



January 31, 2013

Kim Collins, Project Manager
Governor's Office of Early Childhood Development
100 W. Randolph, Suite 16-100
Chicago, IL 60601

Dear Kim and Core Team Members,

John Snow, Inc. (JSI) is pleased to submit to you quarter three deliverables per our contract with the Governor's Office of Early Childhood Development (OECD) for the Illinois Unified System Planning Project.

Broadly, the scope of work involved in developing a plan for Illinois' Unified System includes: (1) a stakeholder engagement and information gathering process; (2) analyses and recommendations on data standards, the extension and use of the Recipient Identification Number (RIN), and early childhood-related data planned system initiatives (i.e., The Framework and ILDS); (3) development of a system design and technical architecture that considers, coordinates, and links efforts of The Framework, ILDS, and Head Start data; (4) the provision of recommendations for interagency policy, governance, security, and staffing related to the Unified System; and (5) the development of an RFI for a data system design that will inform the creation of an RFP for services to build the Unified System.

This past quarter, JSI developed a recommended system design and technical architecture for the Unified System; reviewed the Head Start environment and developed recommendations for promoting collaboration between Head Start and the State in support of data sharing; and performed a risk analysis of and developed recommendations for interagency governance and organizational requirements necessary to support the Unified System.

To complete this work, JSI engaged and communicated with several individuals in leadership and decision making positions from IDHS, ISBE, IDCFS, the Illinois Head Start Collaboration Office (ILHSCO), the Illinois Head Start Association (ILHSA) and others. JSI engaged a group of Head Start Grantees via a focus group in Springfield to directly solicit their perspective on the Unified System, including considerations and capabilities of the System that would provide Head Start grantees and program staff value. These efforts resulted in a set of key findings and recommendations for enabling the Unified System.

The deliverables included in this submission are:

- **Deliverable #8:** Create and present general system design on how to fill the gaps between IDLS and Framework and link the two data systems to create a coordinated data system to the OECD and DREC.
- **Deliverable #9:** Provide analysis and recommendations for inclusion of Head Start/Early Head Start data in State data collection processes and systems.

- **Deliverable #10:** Develop comprehensive technical architecture of systems and data. The structure must include all of the essential data elements and oversight requirements listed in the Early learning Challenge application. It should also describe access levels for users.
- **Deliverable #11:** Identify position risks and issues that may arise during system development (example legal, administrative, technical, and political).
- **Deliverable #12:** Provide recommendations for necessary interagency agreement, policy, business and staffing changes necessary to implement data sharing.

An abbreviated review of the key findings and recommendations for each of the deliverables is provided below:

A. System Design & Technical Architecture

Broadly conceived, the Unified System will provide a system design that is flexible and facilitates integration and interoperability, as well as providing value-added business services to the early childhood workforce, program administrators and researchers. Considering the cost and complexity of developing such a system, it is unlikely that it will be fully developed and delivered as part of a single systems development engagement. Further complicating this topic is the lack of consistency relative to unique identifiers, data standards and technology across the participating agencies and organizations. To address these challenges, the Unified System architecture and system design should be designed and implemented in a modular fashion with the flexibility to evolve over time and provide additional capabilities as they are identified.

Key recommendations for System Design & Technical Architecture include:

- Design and implement a **modular technical architecture** with the flexibility to evolve over time and provide additional capabilities as they are identified.
- Develop an architecture that supports both **federated and centralized models of data sharing** (hybrid model). More capable technology systems with more critical data will integrate via the federated model while more loosely affiliated systems may upload data periodically via the centralized model.
- Ensure that early stages of system development (**requirements gathering**) consider the specific needs of system users and how the system will provide value.
- Ensure that **privacy and security** concerns are addressed through a structured organizational, program and role-based user hierarchy with appropriate authentication, authorization and access security controls.
- Develop **dashboard, data analysis and reporting** features of the system at the earliest opportunity in order to provide specific value to system users.
- Develop **data exchange capabilities** that manage the inconsistencies of legacy system data through robust data translation and validation functions.
- Develop **robust master client index and identity resolution** capabilities within the Unified System that are capable of managing multiple unique identifiers, and can analyze demographic and other identifying data to support identity resolution.

- As legacy systems are retired, ensure that **replacement systems are compliant** with the interoperability requirements of the State.

B. Collaborating with Head Start

In order for the Unified System to fully capture, represent, and report on the early childhood population, programs, and workforce in Illinois, it is critical to have Head Start data integrated and aligned with the Unified System. In general, the Head Start community, including the ILHSA, ILHSCO, and the grantees are supportive of the Unified System and are willing to collaborate with the State on this initiative. However, grantees are not clear on what value the System will provide beyond informing statewide policy and this poses a limiting factor on the overall buy-in and support for the System among Head Start grantees and programs. There are also concerns related to providing sensitive child and family data in an integrated systems environment and the System's ability adequately safeguard the privacy and security of that data. Key Recommendations to promote support from and collaboration with Head Start include:

- Establishing **sustained communication** between the Head Start community and leadership of the Unified System to keep Head Start informed and up-to-date on the on the development of the Unified System and to provide opportunity for Head Start to voice how the System can best meet their needs and offer value as the system evolves.
- The Unified System must **provide real value** to Head Start grantees and programs. System capabilities should include functionality to assist Head Start staff in better doing their jobs, easing the burden of data collection and reporting, and facilitating the management of programming and services.
- Promote the formation of the **Illinois Head Start Data Cooperative** and the proposed model for governing data sharing between the Head Start community and the State.
- The Unified System must have robust **privacy and security features** to satisfy data sharing related concerns.

C. Governance and Organizational Structure

To support the development, implementation, and ongoing operations of the Unified System, an organizational structure and capability must be developed that has the necessary human and financial resources, is representative of the participating agencies, and includes a set of guidelines, policies, and/or business practices that specify the way in which the Unified System and products of the System will be managed. The notion of an organizational or governance structure is especially relevant when considering how the Unified System will involve the ongoing participation of various State agencies as well as the integration of their early childhood data systems into the integrated environment envisioned as the Unified System. The governance and organizational requirements necessary to implement and support the Unified System include:

- Enhancements to the governance structure proposed in the Race to the Top business plan are recommended. These include **formalized relationships with other existing entities such as the P-20 Council; the ILDS Governance and Framework Governance bodies; and the Illinois Head Start Data Cooperative**. These entities represent organizational capacity,

technical expertise, information technology capacity, data governance, and access to early childhood data, all of which may be leveraged to enable the Unified System efficiently and effectively.

- Creation and staffing of a **Finance Committee** to support the complex and ongoing financial requirements of the Unified System. Continued financial resources will be required to develop and enhance the system and a financial sustainability plan will be required.
- Creation and staffing of a **Data Governance Committee** to formalize data governance requirements and capabilities involving all participating agencies is essential. This Committee will be responsible for developing system policies and practices that ensure the privacy and security of data as well as guide the access, use, and sharing of data among participating agencies and within the confines of relevant federal, state, and local privacy and security laws. Close collaboration between this committee and equivalent ISBE (ILDS) and DHS (Framework) Data Governance committees is required.
- Creation and staffing of a **Technology Standards and Best Practices Committee** to research, adopt and promote standards; and to communicate interoperability requirements to participating agencies and organizations. Close collaboration between this committee and equivalent ISBE (ILDS) and DHS (Framework) technology committees is required.
- A well-qualified, strong, and effective **Unified System Project Manager** is critical to oversee the development, implementation, and operations of the Unified System. To the extent that the Unified System will follow an aggressive timeline, this resource should be hired as soon as possible.
- Clearly defined **communication processes and support mechanisms** (web sites, blogs, newsletters, focus groups, presentations, etc.) to keep all participating organizations and stakeholders informed and up-to-date on the development and implementation of the Unified System are essential to the success of the project.

We look forward to your review and welcome your feedback on the enclosed deliverables. If you have any questions or concerns regarding the deliverables submitted, or next steps, please let me know.

Sincerely,

Michael Stelmach
JSI Project Director