies** *elevate the strengths and address the needs* of children and families?

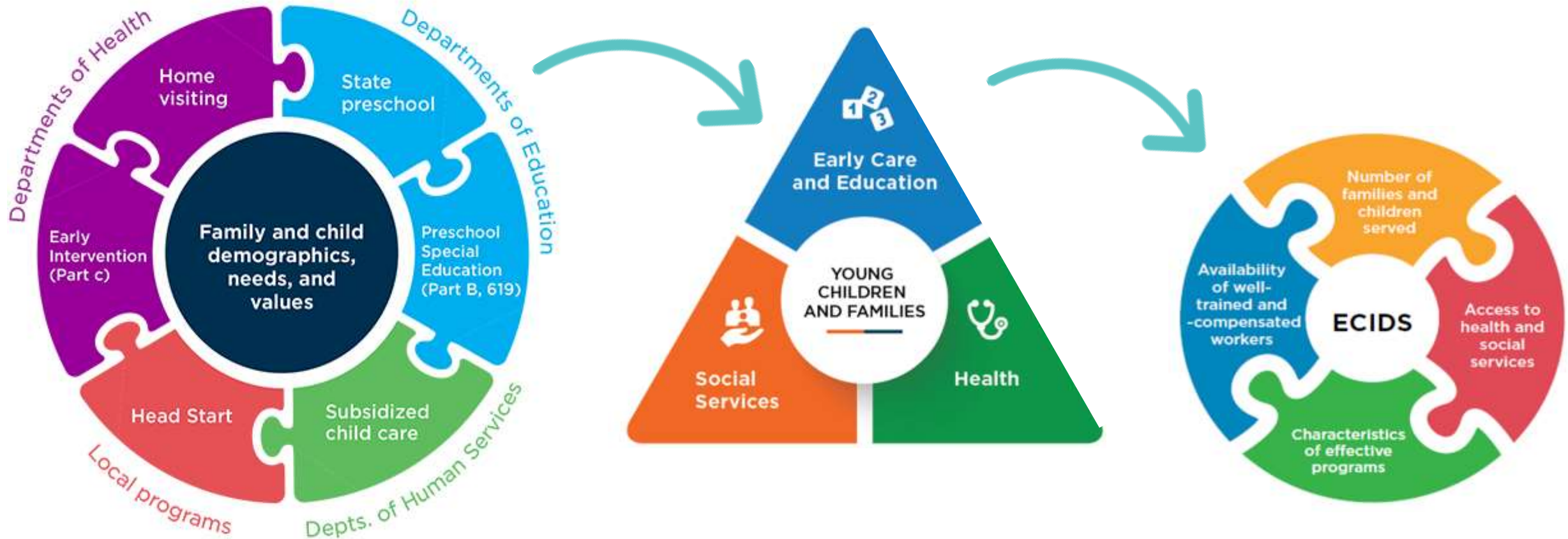


Workforce

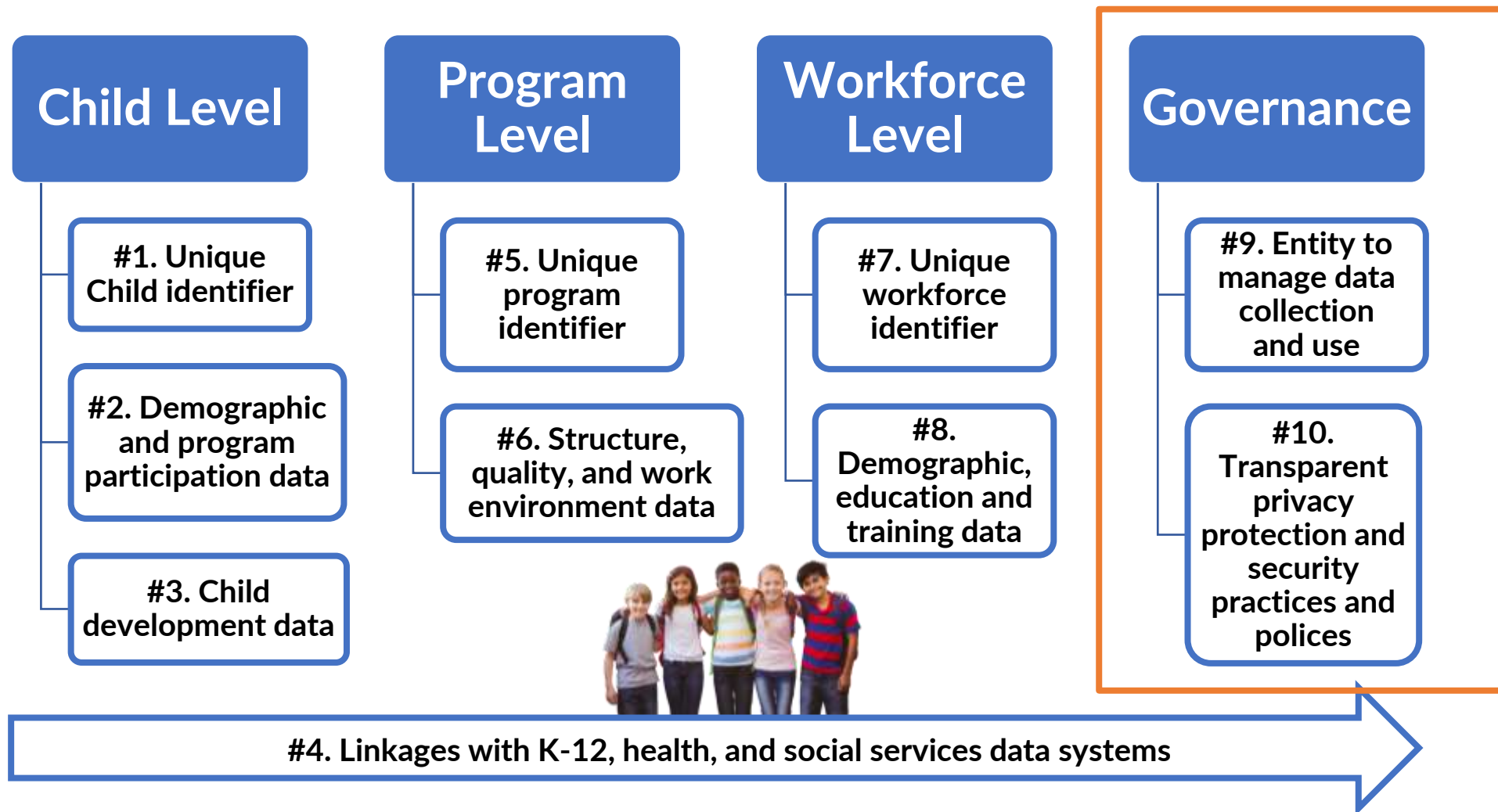
5. Do **educators**, have opportunities to grow, strengthen, and apply their professional skills, to meet the needs of children?

6. What **policies and investments** lead to a skilled and stable early childhood workforce?

Early Childhood Data About Young Children, Families, and Programs Are Disconnected



10 Fundamentals of Coordinated State ECE Data Systems



How states have used integrated early childhood data



- Georgia's Cross Agency Child Data System
 - How many children receive a combination of early childhood services?
- North Carolina ECIDS:
 - How many children who are Pre-K age eligible are not in NC Pre-K are receiving other types of services (e.g., subsidized child care, TANF, SNAP)?
- Minnesota Early Childhood Longitudinal Data System :
 - Do children of color and children enrolled in the state's TANF and SNAP have equal access to early childhood programs?

[Video Link](#)

<https://www.youtube.com/watch?v=FA8EHmKRfTY>

Stephanie Hogenson,
Outreach Director at Children's Defense Fund-MN



What types of policy questions do you have in your state which require integrated data?

A photograph of four young children of diverse backgrounds smiling in a classroom. From left to right: a white boy in a blue shirt, a Black girl in a yellow shirt, a white boy in a white shirt, and a Black girl in a green shirt. In the background, there is a globe on a shelf and a chalkboard with the letter 'A' written on it.

Early Childhood Data Integration Efforts

The Early Childhood
DATA
Collaborative

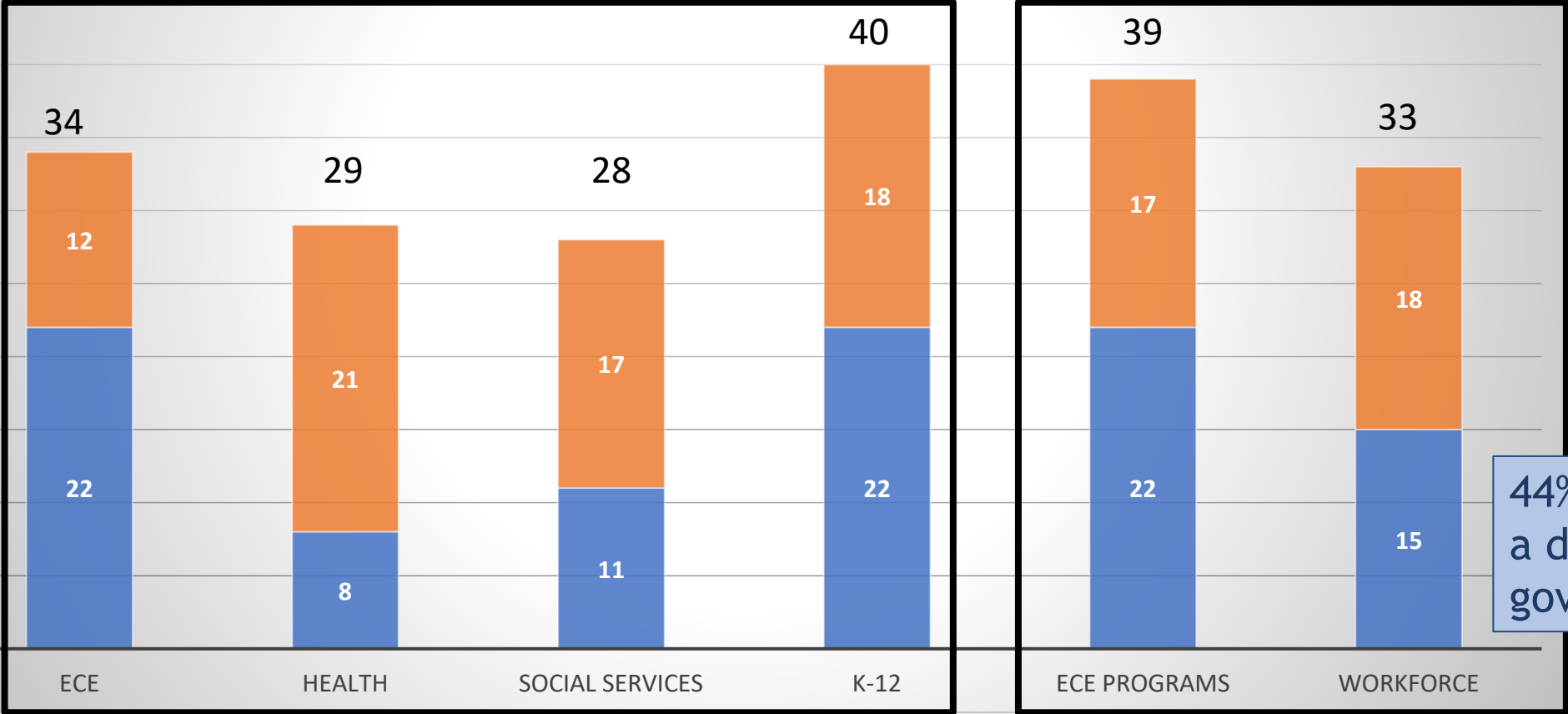
2018 Data Systems Survey Data

Number of States Linking Child, Program, and Workforce Data

■ Links ■ Plans to Link

Child data

Program and Workforce data



44% of states have a defined data governance body

ECE programs linking child-level data

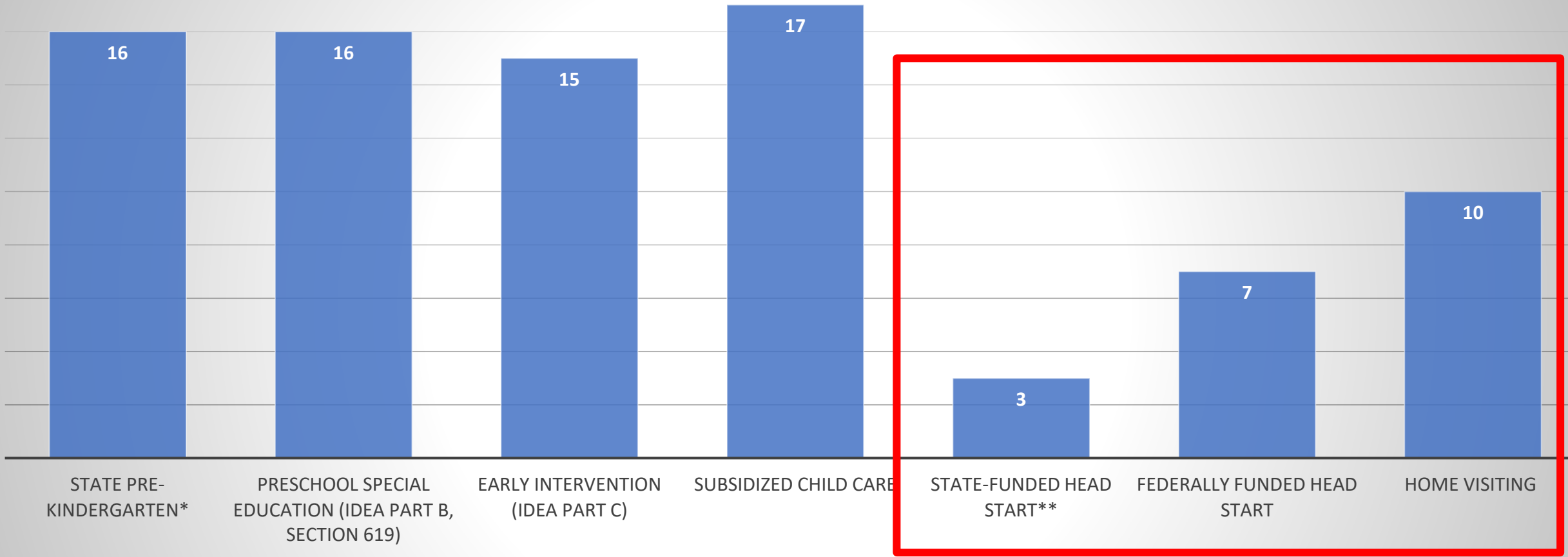


Figure 3. ECE programs Linked by States Linking Child-Level Data Across ECE (n=22 states).

Adapted figure from "2013 State of states' Early Childhood Data Systems" by C. King, V. Perkins, C. Nugent, & E. Jordan, 2018. Early Childhood Data Collaborative, Child Trends.

*Number of states included with state-prekindergarten (n= 21)

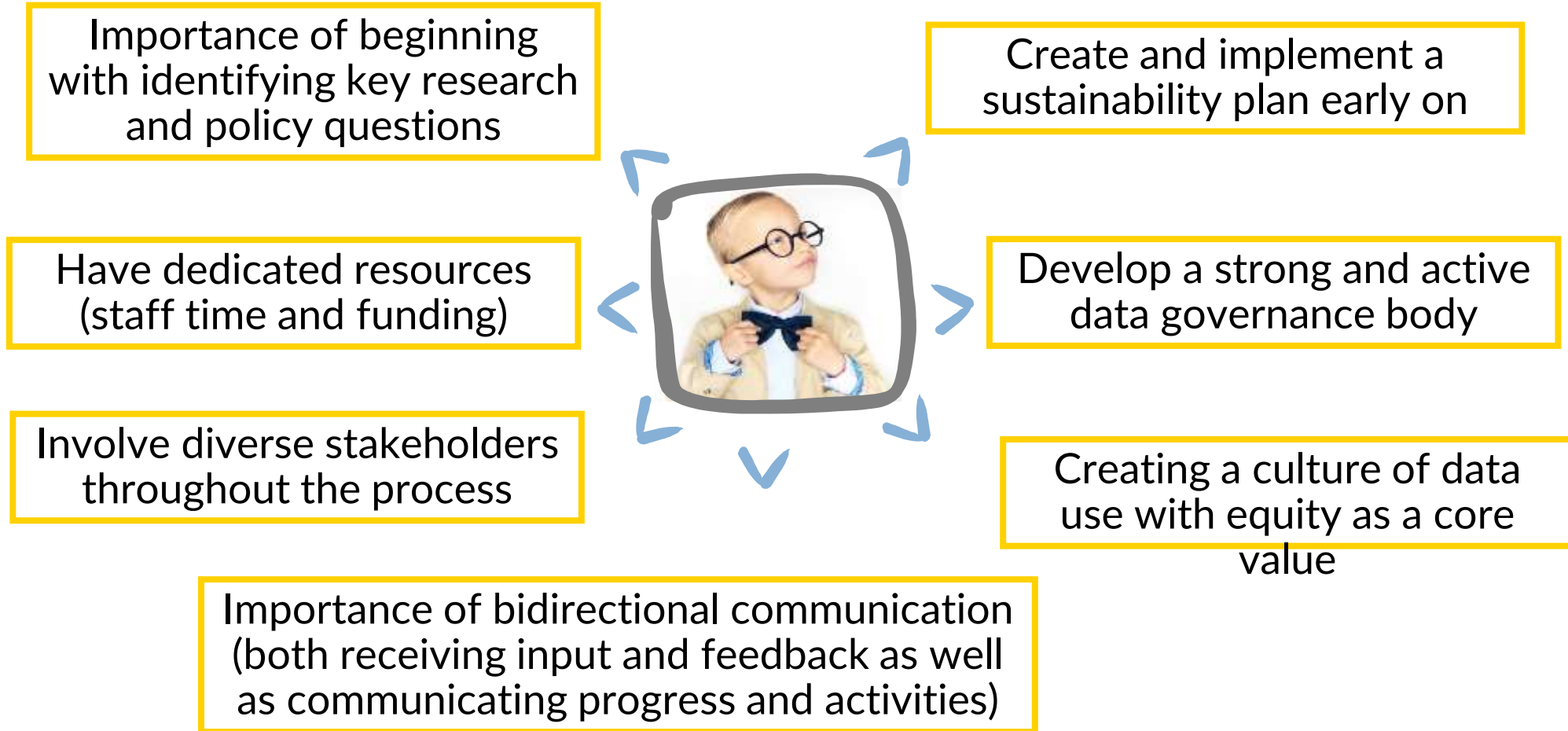
** Number of states included with state-funded Head Start (n= 6)

■ 2018



What types of data do you wish you had better access to when making policy decisions?

Key Lessons Learned





QUESTIONS?

The Early Childhood
DATA
Collaborative

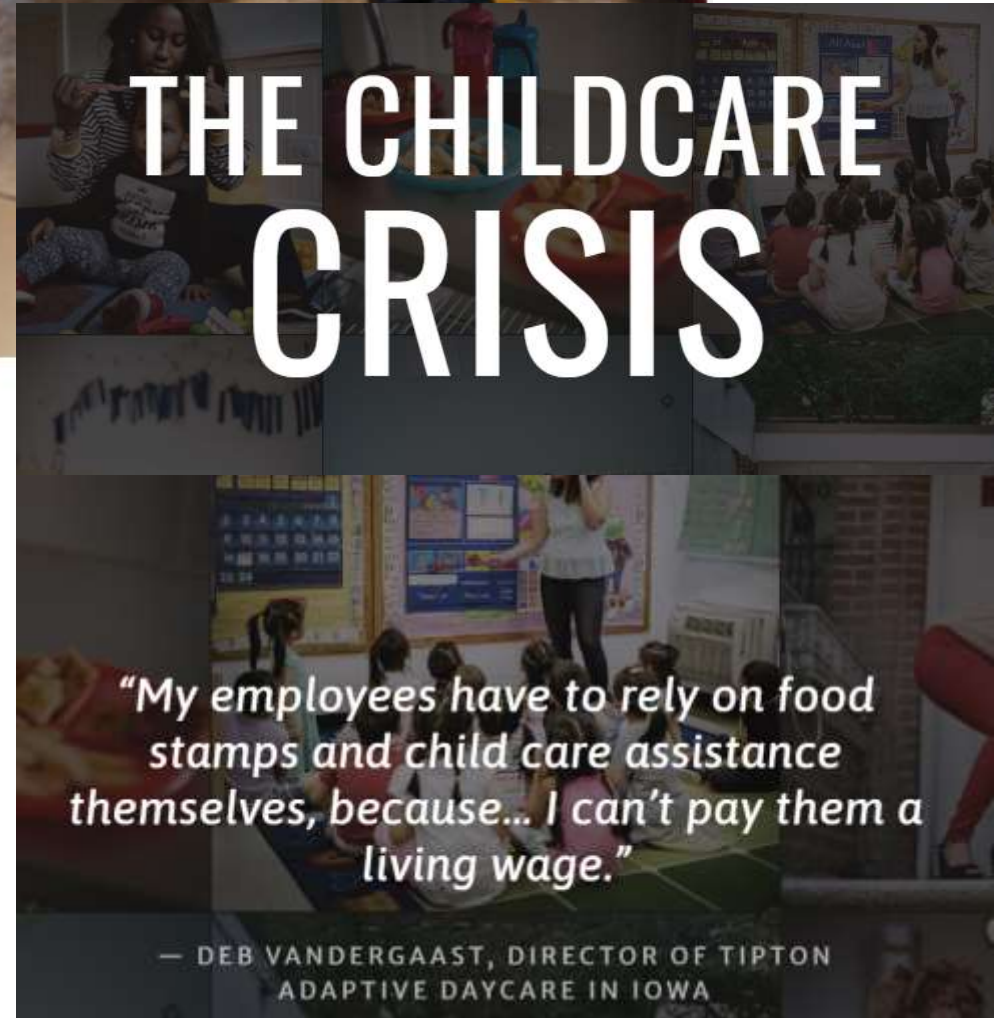


THANK YOU!

Carlise King
cking@childtrends.org



As the global pandemic carries on, parents globally have been exiting the workforce and thrust into caregiving roles. Women have taken the brunt.
 Photographer: Stefan Wernisch/Bloomberg



THE CHILDCARE CRISIS

"My employees have to rely on food stamps and child care assistance themselves, because... I can't pay them a living wage."

— DEB VANDERGAAST, DIRECTOR OF TIPTON ADAPTIVE DAYCARE IN IOWA

COVID-19 tied to poorer parent and child mental health

Filed Under: COVID-19
 Mary Van Beursem | News Writer | CIDRAP News | Sep 04, 2020
 Share Tweet LinkedIn Email

Parent and child well-being has taken a serious hit during the COVID-19 pandemic, three studies published this week in *Pediatrics* show.



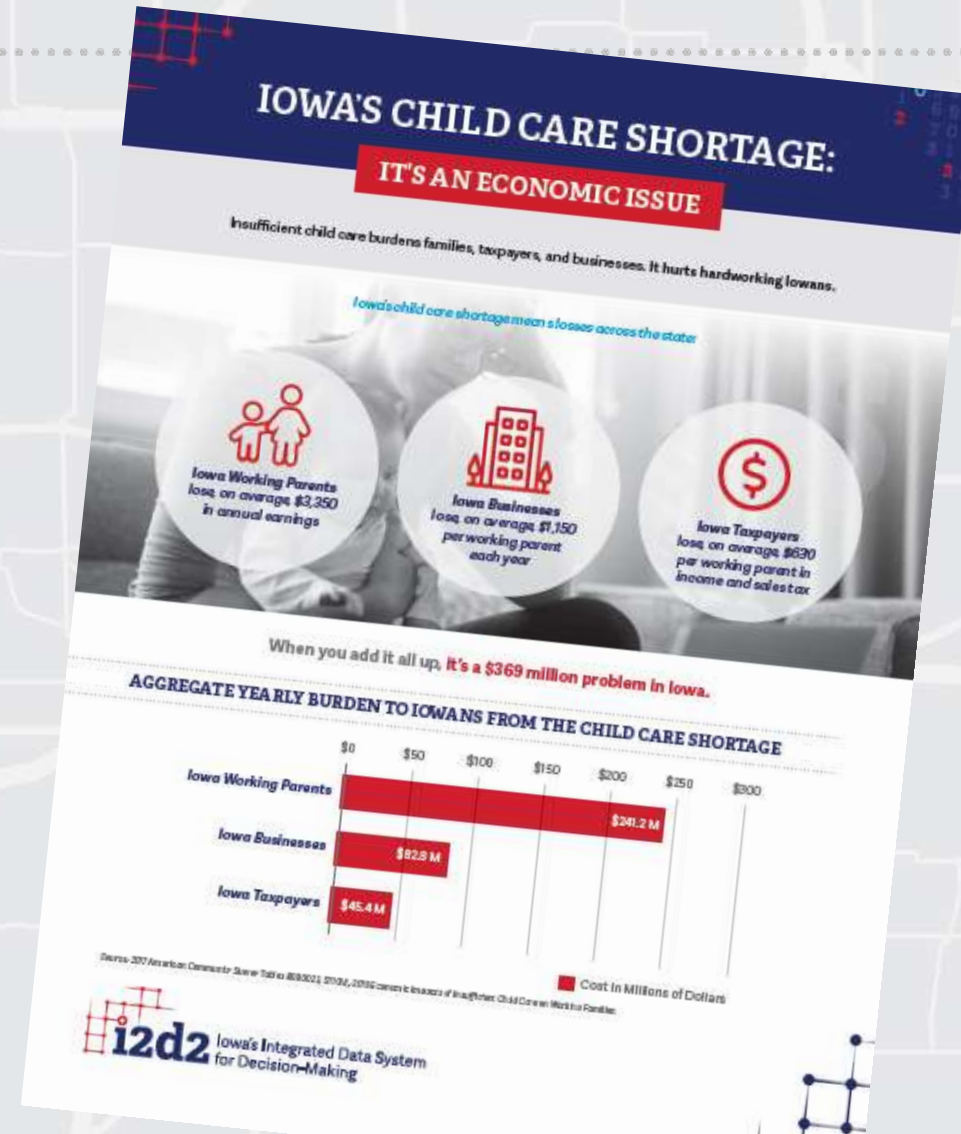
The first study consisted of collecting survey data on daily moods from 645 hourly service workers with children 2 to 7 in large US cities from Feb 20 to

How the Child Care Crisis Became a Global Economic Fiasco

Iowa businesses lose approximately \$83 MILLION annually because of our child care crisis?



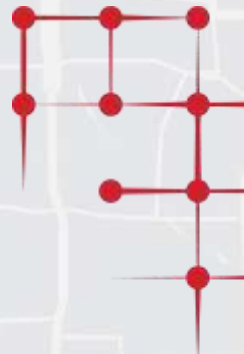
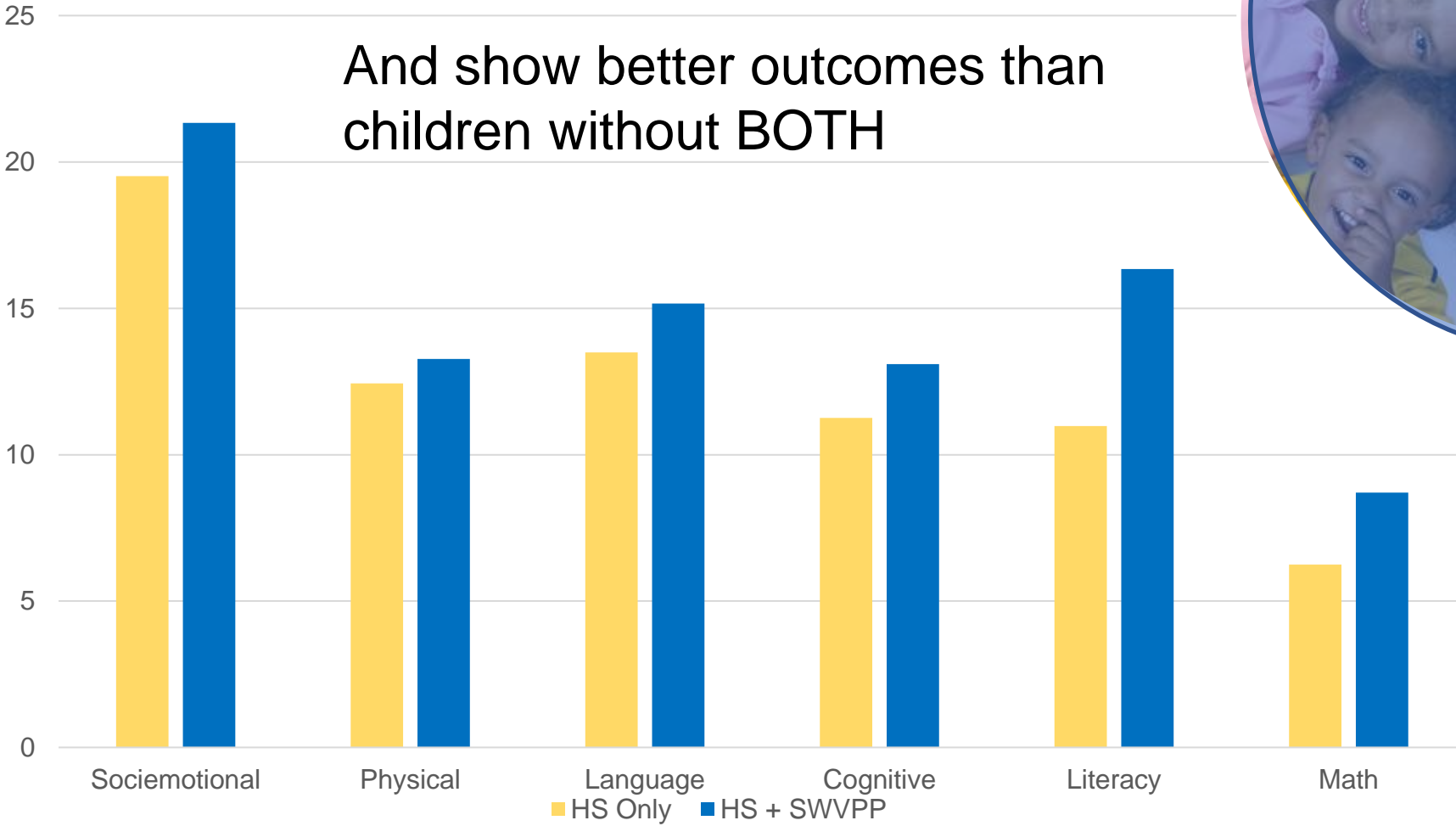
Did You Know?



51% of Head Start children ALSO participate in Statewide Voluntary Preschool?



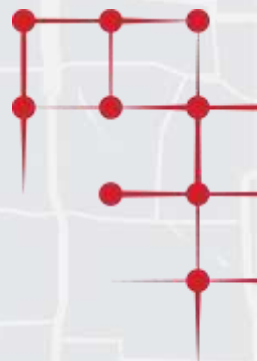
And show better outcomes than children without BOTH

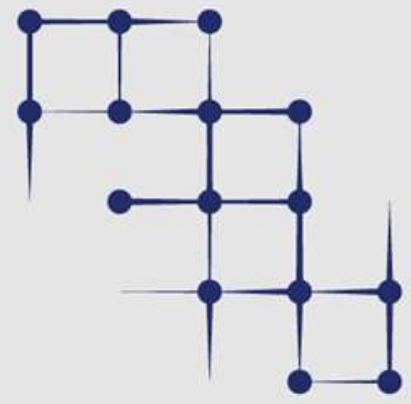
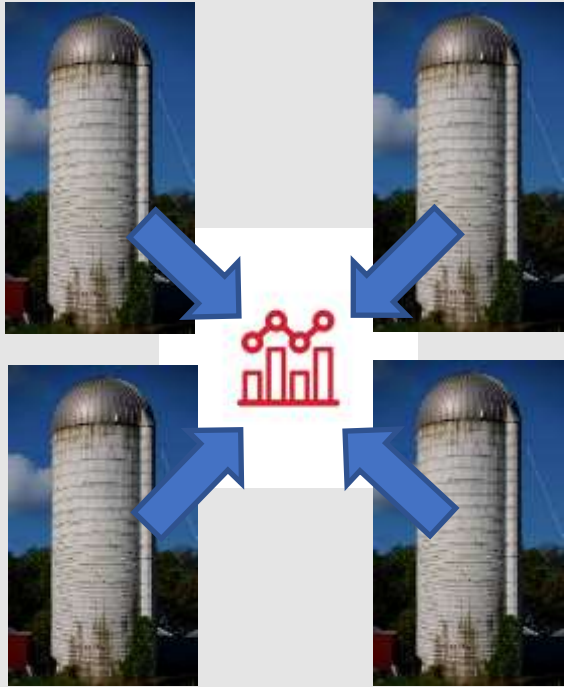


Did You Know?



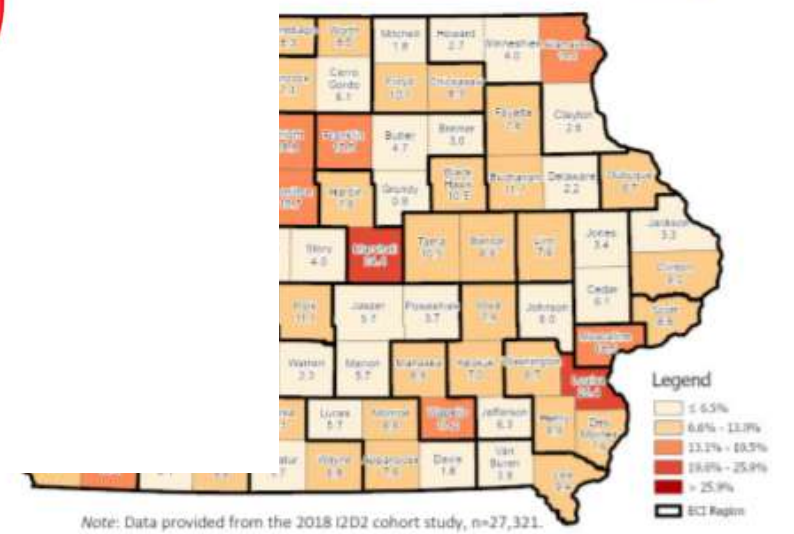
Children born to mothers without a high school education or who are receiving Medicaid/WIC at birth are **SIGNIFICANTLY LESS LIKELY** to have both these valuable experiences?





Brought to you by....I2D2

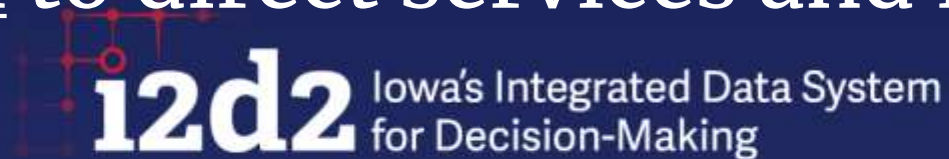
... without a high school education (statewide = 10%)





I2D2 Vision

Our system of early childhood policies and programs across the state will be informed by rigorous analysis of timely, comprehensive, and integrated data from health, human services, and education systems. Implications of policy and program analysis will be considered in collaboration to direct services and resource allocation.



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i2d2 Iowa's Integrated Data System for Decision-Making

As our service systems are increasingly charged with the heroic task to do more, do it quicker, and do it with less — they need comprehensive information to inform strategic decision-making. I2D2 provides a vital solution by integrating people and data from across service systems to address Iowa's most pressing social problems.



*Addresses State
Priorities*



*Promotes Data-Informed
Decisions*



Identifies Gaps



*Enhances Cross-System
Programming Efforts*



*Supports Cycles
of Inquiry*

I2D2 Critical Components

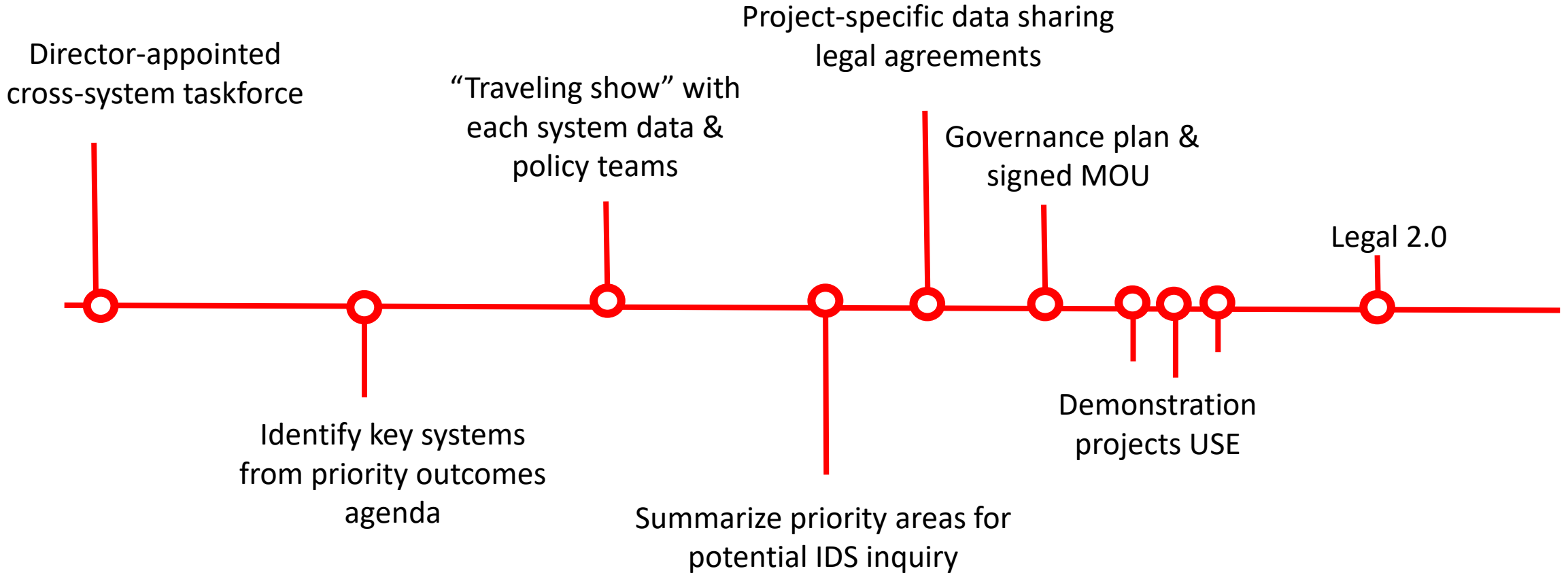
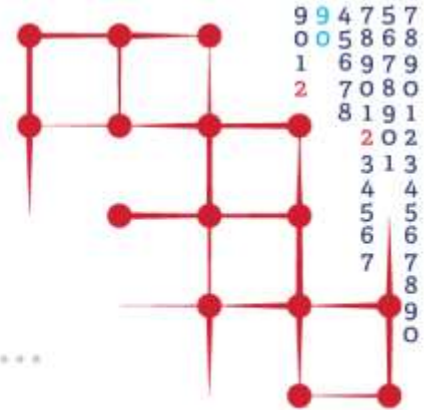
Solid Governance
Plan Emphasizing
State-University
Partnership

Rigorous Standards
for Privacy, Security,
and Data Integration

Strategic Stakeholder
Engagement at ALL
PHASES to Ensure
Data are USED



Stakeholder Engaged Inquiry Process: 3-year Journey



Director-appointed cross-system taskforce

Identify key systems from priority outcomes agenda

"Traveling show" with each system data & policy teams

Summarize priority areas for potential IDS inquiry

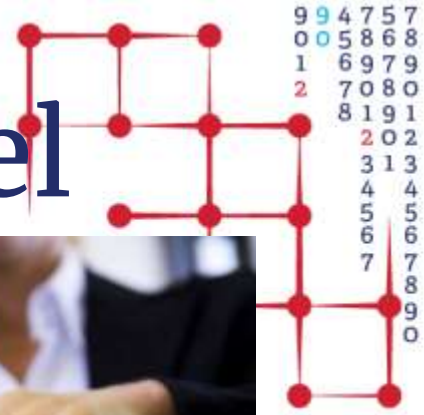
Project-specific data sharing legal agreements

Governance plan & signed MOU

Demonstration projects USE

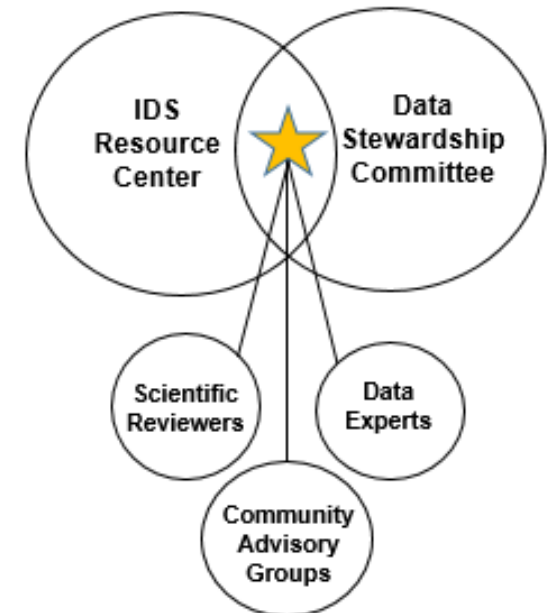
Legal 2.0

State-University Partnership Model



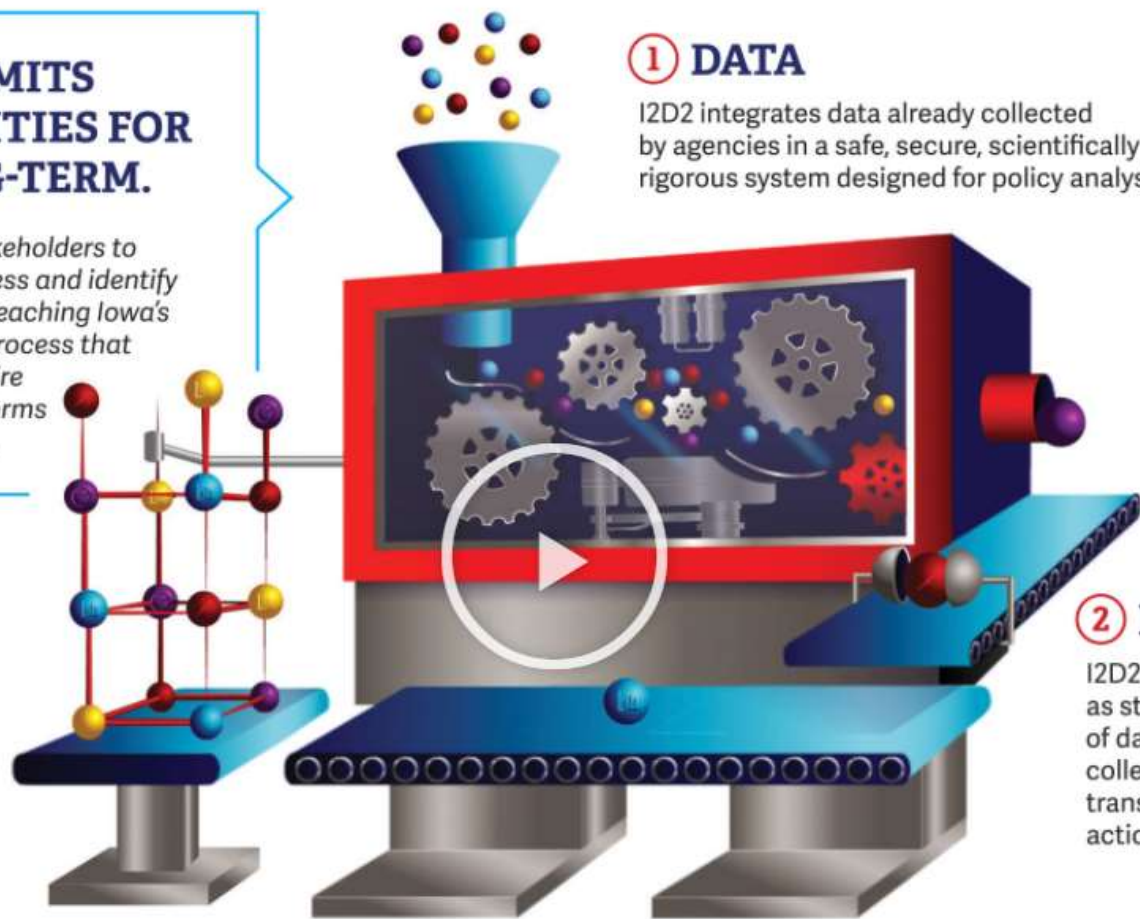
Governance Board

- State maintains control of all data use
- University staffs the infrastructure with a flexible capacity to expand or contract to address priorities
- Capitalizes on ISU's land-grant mission and expertise in data management, analytics, security
- Third-party approach for data integration that meets federal and state legal requirements
- “Build it once, use it multiple ways” model



I2D2 COMMITS TO PRIORITIES FOR THE LONG-TERM.

We work with stakeholders to assess effectiveness and identify shortcomings in reaching Iowa's goals through a process that uses *Data* to inspire *Dialogue* that informs *Decision-making*.



1 DATA

I2D2 integrates data already collected by agencies in a safe, secure, scientifically rigorous system designed for policy analysis.

2 DIALOGUE

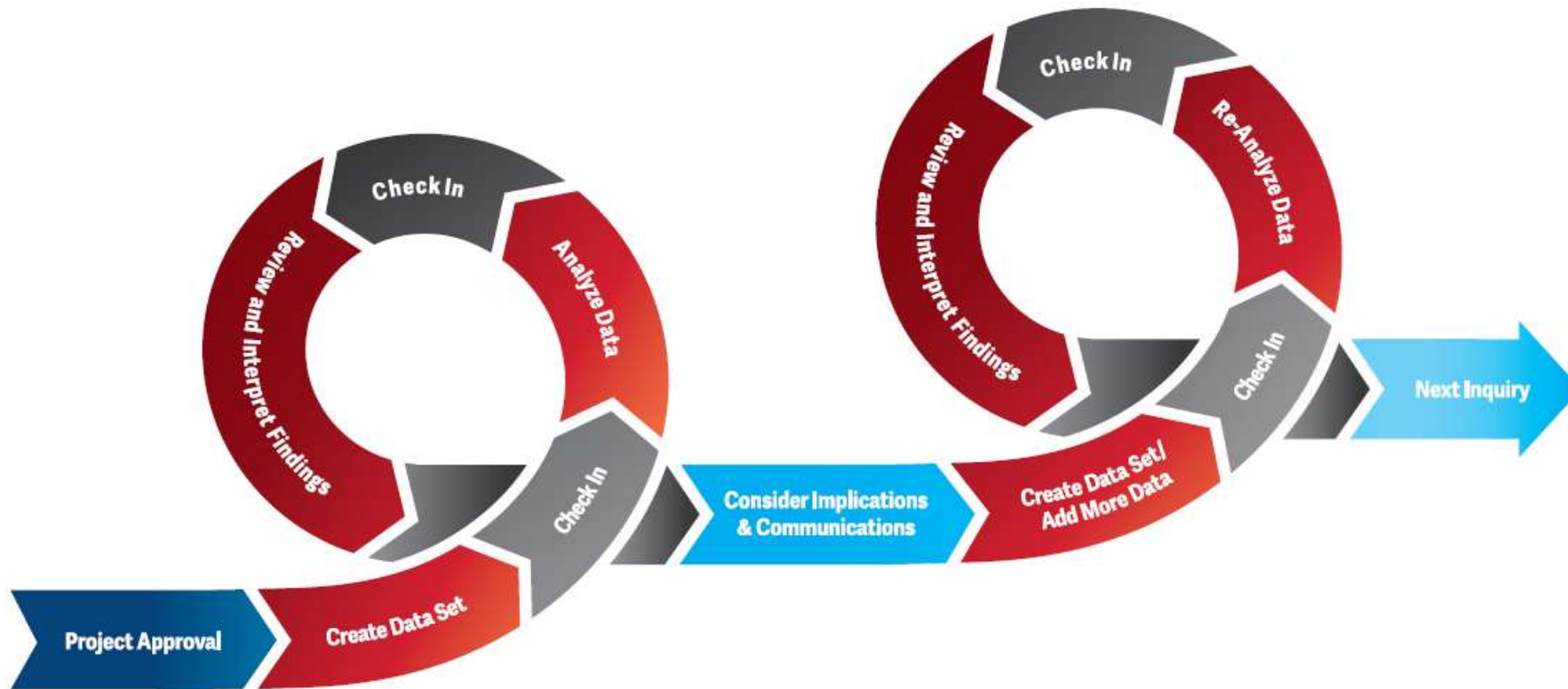
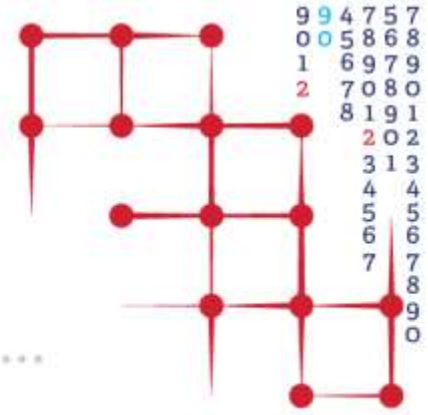
I2D2 integrates people as stakeholder stewards of data to gather collective insight and translate findings into actionable intelligence.

3 DECISION-MAKING

I2D2 integrates data insights with executive leader and program manager decision-making to advance a statewide culture of evidence-based services to improve outcomes.



Cyclical Project Process

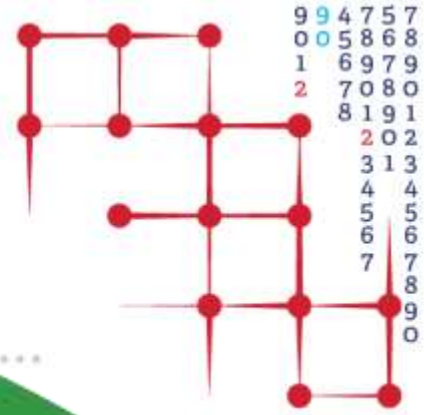


● Data Stewardship Committee

● I2D2 Resource Center

● Community Advisory Group (CAG)

Legal Approach

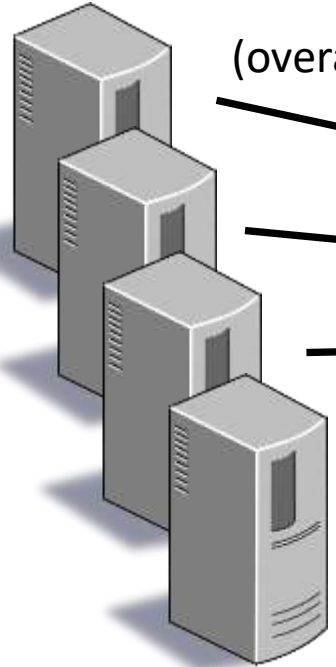


Memorandum of Agreement (MOA)

("business use" of the IDS to serve departments)

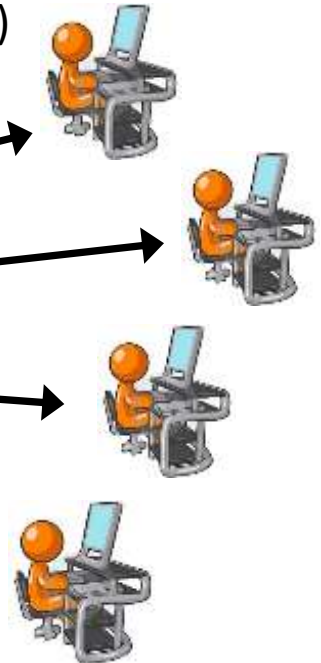
Data Sharing Agreements

(overall data security; privacy protections)



Data Use Licenses

(project specific, anonymized datasets)

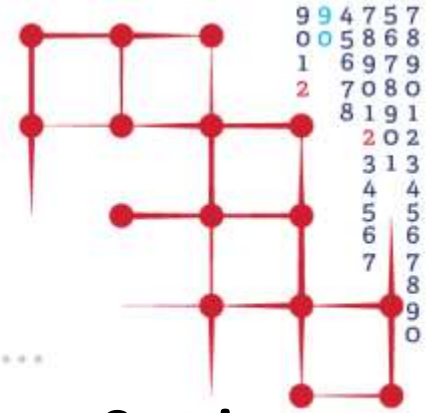


See also the "Best Practices" examples from the AISP network:

<https://www.aisp.upenn.edu/resources/legal-agreements-and-other-supporting-documents/>



Phase I Datasets



Department of Public Health:

Vital Records (Birth/death/marriage)

Infant Screening System

Home Visiting (DAISEY)

Lead Registry

Maternal/Child Health (TavHEALTH)

First Five

Department of Education:

Prek-12 (enroll, achieve, attend)

Preschool assessment

Special Education (IDEA A, B, & C)

Department of Human Services:

Child Care Subsidies

Child Welfare

Child Support Recovery

Income Maintenance/Eligibility

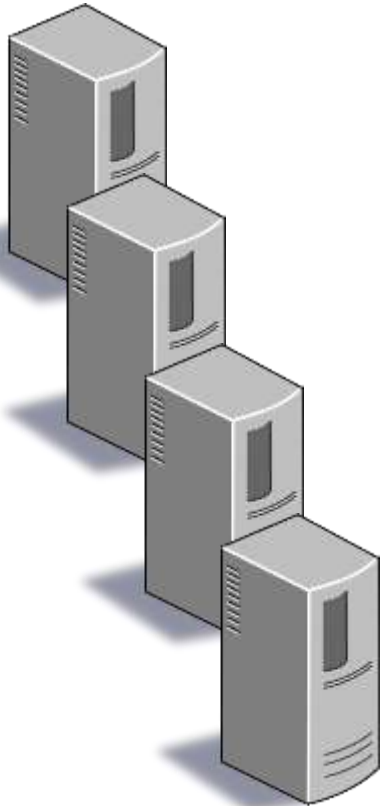
SNAP

TANF

Department of Human Rights

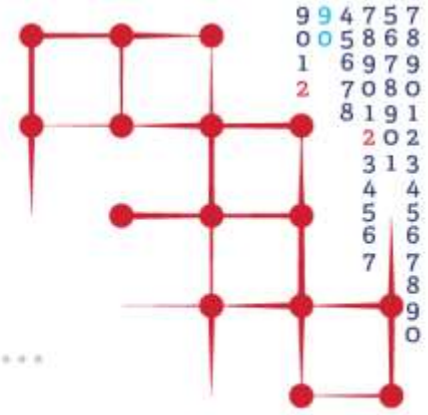
FaDSS (2 Gen program)

Head Start





Analytic Projects



1. Early Childhood Iowa Longitudinal Study (ECILS) – STATUS: ongoing

[Data: IDPH, CCA, DE, *Head Start*, DHR]

- Using needs assessment data & county-level reports to inform data literacy approaches (Strategic Plan Goal 1)
- Expansion to study multiplicity among EC programming and across time

2. Family Support, Home Visiting, and Community Risk – STATUS: ongoing

[Data: IDPH, DE, *Head Start*]

- Analyses informed community risk assessments, prenatal enrollment efforts
- Pursuing new project dimensions with DE, ECI family support, Early Head Start, & focus on early intervention

3. Substance Use Among Iowa Families – STATUS: completed

[Data: IDPH]

- Project report completed, working on policy briefs
- Findings led to follow-up projects that are currently underway (not currently IDS)

Prioritizing Iowa Needs



Early Childhood Iowa Statewide Needs Assessment 2019

"Every child, beginning at birth, will be healthy and successful."



This publication was made possible by the Preschool Development Grant Birth to Five (Grant Number HETP0000-03-00) from the Office of Child Care, Administration for Children and Families, U.S. Department of Health and Human Services as part of a grant totaling \$3,100,110 with ON financed with non-governmental sources. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Office of Child Care, the Administration for Children and Families, or the U.S. Department of Health and Human Services.

Technical Report: An Integrated Data System Analysis of Substance Use and Home Visiting



Iowa's Integrated Data System
for Decision-Making

Trishar Nease, Cassandra Dorian, Travis R. Boyd, David R. Aschewitz
Iowa State University | September 18, 2019

IOWA'S CHILD CARE SHORTAGE: IT'S AN ECONOMIC ISSUE

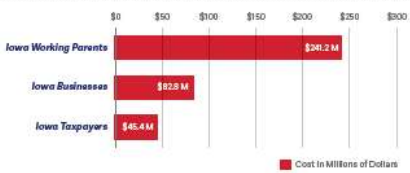
Insufficient child care burdens families, taxpayers, and businesses. It hurts hardworking Iowans.

Iowa's child care shortage means losses across the state:



When you add it all up, it's a \$369 million problem in Iowa.

AGGREGATE YEARLY BURDEN TO IOWANS FROM THE CHILD CARE SHORTAGE



Source: 2017 American Community Survey Table B03002 (2016), 2016 Census Bureau of Economic Analysis (BLS) Home Child Care as a Work-Related Expense



i2d2 Iowa's Integrated Data System for Decision-Making

PRESCHOOL ACCESS: FILL IN THE GAPS

Iowa offers a network of supportive public and private programs, including universal preschool. But when we count every Iowa child accurately using integrated administrative data, we learn that the benefit is not universal. Participation gaps and lack of income can be identified most readily among the following early childhood populations:

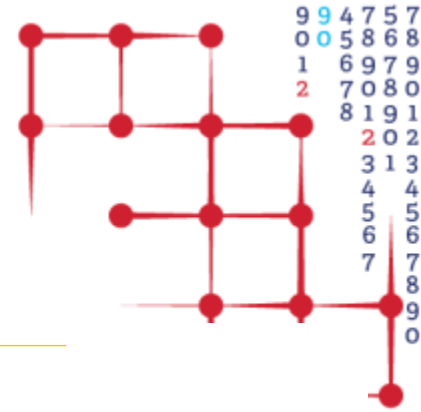


PERCENT OF CHILDREN WITH NO PRESCHOOL EXPERIENCE IN THE YEAR BEFORE KINDERGARTEN

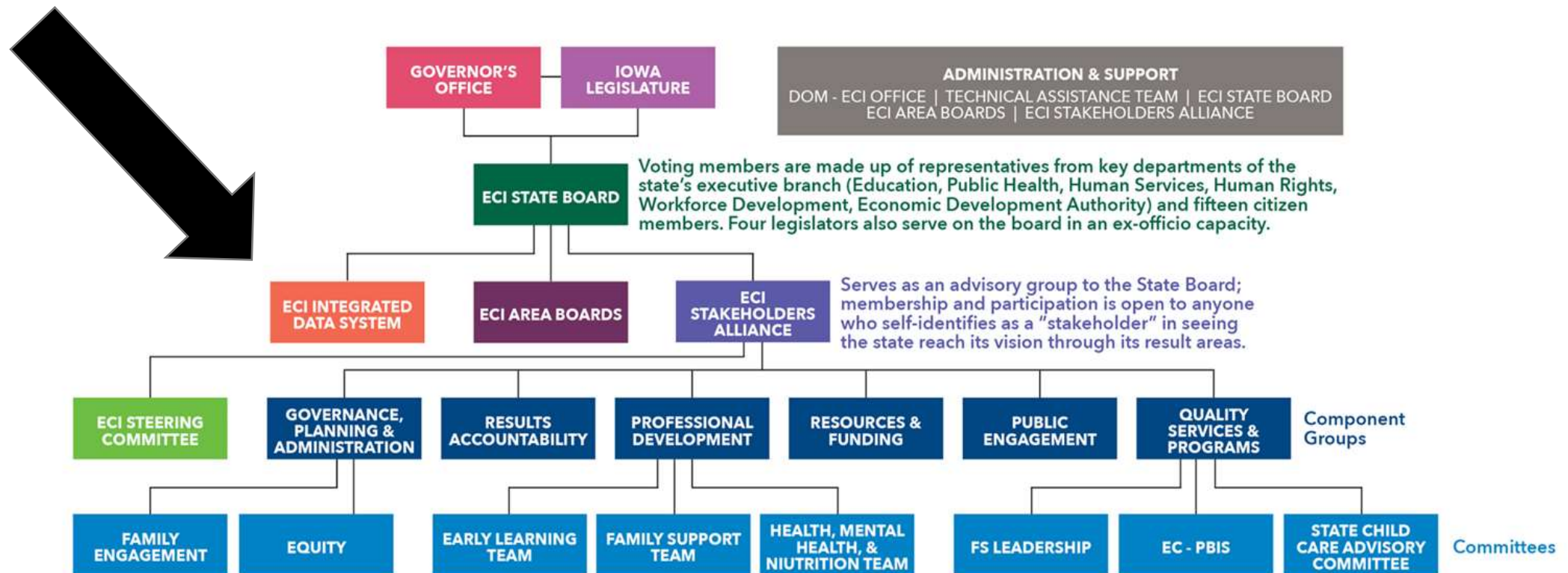


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Early Childhood Iowa 2019 Strategic Plan: I2D2 infused in the Statewide System



HOW THE CURRENT SYSTEM IS STRUCTURED



GOAL 1

Promote a coordinated infrastructure to advance the early childhood system.

STRATEGY 1.1: Expand collaboration and coordination among state and local programs and agencies serving young children and their families.

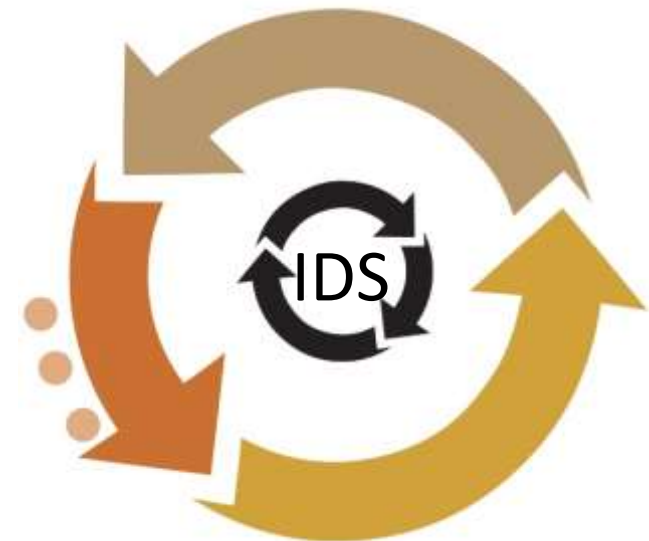
STRATEGY 1.2: Develop and nurture effective public-private partnerships at a state and local level.

STRATEGY 1.3: Infuse data-based discussions and decision-making processes throughout the early childhood system.

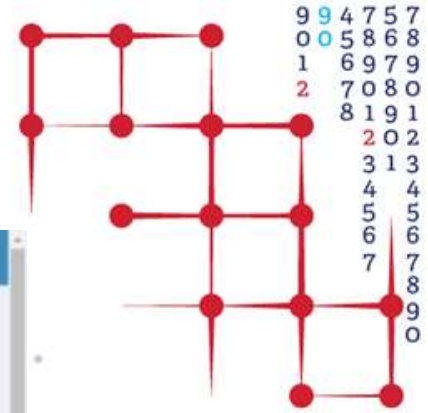
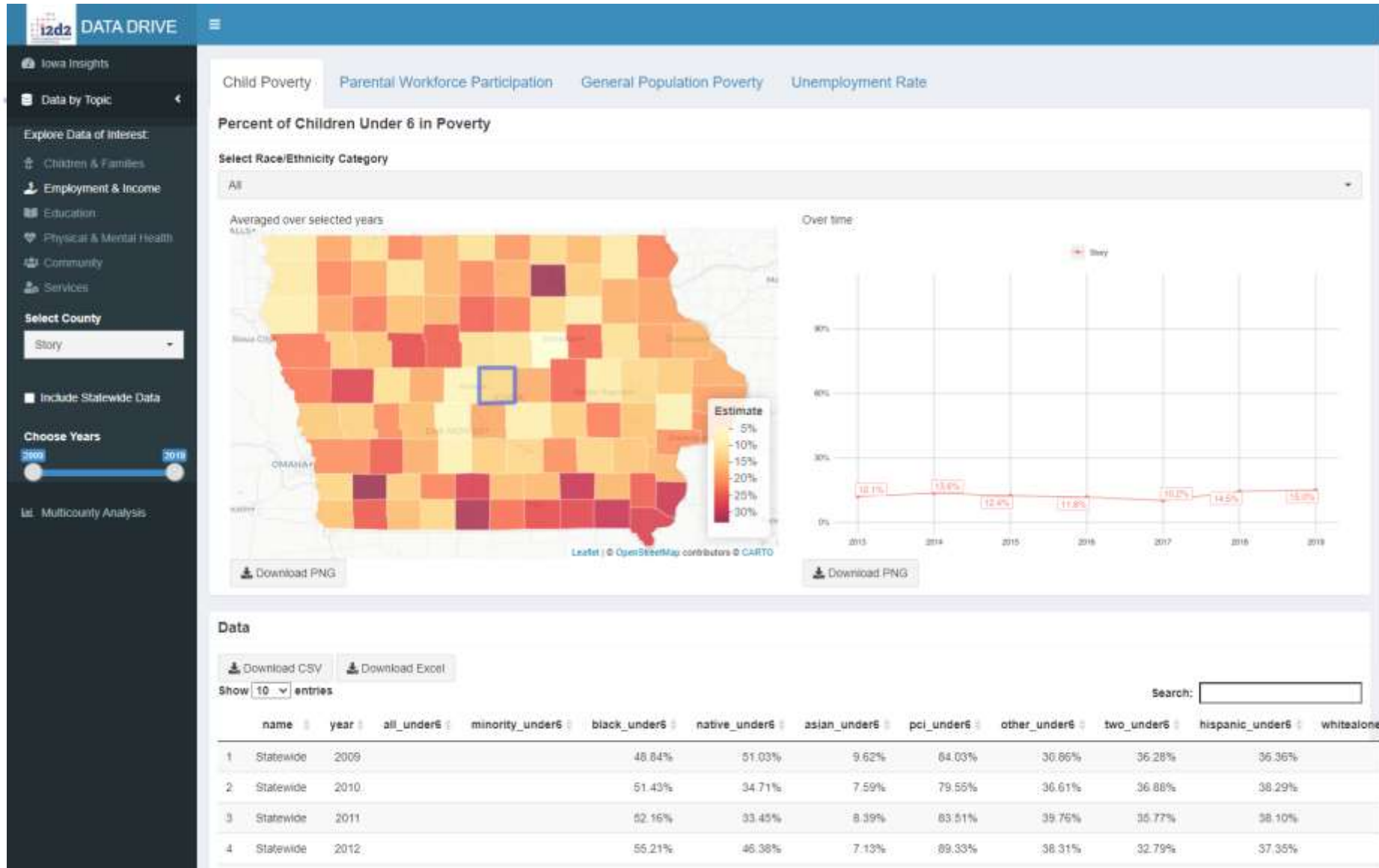
Advancing a collaborative data culture



Enhancing
IDS Capacity



I2D2 Data Drive



Passing On What We Have Learned



People and Processes Before Products
Build it, Use it, Improve it
Communications are Key



i2d2.iastate.edu



i2d2

Iowa's Integrated Data System
for Decision-Making



Learn More



<https://www.childtrends.org/about-ecdc>



<https://i2d2.iastate.edu/>

