Illinois Longitudinal Data System: What is it? What’s been accomplished?

Jonathan Furr – Education Systems Center at NIU
Diana Robinson – NIU Center for Governmental Studies
Anna Colaner – Governor’s Office of Early Childhood Development

March 18, 2015
ILDS Overview

• Builds from extensive existing efforts within and across agencies

• June 30, 2013: Seven State of Illinois agencies and the Office of the Governor (IBHE, ICCB, DCEO, IDES, IDHS, ISAC, ISBE) enter into an intergovernmental agreement for ILDS

• Establishes a cost-effective distributed LDS model that avoids duplication and ensures sustainability
Why ILDS?

- Support and advance sound, research-based decision-making on policy by providing better information to ILDS Agencies, other policymakers, advocates, and the public
- Ensure robust protections for individual privacy and compliance with all pertinent state and federal laws
- Effectively and efficiently address evaluation and research needs that require data from multiple ILDS Agencies
- Develop a common process across the ILDS Agencies to plan and budget for ILDS implementation, improvement, and maintenance
Active ILDS Governing Board Since 2013

- Quarterly meetings with interagency leadership
- Annual plans to establish priorities for action
- Delegation to agency staff to carry out priorities

illinoislds.org
ILDS Conceptual Technical Architecture

- **Early Childhood**
  - Public Reports
  - Analytics Portal

- **High School to College Success**
  - Public Reports
  - Analytics Portal

- **Community College Feedback**
  - Public Reports
  - Analytics Portal

- **Career Pathways Metrics**
  - Public Reports
  - Analytics Portal

- **60% x 2025**
  - Public Reports
  - Analytics Portal

**Intra-agency Enhancements**

- IDHS
- ISBE
- ISAC
- ICCB
- IBHE
- IDES
- DCEO

**CDD Administrator Services**

- i. Batch File Exchange Service
- ii. Master Client Index

**Other Required Services:**

iii. Identity Resolution Services
iv. Confidence Rating Services
v. Administrative Services
vi. Data Standardization Services
vii. Data Exchange Consultation

**Optional Services:**

i. Creation of Data Files
ii. Analytics Support

**LDS Conceptual Technical Architecture Diagram**

- Functional data store
- Interagency data merge
- Agency source systems
- CDD Administrator
Tackling Identity Resolution: NIU Center for Governmental Studies

• Applied research and policy analysis group
• Over 20 years experience working with state agencies (IDES, ISBE, DCEO, ICCB, DHS, Governor’s Office) to:
  • connect data across silos
  • understand practical challenges
  • help inform decision-making
• Emphasis on data security, quality, and mining
ILDS Data Needs

To do its work, the ILDS needs access to data that links records for the same individual across agencies.

Five challenges:

1. Data security and confidentiality.
2. Each agency’s database configured differently. Not set up to talk to each other.
3. Agencies use different unique identifiers.
4. Data quality – original intent not research, information may be missing or incorrect.
5. Volume of records.
Centralized Demographic Dataset Administrator Project

• Supports interagency data matching through identity resolution

• Began April 2015 with 11-member CDDA technical team and high-level NIU advisors

• 7 state agencies:
  • DCEO, DHS, IBHE, ICCB, IDES, ISAC, ISBE

• Core Services
  • Batch file exchange
  • Master Client Index
  • Confidence rating
How it Works

• Two agencies upload data to CDD database
  • (name, individual ID, DOB, gender, race/ethnicity, program year/service timeframe)
• Data are screened, validated, standardized, cleaned
• Records are linked using identity matching software/programs followed by manual review
• Assign a CDD ID
• Prepare Master Client Index for next run of record linkage
• Process repeated for each other LDS agency
• Linkage confidence rates calculated
What Will the CDD Do?

• Provide a database of unduplicated, linked records of people receiving public resources.

• In coordination with other ILDS projects, the CDD will:
  ▪ Help agencies, evaluators, and researchers understand the downstream effects of public programs.
  ▪ Improve the quality of State data over time.
  ▪ Support evidence-based decision-making.

• Inform other State data integration efforts.
ILDS Priorities for End-users
ILDS Priority: Early Childhood

- Merge early childhood data maintained by DHS and ISBE to better understand the characteristics and outcomes of children receiving early childhood services
  - Successful initial merge of Preschool for All and Childcare data
  - Enhancement and expansion of merged dataset to include Excelerate data, site administered data outside of Chicago, and breakdown of data by Innovation Zone
  - Substantial progress in discussions with Head Start community

- Future focus:
  - Incorporate Head Start and B-3 data
  - Provide reports through a publicly accessible dashboard
## Early Childhood Progress: Creating an Unduplicated Count of Children Receiving Services

### Preliminary Counts of 2013 Illinois Child Care Assistance Program (CCAP) and Preschool For All (PFA) Populations

<table>
<thead>
<tr>
<th>School Year 2013</th>
<th>CCAP Population Only (3-5 yrs)</th>
<th>PFA Population Only</th>
<th>Both Programs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Count</td>
<td>38,939</td>
<td>61,883</td>
<td>16,145</td>
<td>116,967</td>
</tr>
<tr>
<td>Percentage</td>
<td>33.29%</td>
<td>52.91%</td>
<td>13.80%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: * CCAP population only includes children in the Certificate Program ages 3-5 using Sept. 1st as cut-off.
* PFA population is estimated from ISBE data using PFA program indicator and age range 3-5 using Sept. 1st as cut-off.
* The age range 3-5 is defined as children greater than or equal to 3 yrs, and less than 5 yrs old. The IEP in PFA participants older than 5 are not included in this summary.

---

### Representative Data: Not for Attribution
Representative Data: Not for Attribution
Representative Data: Not for Attribution
2013 Innovation Zone Head Counts

- Williamson County Innovation Zone
- Thornton Township Innovation Zone
- Pilsen/Little Village (South Lawndale) Innovation Zone
- North Lawndale Innovation Zone
- Greater East St. Louis Innovation Zone
- Cicero Innovation Zone
- Aurora Innovation Zone

Legend:
- ISBE Kids By School
- CCAP Kids By Care Giver
- CCAP Kids By Vendor
Early Learning Services Dashboard

- Indicators and metrics developed in consultation with an ad-hoc committee of the Data, Research, and Evaluation Committee; the Governor’s Office of Early Childhood Development; and Child Trends
- Primary and secondary indicators included
- Will show progress across time, by geographies, and by varied subgroups
## Illinois Early Childhood Services Dashboard

### Indicator: Economic Security

- Among all Illinois children Birth to 5, number and percentage not in low income families (]>=200% FPL)
- **2014:**
  - #: 558,810
  - %: 56.74%

### Indicator: High Quality Early Learning for Infants and Toddlers

- Among high needs Illinois children Birth to 3, number and percentage receiving public funding enrolled in Gold rated ExceleRate Illinois programs and/or in home visiting programs
- Coming Soon

### Indicator: High Quality Early Learning for Preschoolers

- Among all Illinois children 3 to K entry, number and percentage publicly funded enrolled in Gold rated ExceleRate Illinois programs and/or in home visiting programs
- Coming Soon

### Indicator: Health

- Among all Illinois children receiving Medicaid/SCHIP for first 15 months of life, number and percentage attending 6 or more well child visits
- **2014:**
  - #: 63,785
  - %: 72.0%

### Indicator: Coordinated Community Systems

- Among all Illinois children Birth to 5, number and percentage in communities with successful community collaborations
- Coming Soon

### Indicator: KIDS

- Among all Illinois children assessed on KIDS, number and percentage scoring at “developing” level or better on all domains
- Coming Soon

---

DRAFT – Data and metric definitions are preliminary, based on currently available information.
Early Learning Services Dashboard and Community Systems

- Governor’s Office of Early Childhood collected additional data and report requests from Community Systems Development Subcommittee and workgroups
- Requests documented in charts and reporting templates
- To be considered as part of Dashboard or as standalone ILDS reports
Example Community Systems Report

Example element: Number of children of teen wards who received developmental screenings, by race (by geography)

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>By Geographies (county, municipality, ZIPs, etc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>By Geographies (county, municipality, ZIPs, etc)</td>
</tr>
<tr>
<td>NH White</td>
<td>By Geographies (county, municipality, ZIPs, etc)</td>
</tr>
<tr>
<td>NH Black or African American Children</td>
<td>By Geographies (county, municipality, ZIPs, etc)</td>
</tr>
<tr>
<td>NH Asian</td>
<td>By Geographies (county, municipality, ZIPs, etc)</td>
</tr>
<tr>
<td>NH American Indian or Alaska Native</td>
<td>By Geographies (county, municipality, ZIPs, etc)</td>
</tr>
<tr>
<td>NH Native Hawaiian or Other Pacific</td>
<td>By Geographies (county, municipality, ZIPs, etc)</td>
</tr>
<tr>
<td>NH Children of Two or more races</td>
<td>By Geographies (county, municipality, ZIPs, etc)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income Level</th>
<th>50%</th>
<th>100%</th>
<th>150%</th>
<th>185%</th>
<th>200%</th>
<th>400%</th>
<th>400%+</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Homeless</th>
<th>Caregiver with &lt;HS Education</th>
<th>in Child Welfare</th>
</tr>
</thead>
<tbody>
<tr>
<td>MI 1 CHV</td>
<td>DHS - EI</td>
<td>DHS home visiting (Parents Too Soon)</td>
</tr>
<tr>
<td>MI 2 CHV</td>
<td>Early Head Start</td>
<td>Head Start home visiting</td>
</tr>
<tr>
<td>MI 3 CHV</td>
<td>Head Start</td>
<td>ISBE PI</td>
</tr>
<tr>
<td>MI 4 CHV</td>
<td>Head Start</td>
<td>ISBE PFA</td>
</tr>
<tr>
<td>MI 5 CHV</td>
<td>Head Start</td>
<td>ISRS FC Special Education</td>
</tr>
<tr>
<td>MI 6 CHV</td>
<td>&lt;ISRS FC Special Education</td>
<td>DHS CCAP total</td>
</tr>
<tr>
<td>MI 7 CHV</td>
<td>DHS CCAP kids in ICC Centers</td>
<td>DHS CCAP kids in LCC Centers</td>
</tr>
<tr>
<td>MI 8 CHV</td>
<td>DHS CCAP kids in LCC Homes</td>
<td>DHS CCAP kids in LEX CC Centers</td>
</tr>
<tr>
<td>MI 9 CHV</td>
<td>DHS CCAP kids in LEX CC Homes (FFN)</td>
<td>DHS CCAP kids in LEX CC Homes (FFN)</td>
</tr>
</tbody>
</table>
ELC Research Agenda

- Identifies a broad range of research questions important to the early childhood community, with a set of high-impact questions prioritized.
- Designed to allow researchers and research funders to identify questions important to the early learning community.
- Developed by the Illinois Early Learning Council Data, Research, and Evaluation Committee, in collaboration with other early learning committees.
- Meant to be regularly updated.
Statewide Longitudinal Data System Grant Program

• Since 2009, ILDS-related activities have benefitted from over $20 M in funding through the federal SLDS grant program

• Illinois recently received an additional $7 M through this competitive program

• Focus for new grant:
  - Using data to better understand fiscal equity within education systems and return on investment
  - Delivering data for instructional support
SLDS Grant Research Projects

• Early Childhood ROI:
  • What is the impact of funding choices made at the federal, state, and local level on program quality and sustainability?
  • What are the various cost savings resulting from publicly-funded early learning programs in terms of later educational and human service investments?
How Can the ILDS Help Researchers (and vice versa)?

• ILDS Governing Board working to develop a common process for researcher access across agencies

• Research requests will be prioritized that align to the ILDS research agendas and priority areas

• Focus on “ROI” research

How can the ILDS best meet researchers’ needs?
Thank you! Questions??