IDC **IDEA DATA CENTER**

Building Capacity for High-Quality *IDEA* Data

In collaboration with **DaSy, ECTA, NCSI, & NTACT**

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Benefits of Using Integrated Data Systems to Support the SSIP

SSIP Interactive Institutes

Albuquerque, NM; April 29-30, 2015
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Jacksonville, FL; May 12-13, 2015
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Chicago, IL; May 27-28, 2015
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Objectives

- Understanding integrated data and how it relates to SSIP

- Learn about current integrated data systems

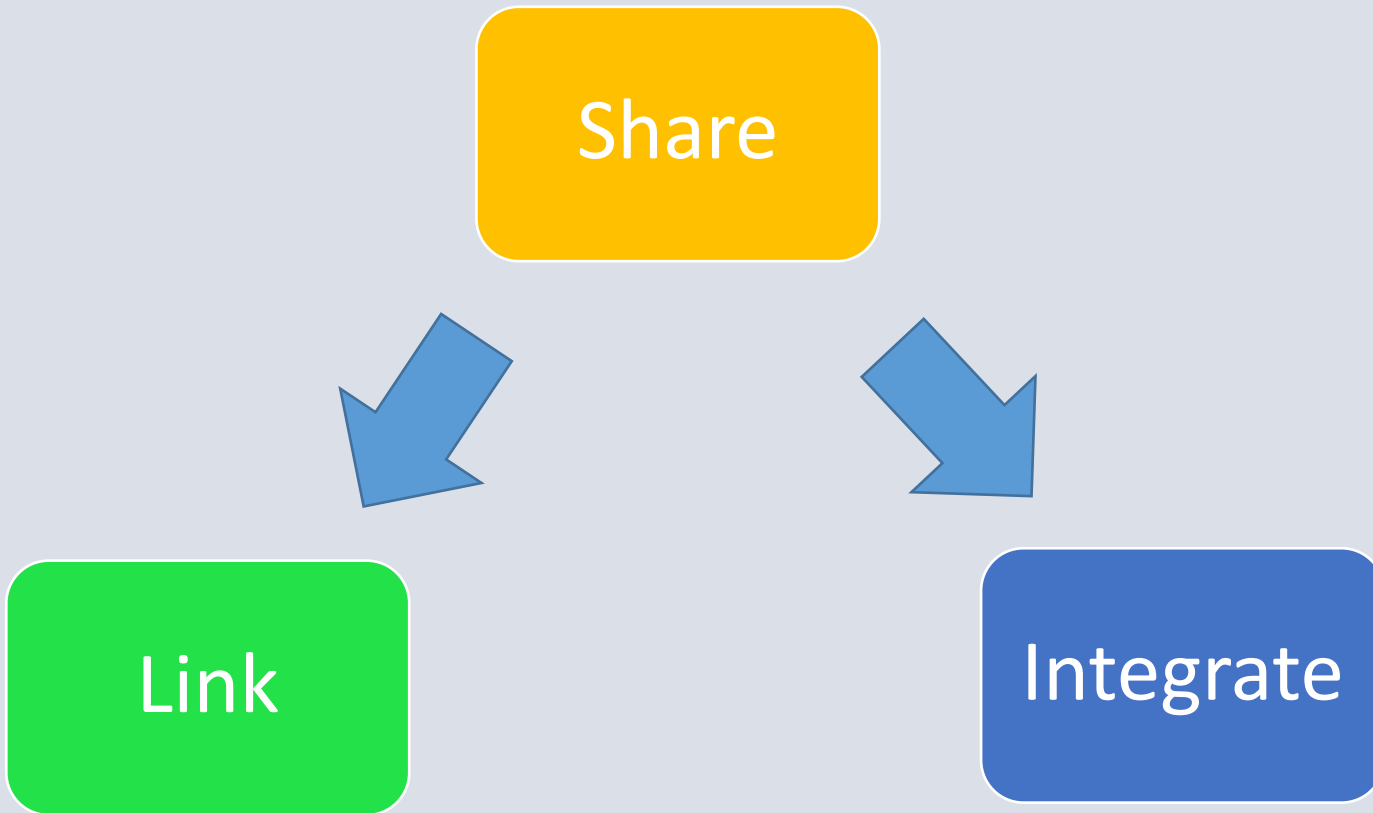- Apply this information to your Phase 2 SSIP activities

Agenda

- What does it mean to integrate data?

- What are the current state integrated data systems?

  - P20W+ Statewide Longitudinal Data System (SLDS)

  - Early Childhood Integrated Data System (ECIDS)

- What can be done with integrated data to support SSIP?

- Discussion activity

What does it mean to integrate data?

Data/Information Sharing

- Information sharing describes the exchange of data between various organizations, people, and technologies.

    - http://www.techopedia.com/definition/24839/information-sharing

- Can occur in many forms for Part C and B
    - Paper report
    - Electronic file
    - Others

Data Linkage

- DaSy—The process of joining or connecting records in one data set/system with those in another data set/system. Records can be linked through a common identifier in both data sets or by some other method.

Data Integration

- SLDS—Data integration is the combination of technical and business processes used to combine data from disparate sources into meaningful and valuable information. A complete data integration solution encompasses discovery, cleansing, monitoring, transforming, and delivery of data from a variety of sources.
    - Source: www.ibm.com/software/data/integration/
- ECIDS—Combining data from disparate sources into meaningful and valuable information

What Does Integrating Data Mean?

Ensuring data from various sectors and their program areas can be seamlessly combined to provide a cohesive picture of a student

Goal: To spend more time on what the data say than reconciling the various meanings

- Resolution of

    - data definitions from multiple sources

    - data element code sets from multiple sources

Example: Gender codes "M/F" in Source A vs. "male/female" in Source B vs. "1=male/2=female" in Source C

What are the general benefits of integration?

High-Level Benefits

- Enhanced collection and reporting systems and processes

- Higher quality data

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The Benefits of Integrated Data for SEAs and LEAs

- Reduces staff burden for schools\agencies through elimination of duplicate data entry

- Reduces staff burden for the state agencies by minimizing efforts for reconciling inconsistent data

- Increases data quality—for data collected, reported, and used

- Provides the ability to cross-validate data and minimizes the risk of inconsistent reporting

Source: CIID Topical Brief: Benefits of an Integrated Data System

What are the current types of state integrated data systems?

Overview of Current Integrated Data Systems

- There are two key state integrated data systems

  - Longitudinal integration between sectors—Statewide Longitudinal Data System (P-20W+ SLDS)

  - Horizontal integration across a sector—Early Childhood Integrated Data System (ECIDS)

SLDS

- An SLDS is a unit record-level data system designed for collection, management, analysis, and reporting of statewide education data over time and across programs.

- An SLDS leverages stakeholders and partners of education, training, and employment programs to create a system that provides data to support the research and evaluation of programs to improve the outcomes of individuals provided service while protecting their privacy.

- An SLDS supports critical reporting on the quality of public education, such as accurate completion and dropout rates for secondary and postsecondary institutions.

What Is a Longitudinal Data System?

"An education longitudinal data system is a data system that **collects and maintains** detailed, high-quality, student- and staff-level data that are linked across entities and **over time**, providing a complete academic and performance history for **each student**; and makes these **data accessible** through reporting and analysis tools." (Traveling Through Time, Book One)

What Is a Longitudinal Data System?

- Initially K-12 focused, linking data over time

- Has evolved into a P20W+ approach

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What Is the Goal of Creating Longitudinal Data Systems?

- Respond to questions asked by various stakeholders

- Make informed policy and practice decisions

- "A sophisticated LDS can be a tremendous tool for shedding light on the nuts and bolts of education, and for improving student outcomes. However, agencies must be aggressive and creative in using their LDS to take advantage of its full potential." (Traveling Through Time, Book One)
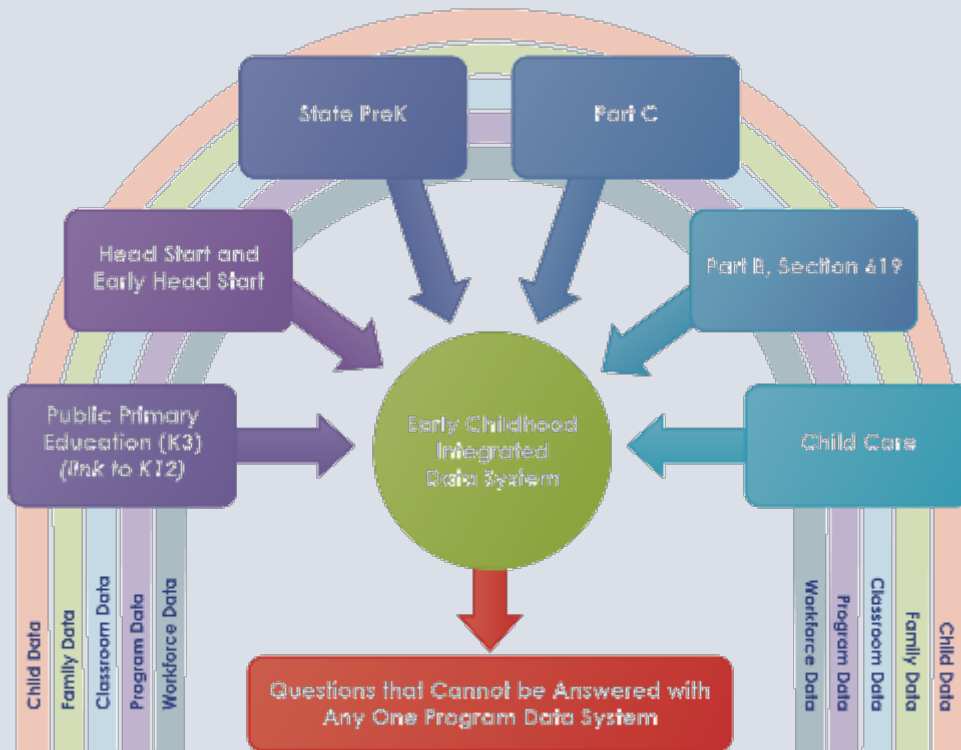
What Data Go Into These Systems?

- It depends on the **purpose** of the system and the **intended users.**

- Please note that based on the intent of the system, only gather data necessary to respond to the purpose and **not everything!**

But meeting federal requirements should only be a starting place when it comes to the use of integrated data

What Is an ECIDS?

- Collects, integrates, maintains, stores, and reports information from early childhood programs

- Crosses **multiple agencies** within a state that serve children and families from birth to age 8

- Includes data on the individual child, the child's family, the classroom, the program/providers, and other services that provide comprehensive care and education for young children

(What is an ECIDS, NCES 2014)
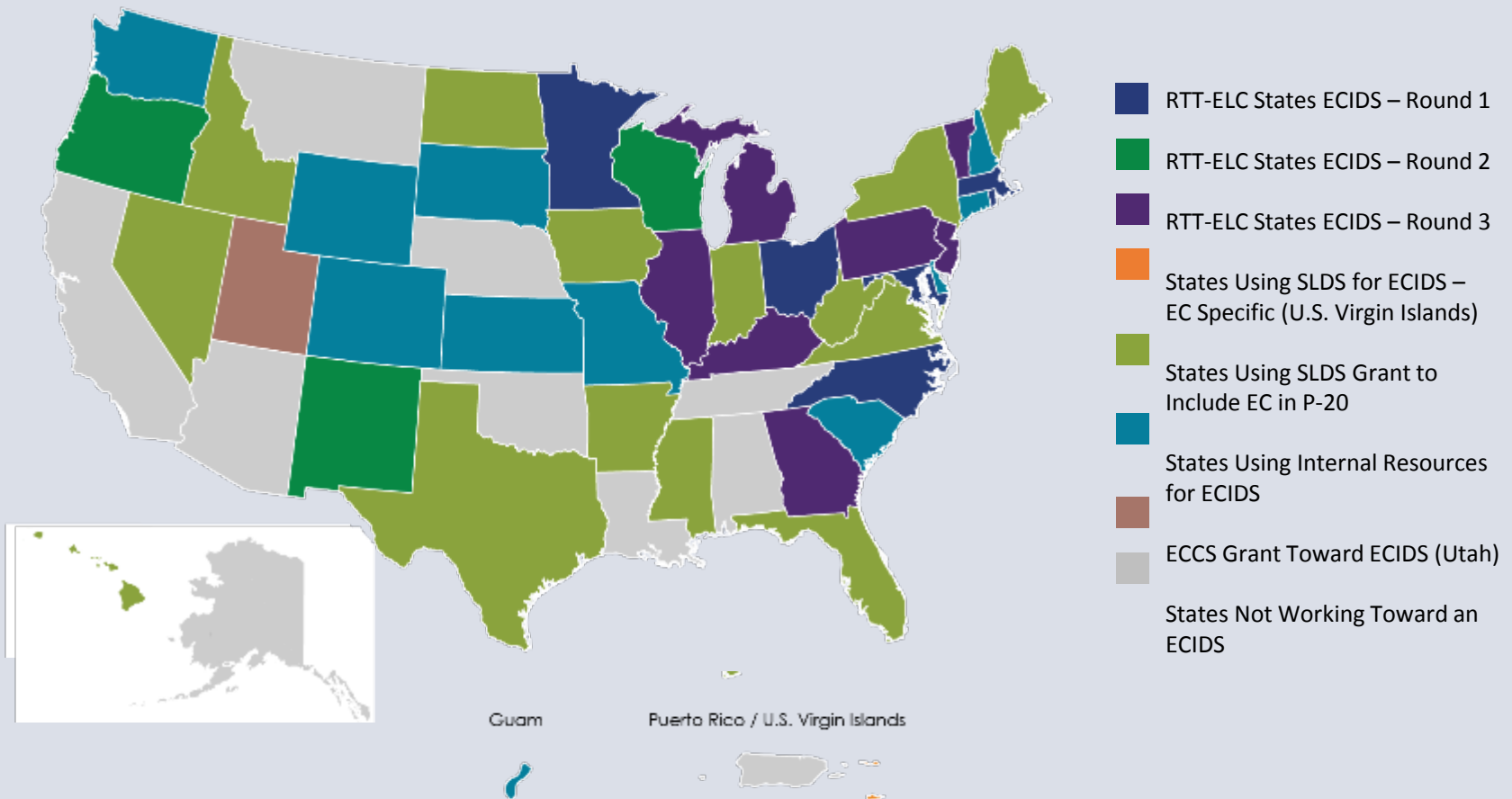
ECIDS Development Is Not Linear

- There is no state that has it all figured out. States have strengths in different components of the ECIDS *(see components to the right)*
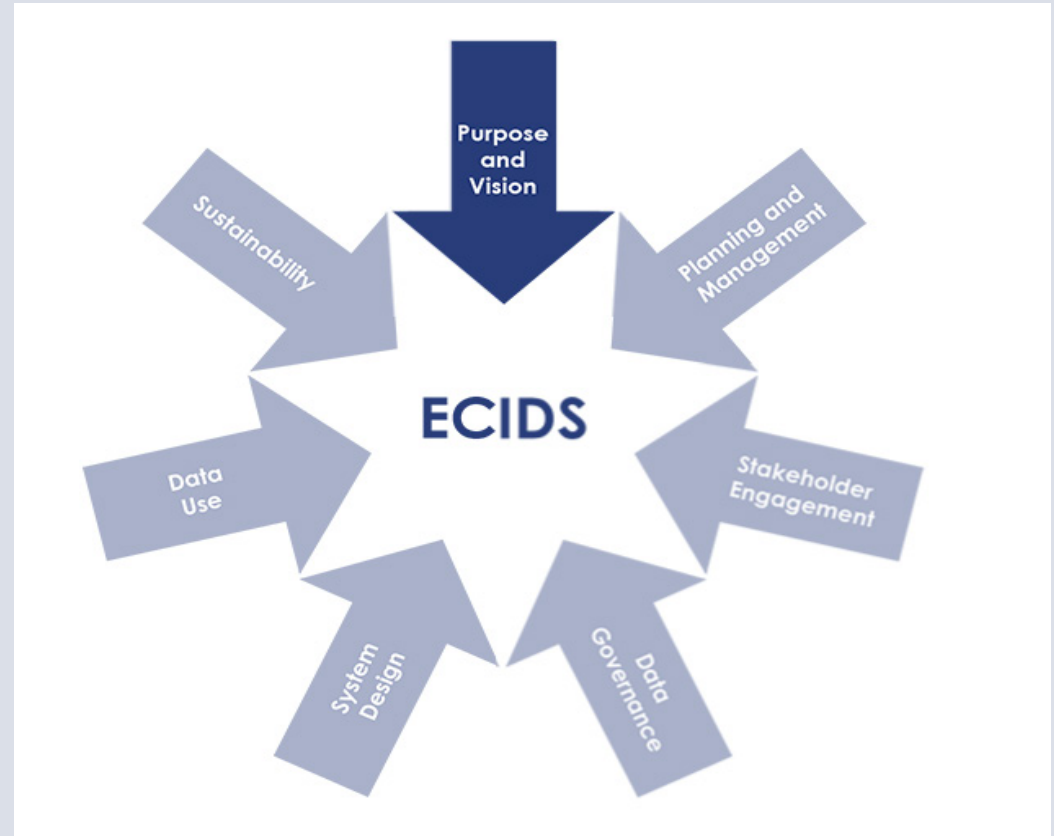
Funding & Use of the ECIDS

In 2011 when we started, PA was the only state that had anything close to an ECIDS. For the first time in 2015, at least 4 states will be able to use their ECIDS to inform decisions.

Legend:
- RTT-ELC States ECIDS – Round 1
- RTT-ELC States ECIDS – Round 2
- RTT-ELC States ECIDS – Round 3
- States Using SLDS for ECIDS – EC Specific (U.S. Virgin Islands)
- States Using SLDS Grant to Include EC in P-20
- States Using Internal Resources for ECIDS
- ECCS Grant Toward ECIDS (Utah)
- States Not Working Toward an ECIDS

Guam

Puerto Rico / U.S. Virgin Islands

How might integrated data support SSIP?

Case #1: Quickly enhance individual program data systems

- Add new elements by gathering them from integrated data systems instead of having to collect new elements (For example, a program can use a family income element from the integrated system instead of adding this element to collect in its own system.)

- Upgrading technology/user interfaces by leveraging current technology from integrated data systems (For example, Part C could leverage the infrastructure that the ECIDS uses and extend it for their use. This could save money and give the end-user a more consistent experience.)

- Need to have a common identifier to connect to external data by leveraging the integrated data system UID system

Case #2: Access to more comprehensive data systems for current children

- Use data to show short- and long-term objectives (more accurate evidence if you can pull data on a child(ren) from multiple sources

  - For example, a short-term goal would be to provide professional development so staff can consistently and effectively implement evidence-based practices, and the long-term goal would be to increase the percentage of infants and toddlers who make gains in their social-emotional development.

- Data analysis—Access to external data to comprehensively look at child data across programs

  - For example, determine if children in 619 also attend Head Start, do children who participate in 619 and Head Start have better outcomes than children only enrolled in 619?

Case #3: Access to longitudinal data for children as they progress through school

- Track child outcomes over time

  - For example, What is the four-year cohort graduation rate for students who received services under *IDEA* according to an IEP or IFSP at any time? This is best calculated with an integrated data system.

- Use data to assess fidelity of implementation through us of stronger methodology

  - For example, integrating data allows you to regularly monitor the data needed for the SiMR across time instead of the manual process to incorporate data from multiple programs.

Discussion Activity

Break out into small groups, use worksheets with questions, and be prepared to share back with the entire group

- What can you do in your agency to support this work?

- What questions can you ask in your state to initiate discussion on data integration?

- What are your improvement strategies that may relate to using integrated data?

  - Enhance program data systems

  - Access to comprehensive data systems

  - Access to longitudinal data systems

For More Information

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