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Oklahoma Early Childhood Integrated Data System:
Summary of Stakeholder Feedback and
Proposed Next Steps

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This document summarizes key themes gleaned from interviews with stakeholders engaged in Oklahoma's state data systems work. The questions used as an interview protocol are included as an appendix; interviews did not strictly adhere to the protocol, but generally covered the issues raised by the questions.

Interviews were conducted with:

- Steve Buck, Office of Juvenile Affairs
- Natalie Burns, Oklahoma Partnership for School Readiness
- Sharon Butler, Department of Health
- Ginger Elliott-Teague, Department of Education
- Kay Floyd, Head Start Collaboration
- Erik Friend, Department of Education
- Annette Jacobi, Oklahoma Commission on Children and Youth
- Tracy Leeper, Department of Mental Health and Substance Abuse
- Becki Moore, Office of Management and Enterprise Services
- Leea Mote, Office of Management and Enterprise Services
- Fred Oraene, Oklahoma Health Care Authority
- Sophia Pappas, George Kaiser Family Foundation
- Austin Ralstin, Department of Mental Health and Substance Abuse
- Edd Rhoades, Department of Health
- Mark Sharp, Department of Education
- Dan Sterba, George Kaiser Family Foundation
- Paul Shinn, Department of Human Services

Interviewees were promised that quotes would not be attributed specifically to them in the final report.

On July 24, 2018, the Oklahoma Partnership for School Readiness hosted a forum to discuss a draft of this report with interested parties. The authors presented an overview of the report's findings and recommendations, and took questions from the audience. Some of the points included in this report are drawn from that conversation. A list of attendees at that event is included as an appendix.

The stakeholders we spoke with were universally enthusiastic about the importance of developing an early childhood integrated data system at the state level, but were also realistic about how much work remains ahead for the state to accomplish that goal. This report starts by discussing what impact interagency data linkages could have on Oklahoma's early childhood programs, with the recognition that the value of those linkages requires substantial further definition. It then describes what work has already been done to link data across agencies, and the role of the Oklahoma Partnership for School Readiness in the progress made so far. Finally, it makes recommendations for next steps that would allow Oklahoma to clarify its data use goals and speed the development of a system that helps achieve them.

I | REALIZING THE BENEFITS OF INTERAGENCY LINKAGES

There is no widely shared vision of what could be achieved with improved data sharing

Respondents widely acknowledged that while progress has been made, there is not a shared interagency goal. They agreed on the need for a clear message to the broader stakeholder community of why this work matters and what it could achieve. Without strong leadership and a clear vision, the sustainability of any work to improve data usage will be in constant jeopardy.

- What will be the “elevator speech” for this work?
- In addition to a vision, respondents articulated the need for a roadmap on how that vision would be achieved. What is the business plan or playbook? What are the next steps?
- How can the vision be articulated in terms that are broadly understood, with a focus on outcomes for children and families, while also effectively protecting their privacy?
- Some respondents noted that some people involved in the work have a hard time getting out of their tunnel and thinking holistically.
- Some advocacy groups do not believe in data sharing, and take the view that if it is not required it should not be done. Longitudinal data sharing has been a hot-button political issue.
- One respondent noted that a legislative framework would be valuable to shaping this work.

Agencies are still struggling to find the value proposition in the linkages work

When interagency linkages are successful, it is because the agencies involved feel like the benefit they receive from it is worth the time and energy the work requires. For several agencies – most notably the Department of Education – the benefits they stand to receive have not been articulated clearly enough to justify financial investment in a shared infrastructure. Articulating the key questions that agencies will be able to answer only with interagency linkages is an essential launching point for the process, and greater clarity regarding key questions is needed to move forward.

- It is essential to understand that linking data across agencies is not an IT project – It is a change management project with an IT component. Being clear on what exactly the desired changes are is the critical starting point.
- All of the agencies involved believe that it will be possible to achieve benefits and appear to be working in good faith to articulate it; respondents generally expressed appreciation for the fact that agencies are being very appropriate in looking out for their institutional best interest. Respondents acknowledged that where agencies were not seeing the value proposition of linked data it was not because those agencies were being obstructionist, it was because the value really had not been articulated for them.
- Respondents were largely positive about the progress made with the Department of Education, while also realistic about the work yet ahead.
- In addition to agencies buying into this work (individually and collectively), other stakeholders need to buy into it as well – including policymakers and parents.
- Several respondents noted the need to articulate some use cases that help explain the value.

Several stakeholders identified value propositions that mattered to them

These included:

- For some early childhood providers the opportunity to show long-term outcomes is a critical value that would be served by stronger longitudinal linkages. This includes K-12 and post-K-12 outcomes.
- Even more specifically, it would be useful to study later outcomes (both positive and negative) and then back map those to previous experiences, to start looking for patterns that might inform how services are provided.
 - For example, imagine two communities with similar demographics where one has a high rate of children going on to higher education and a low rate of children going on to juvenile justice or prison, and the other is the reverse. Can we analyze what factors led to that difference?
- One overarching goal articulated is that this is about shared services – how are agencies developing shared solutions? Data systems are an essential component of that.
- In a tight fiscal context at the state level, better data use could lead to more efficient services.
- Defining cross-cutting outcomes that multiple agencies would be responsible for helping to achieve. While multiple respondents expressed enthusiasm for this idea -- and even noted efforts that could be built on in the process of developing cross-agency outcomes – there was acknowledgment that this kind of process is much easier with strong gubernatorial leadership, and that not all agencies are currently ready for this kind of conversation.
- Developing distinct counts of children being served.
- Providing community-level data dashboards.
- Supporting infant-toddler services.

There are real political challenges to data linkages

The lack of a positive vision is particularly problematic when stakeholders voice concerns about data privacy and security, which are deeply important issues. A positive vision is needed to help people understand why this work is needed in the first place, and then strong governance, training, and data management protocols are needed to reassure the public that personally identifiable data is safe.

There is a significant need for more capacity to use data

Once data is produced, greater analytic capacity is needed to make it meaningful. While some state agencies have meaningful capacity to analyze data, some do not; moreover, there is a widely understood need for analytic capacity that looks at critical problems in a cross-agency manner.

- Even those agencies that already have meaningful analytic capacity believe they could be more effective if they had additional capacity.
- In some agencies that have analytic capacity, that capacity may not be focused on broader cross-cutting questions so much as on pressing concerns related to specific programs.
- There is a lack of capacity from non-governmental partners to provide data analysis, but potentially some interest in building that capacity – which would require philanthropic investment.
- Some respondents articulated the need for the state to provide support to community-level efforts including by producing data in forms that make it easier to use.
- Some respondents noted that while in theory the Office of Management and Enterprise Services (OMES) could play a role in providing analytic capacity, it does not appear that OMES will in fact do so.

There is a strong interest in predictive analytics

Numerous respondents noted that while government cannot in all respects be run like a business, there are some ways in which it can – and that predictive analytics using aggregated data should be one of them. Respondents noted that businesses routinely use predictive analytics when making major decisions, and that government would benefit from being able to do the same.

- Some respondents thought that the legislature was increasingly open to this notion, but would have to be persuaded that an up-front investment in predictive analytics capacity would lead to long-term payoff. Those respondents thought the business community might be useful in helping to make that case.
- One respondent noted that there has been a lot of discussion about conducting performance audits of state agencies – but those audits will require a clear definition of success, and also the data necessary to analyze progress toward desired outcomes.

The difference between aggregated data and “rapid-time” data is significant to some stakeholders

Many interagency agreements in other states have focused on the ability to produce reports of aggregated data on a periodic basis, which are generally useful to inform policymaking and strategic decision making. Some of the respondents are more focused on getting “rapid-time” data designed to serve program operators on a daily or near-daily basis.

Agencies are naturally concerned about who will provide the narrative

In the current political environment agencies are keenly interested in the stories that data tells and want to influence that narrative. A key challenge for the state will be balancing that legitimate agency interest with the broader interest in following the story that the data tells, regardless of where it leads. The agencies’ desire to control the narrative may at times come into tension with the broader need to shape an ecosystem that meets the needs of children and families, particularly if agencies are placed into a defensive posture by external forces.

- There are a lot of open questions about the impact of new data on the public at large, and how the public might be able to access easily new information.
- How will data be contextualized? A deep understanding is necessary to explain data well to broader audiences.
- Several respondents thought universities might be useful partners in providing broader data analyses that inform the larger public, as long as they could do so in a cost-efficient manner.
- One respondent noted that the legislature may not want agencies to be in a strong position to make the case for themselves – and also that agencies may be afraid of what story the data tells.

Actually using data to drive change is a whole different level, but is a goal the state needs to achieve

Respondents understood that producing data is only a step toward understanding the story that the data tells – and that understanding the story the data tells is only a step toward using the data to drive policy changes that improve outcomes for children and families. There was widespread doubt that the state is poised to make meaningful changes in response to new data, as that would require major political will and significant change management capacity. One respondent noted that this would be a whole new way of working for agencies, which in many instances are not designed to do what data would allow them to do (or push them to do).

- Here too there are deep concerns that agencies are too invested in the status quo to change even when the data says they should.

There is a need to connect state efforts to community-level work

Some communities are working on building their data infrastructure – a pilot project in Little Dixie was referenced by multiple respondents – and it is not clear how that work will relate to statewide efforts. How will local pilots influence statewide system design, and how will statewide system design support local efforts?

- Some respondents articulated the need for the state to provide support to community-level efforts including by producing data in forms that make it easier to use.
- There are local efforts underway to share data between community providers (including Head Start) and local school districts. What can the state learn from those?
- Tulsa is a pilot site for an initiative that just won a national innovation competition (and associated grant).
- One respondent noted that local communities will always collect more data than the state, and that's fine – the key is to ensure that efforts are harmonized to minimize duplication.

II | LINKING DATA ACROSS AGENCIES

The process of developing linked data systems in Oklahoma has been atypically bottom-up

In many states, the process of developing linked data systems has been led by a high-level executive branch leader with a vision for cross-agency work – and in many instances the struggle those states have had has been to sustain energy with program-level managers within individual agencies. But in Oklahoma the process has followed just the opposite approach: the agency staff deep in the work have come together because they see the need for linked data, even though agency leadership and the governor’s office have yet to embrace the issue.

- This history has clearly impacted the strengths and weaknesses of the system as it has emerged to date. The lack of a holistic vision for the work is the kind of problem that is hard for agency staff to solve without high-level leadership buy-in.
- The strength of the relationship among staff within agencies was cited as a positive by numerous respondents.
- One respondent noted that the lack of high-level leadership may make it hard for agencies to put their true cards on the table.
- Multiple respondents noted that ideally, high-level leaders would articulate the importance of this work and keep the pressure on to move it – but would leave key design and implementation decisions to experts in the field.

In Oklahoma the landscape of data system linkages is still relatively decentralized

While there has been significant effort to build a Master Person Index for early childhood, that effort does not span many agencies. Respondents described a landscape in which there are numerous data-sharing efforts that are disconnected from each other, and that typically involve two agencies sharing data for a specific purpose. Respondents generally thought that these bilateral agreements were effective for their intended purposes, but that the work of those agreements was not coordinated across agreements.

- Multiple respondents expressed a desire to see Oklahoma move to a more holistic system.
- This issue is also one that would benefit from higher-level leadership within the state administration.
- As one stakeholder put it, “We do not have data systems, we have a lot of systems that have data.”
- Some respondents talked about how far the state has to go to implement a governance structure, while others seemed to think it was further along. This discrepancy may have come from a difference in focus – the Master Person Index is further along, whereas the idea of a holistic governance approach still has a ways to go. Even with regard to the MPI, however, there was some disagreement about the likely effectiveness of the existing governance structure.
- Multiple respondents noted differing data standards across agencies, and identified the need for greater consistency to facilitate sharing.
- At the stakeholder engagement forum one commenter noted that technology is changing far more rapidly than the state’s systems.

Some respondents also noted data sharing challenges within agencies; some agencies have a large number of systems that may not connect to each other, let alone other agencies’ systems.

While some states have worked to build a “P-20W” system that links from early childhood through higher education and the workforce, in Oklahoma the early childhood work has been largely disconnected from higher education and workforce linkage efforts

A particular subset of the larger fragmentation is the disconnect between two efforts that in some states are more closely integrated. The effort to link data in early childhood has been driven by the state’s Health Department and agencies focused on health and social services; the Department of Education has been getting more actively involved in conversations, but the conversation has not been connected to discussions with any higher education or workforce agencies.

- Multiple respondents expressed a desire to see these issues better connected, which is an issue that likely requires higher-level leadership to address.

A lot of agencies are at the table

Respondents generally believed that the DISCUSS group represented a major positive step in that it brought together a group of agencies that had not previously worked together collectively. They generally thought the right conversations have been happening up until now, but are concerned about whether those conversations are advancing as they need to – there is a real worry that progress is hitting a plateau.

- There is a strong sense that the relationships being forged through the DISCUSS process will serve the state well in the long term.
- Many states are struggling to integrate Head Start data into broader state systems, and eventually Oklahoma will need to wrestle with this issue as well.
- Different agencies have very different processes, and in Oklahoma agencies are relatively independent. This is a challenge to developing shared governance that is strong and sustainable.
- The fact that the early childhood discussions are disconnected from the higher education and workforce discussions influences who is at the table. Ultimately high-level leadership should make a decision about the state’s approach, and whether these will continue to be two separate conversations.

Turmoil at the Health Department has impacted the work

The Health Department was widely acknowledged as a key driver of data linkage efforts, but in the last year the agency was rocked by a financial scandal that led to the resignations of the commissioner and other senior staff (including the senior official who had championed the data systems linkages work). The Department is now moving forward with a dramatically reduced budget and interim leadership, but those are difficult conditions in which to make headway on an initiative like linking data across agencies.

The role of the Office of Management and Enterprise Services (OMES) is unclear, and different stakeholders have different visions of what it should be

Respondents widely agree that when OMES was set up to consolidate IT functions across agencies there was not a strong consensus within the administration or legislature about exactly what its role would be, and that lack of role clarity has been an ongoing struggle for the agency writ large.

- One anxiety some stakeholders have is about who will hold linked data, and OMES will likely need to be a part of that conversation. Multiple respondents originally thought OMES was going to end up being the central holder of all data (much like the South Carolina model for linked data that several respondents referenced), but that has not been the case.
- Developing more consistent data standards is one role that was suggested for OMES.
- Some agencies have been frustrated with OMES, and there is clearly a disconnect in some places between what OMES thinks its job is and what the agencies think its job is.
- One respondent expressed concern that OMES might not truly understand the early childhood space, and that it simply might not be on their radar. This respondent said that OMES is not opposed to early childhood but just is not focused on it.
- One respondent thought that the legislature is expressing concern about high costs relating to OMES, and that further legislative scrutiny could impact the agency's future direction.
- Another respondent described OMES as a middleman that is getting paid a lot for bad service.

The Master Person Index is a potentially exciting start

Three agencies are working together on a Master Person Index that will allow those agencies to identify children consistently across agencies. Those agencies are enthusiastic about the possibilities of having this linked data.

- Not all stakeholders are clear on what operational impact the MPI will have.
- Not all stakeholders are clear on how decisions will get made with regard to the MPI. It appears that the governance structure contemplates the DISCUSS committee as the final word on decisions about data management and use; there is no single backbone entity that has decision-making authority, and there is some concern about how this might play out in practice.

III | THE ROLE OF THE OKLAHOMA PARTNERSHIP FOR SCHOOL READINESS

The Oklahoma Partnership for School Readiness (OPSR) is seen as a positive force in moving the data conversations

OPSR has done a good job of getting stakeholders to the table, and of influencing existing data sharing agreements. OPSR is seen as having a good concept of what it is working toward, and of actively pursuing its goals. It was also credited for ensuring that early childhood is on the table in the state's larger data systems work, and for bringing important information to the table. OPSR is seen as the agency most likely to hold the bigger picture, and to keep stakeholders focused on that bigger picture.

- The fact that OPSR will not provide data to a linked system is both a strength and a weakness; it places OPSR apart from the other agencies in ways that give it freedom, but that also may be seen as limiting the skin it has in the game.
- OPSR was credited with playing a “glue function” and supporting the building of strong relationships.

There is disagreement about what OPSR's strategy should be going forward

Some respondents argued that OPSR should be the visible leader of the data systems linkages work, because of its role in focusing on the larger ecosystem and its unique cross-cutting vision. Other respondents believed that OPSR has succeeded so far largely by keeping this work and its role lower on the radar screen, and believed that strategy should be continued; there was concern that if OPSR's role was more visible that it would cause a backlash. As one respondent asked, does OPSR want to risk its existence on this project?

- There is general agreement that OPSR's positioning is unique and should be leveraged, but not agreement about the best way for it to take advantage of its unique role.
- OPSR has a legislative mandate to track the effectiveness of the system and make recommendations, and its role should be consistent with that legislative mandate.

There is concern about OPSR's capacity

OPSR has lost significant capacity in recent years that may impact its ability to be effective in this space. The staff OPSR has are generally well-regarded but respondents were unclear on how much capacity it would have for this work going forward.

IV | WHERE DO WE GO FROM HERE

A fully realized early childhood integrated data system will include the following:

1. A vision of what can be accomplished with linked data, grounded in a key set of outcomes the data is meant to help achieve;
2. The capacity to build out a system that supports that vision;
3. The analytic capacity to make sense of the numbers the system produces; and
4. The capacity to make operational changes based on those analyses.

In all four areas the state has a great deal of work left ahead, but it has made some real progress on #2 and has some strengths to build on in #3 as well. The recommendations below are meant to address how the state can improve its position in all four of these areas, along with some overarching recommendations focused on the need for leadership in this initiative. All of the work will benefit from strong centralized leadership from the governor and legislature and deep engagement by all participating agencies; the Oklahoma Partnership for School Readiness can also play a valuable leadership and facilitation role in many or all of these work strands. As discussed at the stakeholder engagement forum, Oklahoma can develop more specific timelines for this work that map onto other agency and administration timelines during the coming period of transition.

A. Overarching Issues

High level leadership will be needed for this work to succeed. The state has made significant headway that can be built on – but strong leadership will be needed to carry the work forward, and to keep work flowing through multiple process steps.

- In many states the push for linked data has come from governors; governors are responsible for the entire system, and frequently see the need for data that can only be produced through interagency linkages. If the new governor believes in this work and influences agency heads to keep it moving, it is poised to yield important fruit. If the next governor does not believe in this work, it runs a serious risk of dying on the vine.
- At the stakeholder engagement forum numerous participants commented on the importance of direct outreach to gubernatorial candidates.
- In some states a push for linked data has come from the legislature, which may have a similar curiosity regarding key systemic questions. One strategy to consider is whether to develop draft legislation solidifying the framework of an integrated data system.
- At this time it is not entirely clear which of those strategies is more likely to be successful in Oklahoma, and the election results will likely impact that calculus.
- At the stakeholder engagement forum one suggestion was to focus not on the development of a data system, but on the need to improve the early childhood system as a whole – with the development of a data system providing needed support for that developing system.

A. Overarching Issues (continued)

Agency leadership and buy-in will also be critical. In addition to leadership at the gubernatorial and legislative level, there will also need to be active engagement from core agencies.

- The instability at the Health Department has affected many issues, including this one. Ideally stronger gubernatorial and legislative leadership would reduce the need for the Health Department to spearhead this work, but high-level bandwidth from the Health Department will still be necessary for system development to move forward.
- The full and enthusiastic participation of the Department of Education and State Board of Education is ultimately necessary for the system to succeed; there is value in an integrated data system with linkages that just cut across agencies serving children birth to five, but many of the biggest impacts of an integrated data system come from studying the long-term outcomes that require the Department of Education's engagement. Identifying the use cases that resonate the most with ODE is a high priority.
- The continued uncertainty over the role of OMES is a challenge. It is not clear that OMES' role will be clarified in the immediate future, and a better definition of its role may not be entirely necessary to begin articulating a vision – and even to start building out some capacity. But in any potential ideal state for an operating integrated data system, OMES will have a clearly defined role and be providing ongoing support.

B. Developing a Vision

A vision needs to be developed based on the needs of stakeholders. Some of that work is already underway with key state agencies at the table, but for a vision to be successful it will require higher-level leadership from within government -- either at the governor's office or legislature – and broader stakeholder engagement. The staff currently working on data have recognized these needs and are supportive of efforts that would engage higher-level leaders and additional stakeholders.

- The broader vision also needs to include some specific use cases that will be responsive to stakeholder needs (with the governor and legislators critical stakeholders in this definition), with the understanding that the prioritized use cases may evolve over time.
- The use cases developed need to be realistic to help manage expectations and establish early wins. The initial outputs of any linked system are generally annual or semi-annual reports that inform policy analysis, and the work plans for this system should reflect that reality. A few realistic early wins should be identified and aggressively pursued.
- Some of the agencies involved have already identified promising use cases that are motivating their work on an integrated data system.
- The work of developing a vision should include the voices of families, and the final product should reflect the needs of families.
- One suggestion at the stakeholder engagement forum was to do a study analyzing the gap between Oklahoma's current performance and the national average in certain key measures of child success. The study could also include recommendations for achieving the national average and estimated costs to achieve that goal.

B. Developing a Vision (continued)

The governor and/or legislature should define the scope of the vision. A key threshold question that has not been definitively resolved is whether Oklahoma will pursue an early childhood integrated data system as its own project, or whether that will become part of a larger effort linked to K-12 education, postsecondary education, and the workforce. The new governor and legislature should be engaged in resolving this issue and putting in place the framework necessary to build out the system.

- There are some advantages to working solely within an early childhood frame, as there are already groups in place working on those issues. This may also slightly reduce the technical challenges of the buildout work.
- On the flip side, the overall value proposition of the work is dramatically reduced without the connection to later years – including for the early childhood providers themselves, who are interested in knowing the long-term outcomes of the children they serve.

C. Building a System That Supports the Vision

“Building a system” is about much more than just a set of technical linkages. Indeed, the necessary steps to building a system include a mix of political, legal, and technical work:

- *Implementing a governance structure.* While existing committees provide a useful forum for interagency staff coordination, there is no formal structure for agency leadership to administer a multi-agency data initiative. That formal structure is necessary for the agencies to run the system, and for outside parties to engage with the system.
 - The manner in which different agencies collect data varies widely, which is a challenge for interagency linkages. Particularly if the state is going to move to a more holistic approach, it needs to work on implementing standards for data quality.
- *Implementing the multi-agency data sharing agreement.* The existing data sharing agreement establishes a framework for interagency data sharing, but needs to be housed and administered within a governance structure. Moreover, to date data sharing has been limited to projects involving two agencies; it may be necessary to revisit existing agreements to determine whether they can effectively support multi-agency projects.
 - Protecting personally identifiable information is a critical aspect of data sharing, and Oklahoma should ensure that it is using up-to-date best practices in this area.
- *Buildout of the Master Person Index.* To maximize its effect the Master Person Index should involve all agencies involved in the governance structure.
- *The personnel capacity to produce data, both centralized and across agencies.*
 - Managing the governance structure and data sharing agreements are centralized functions, and in many states governance sits outside the individual participating agencies and is defined in a master data sharing agreement. The same is true of the capacity to manage the Master Person Index, which is technical capacity that can be separated from staffing the governance structure (although it can also be housed in the same place). One key role of the centralized capacity is to monitor the progress of implementing the use cases, and also to manage the ongoing process of updating the use cases.
 - Each participating agency will also need the capacity to produce data for interagency file sharing, and then produce outputs for end users.
 - In developing the data sharing framework for a system it is important to anticipate continued rapid change in the available technology – otherwise the system will be outdated before it is finished.
 - These capacities are necessary just to produce data in the first place; the capacity to use data effectively is discussed further below.

D. Developing Use Capacity

Realistically, the state is years away from being able to produce new data that would impact how state government and communities operate. But if the state is going to move toward having an integrated data system, it should start planning for the impact of the data the system will produce. There is no point in building an integrated data system only to keep doing the same things the state has always done; the goal of the data system is to change practice in ways that lead to better outcomes for children and families. Engaging political leaders about the importance of this issue is critical, and a strategy will be needed to help policymakers understand the value of an early childhood integrated data system.

E. The Political Will and Capacity to Make Operational Changes

Maximizing the impact of data linkages requires the capacity to analyze and synthesize newly-produced data. This includes several different dimensions:

- *Public reports and dashboards.* At both the state and community level, new data should be made transparent to inform decision-making. The prioritized use cases should drive the content of the reports and dashboards. There are numerous examples of state and local level data reports and dashboards that could inform Oklahoma's approach to making data public.
- *State-level analytic capacity.* As noted above, some state agencies already have this in place while others do not. In addition to each individual agency building its capacity, the system as a whole would benefit from some centralized and independent capacity that could look across agencies with a big-picture view. There are a variety of ways to position that capacity, and the governor and/or legislature should be engaged in defining and locating that capacity.
- *Capacity outside state government.* Building an advocacy community with independent capacity to inform public debate could add value to the system, but would require philanthropic investment.
- *Research capacity.* In some instances a research design is needed to unlock the true power of data. Some states have placed an emphasis on having access to centralized research capacity, either at a university or another external provider.
- *Local analytic and research capacity.* Many communities will not have sufficient resources to develop significant capacity on their own. That puts the onus on the state to develop a support infrastructure for communities that allows them to leverage newly available data.

Appendix 1: Interview Protocol, Distributed Prior to Interviews Oklahoma Partnership for School Readiness: Interview Questions Regarding Data System Development

The following are questions that we expect to ask in interviews about the development of Oklahoma's early childhood data system. We do not expect that all interviewees will be asked all of the questions, or that all interviewees will have answers to all of the questions. The goal is for interviewees to speak freely on the subjects they feel most comfortable discussing.

Current Practices

- What state level resources are currently devoted to the development of a federated data system? What actions and strategies were effective in working to develop this system?
- How is linked data currently being used by key stakeholders?
- What has been the role of the Office of Management and Enterprise Services?
- How have health agencies and the Department of Education interacted in this work?
- How have the agencies worked together on the mechanics of data generation (e.g. the information request procedure)?
- How strong is the connection between the vision of agency leaders and the execution at the program management level? What is the vision of agency leaders?
- What capacities exist inside and outside government to effectively utilize data once it is produced? Specifically, what is the capacity for data use by:
 - Legislative staff
 - Agency staff
 - Providers
 - Research partners
- What lessons can be drawn from past interagency data efforts, including the P-20 Council?
- How would you assess the importance and effectiveness of existing efforts for promoting interagency data sharing and use?
 - The DISCUSS Committee
 - The CAR Workgroup
 - The Multi-agency Data Sharing Agreement
 - The Master Person Index project
- How strong is the existing approach to data governance?
- Are there state legislative barriers to the disclosure of information? State agency interpretations of state law that play a role here?

OPSR's Role

- How has OPSR's staff interfaced with state department staff on the development of a state data system and what process indicators can Grantee report on the development of a data system? What role did the public-private partnership play in developing a statewide data system?
- What regulatory or legislative opportunities exist that help efforts to build a statewide data system? How did OPSR help capitalize on these?
- What legislative and regulatory barriers was OPSR able to help overcome in its effort to build a data system?

Moving Forward

- How would you like to see data used? Do these potential use cases resonate?
 - Establishing a distinct count across early childhood programs
 - Analyzing outcomes of children transitioning into the K-12 system
 - Providing “dashboard” data on early childhood service delivery to communities
 - Better understanding early childhood workforce characteristics and education pathways
- For each agency – what are your key early childhood policy initiatives? How can integrated data support your assessment of these policies?
- What plans are there to improve the use of data?

Is there anybody else you’d recommend that I talk to?

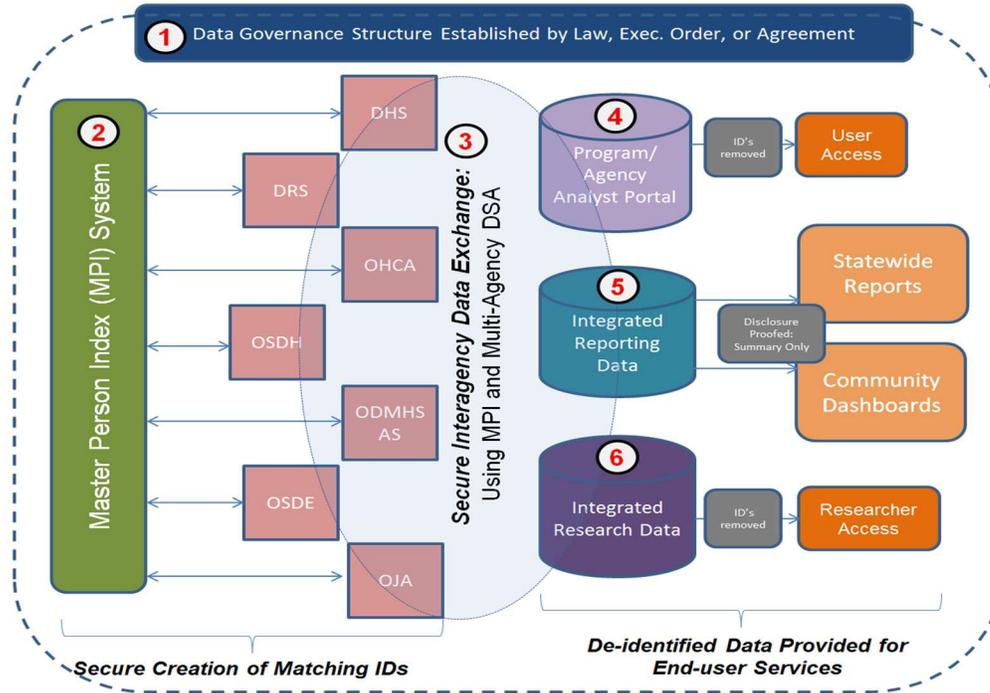
Appendix 2: Attendees at the July 24 Stakeholder Engagement Forum

List of Attendees:

- Melody Bays, Oklahoma City Community Foundation
- Lesli Blazer, Oklahoma Department of Human Services
- Natalie Burns, Oklahoma Partnership for School Readiness
- Sharon Butler, Oklahoma State Department of Health
- John Delara, Oklahoma State Department of Health
- Luann Faulkner, Oklahoma Department of Human Services
- Kay Floyd, Head Start Collaboration
- Robert Harbison, Oklahoma Partnership for School Readiness Foundation
- Melissa Houston, Oklahoma Department of Labor
- Annette Jacobi, Oklahoma Commission on Children and Youth
- Janice Keizer, American Institutes for Research
- Craig Knutson, Potts Family Foundation
- Tracy Leeper, Oklahoma Department of Mental Health and Substance Abuse
- Beth Martin, Oklahoma State Department of Health
- Lia Tepker-McHughes, Oklahoma Department of Labor
- Jennifer McKay, Oklahoma State Department of Education
- Cheryl McNair, Oklahoma Office of Juvenile Affairs
- Gina McPherson, Oklahoma State Regents for Higher Education
- Susan McVey, Oklahoma Department of Libraries
- Sharon Morgan, Oklahoma State Department of Education
- Rep. Monroe Nichols
- Fred Oraene, Oklahoma Health Care Authority
- Shelly Patterson, Oklahoma Health Care Authority
- Sumita Pokharel, Office of Management and Enterprise Services
- Pat Potts, Potts Family Foundation
- Ray Potts, Potts Family Foundation
- Mohsen Pourett, Oklahoma Office of Juvenile Affairs
- Charles Pruet, Oklahoma Department of Human Services
- Edd Rhoades, Oklahoma State Department of Health
- Paul Shinn, Oklahoma Department of Human Services
- Persephone Starks, Oklahoma State Department of Health
- Wanda Threatt, Oklahoma Department of Human Services

Appendix 3: Early Childhood Data Governance Conceptual Technical Architecture

The purpose of this technical architecture diagram is to demonstrate how the various component parts of the state’s early childhood data system can align as part of a coherent structure. This is intended as a starting point for stakeholder and interagency development of the system architecture and technical requirements for the desired “end-state” system. That end-state vision can then serve as a guide for identifying gaps and developing plans to address them.



Component	Description	
1	Data Governance Structure	Establishes the formal structure for agency leadership to administer a multi-agency data initiative
2	Master Person Index (MPI) System	Expansion of current system to include all agencies in the governance structure
3	Secure Interagency Data Exchange	Both the MPI and Multi-agency DSA support the secure exchange of data to support end-user functions; other security aspects addressed through the governance structure
4	Program/Agency Analyst Portal	Agencies establish an integrated data set with analytic tools and authorization procedures that enable data queries and analytics by authorized users within a secure environment
5	Integrated Reporting Data	Agencies agree to secure integration of data from multiple agencies for public reporting and dashboards displaying summary aggregated data
6	Integrated Research Data	Agencies agree to secure integration of data to establish research ready, de-identified datasets for authorized researchers