TABLE OF CONTENTS

SECTION 1 EXECUTIVE SUMMARY ........................................................................................... 1
  1.1 Background and Objective ........................................................................................... 1
  1.2 Summary of Recommendations ................................................................................... 2
SECTION 2 INTRODUCTION ..................................................................................................... 4
  2.1 Background .................................................................................................................. 4
  2.2 Connection to ROA ....................................................................................................... 5
  2.3 Relationship to Other Foundational Initiatives ............................................................ 7
  2.4 Objectives of This Report ............................................................................................. 8
SECTION 3 THE FUTURE STATE OF CHILD WELFARE ANALYTICS IN FLORIDA .......... 10
  3.1 Organizations, Communities, and Actors ................................................................... 10
      3.1.1 Functional Organization and Staffing for Child Welfare Analytics ............... 10
      3.1.1.1 OCW ............................................................................................................ 10
      3.1.1.2 Analytics Lab and Other Providers of Analytical Services ....................... 11
      3.1.1.3 FICW ............................................................................................................ 11
      3.1.1.4 Regions, CBCs, and Other External Entities ................................................ 12
      3.1.2 Analytical Governance for Child Welfare .......................................................... 12
  3.2 Operational Processes for Analytics ........................................................................... 14
      3.2.1 Processes for Operationalizing Analytics .......................................................... 14
      3.2.2 Additional Processes Supporting Analytics ......................................................... 15
  3.3 Tools and Technology ................................................................................................ 15
      3.3.1 Tools .................................................................................................................... 15
      3.3.2 Technology .......................................................................................................... 15
  3.4 Integration with Other Programs and Processes ........................................................ 16
SECTION 4 GAPS AND IMPACTS .......................................................................................... 17
  4.1 Analytical Governance for Child Welfare ................................................................. 17
  4.2 Organizational Change Management for Analytics ................................................... 17
  4.3 Resources and Staffing ............................................................................................... 18
  4.4 Processes ..................................................................................................................... 19
  4.5 Technology ................................................................................................................ 20
  4.6 Impacts of Implementing the Future State .................................................................. 20
SECTION 5 RECOMMENDED IMPLEMENTATION ROADMAP ........................................ 21
  5.1 Overview .................................................................................................................... 21
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1.1</td>
<td>Child Welfare Analytics Governance Implementation</td>
<td>21</td>
</tr>
<tr>
<td>5.1.2</td>
<td>Other Activities for the Implementation of the Future State</td>
<td>25</td>
</tr>
<tr>
<td>5.1.2.1</td>
<td>Capability and Capacity Building</td>
<td>25</td>
</tr>
<tr>
<td>5.1.2.2</td>
<td>Case-by-Case Adjustment of the Cycle of Accountability Processes</td>
<td>25</td>
</tr>
<tr>
<td>5.1.2.3</td>
<td>Transfer of Activities</td>
<td>25</td>
</tr>
<tr>
<td>5.1.2.4</td>
<td>Technology Enhancements</td>
<td>26</td>
</tr>
<tr>
<td>5.2</td>
<td>Risks and Dependencies</td>
<td>26</td>
</tr>
<tr>
<td>5.3</td>
<td>Final Comments</td>
<td>27</td>
</tr>
<tr>
<td>6.1</td>
<td>12-24 months</td>
<td>28</td>
</tr>
<tr>
<td>6.2</td>
<td>36-60 Months</td>
<td>30</td>
</tr>
</tbody>
</table>

SECTION 6 APPENDIX: DETAILED TIMELINE FOR IMPLEMENTATION ACTIVITIES ... 28
### Revision History

<table>
<thead>
<tr>
<th>DATE</th>
<th>AUTHOR</th>
<th>VERSION</th>
<th>CHANGE REFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/27/2016</td>
<td>Michiko I. Wolcott</td>
<td>V001</td>
<td>Initial Draft</td>
</tr>
<tr>
<td>06/30/2016</td>
<td>Michiko I. Wolcott</td>
<td>V1.00</td>
<td>Final Draft</td>
</tr>
<tr>
<td>07/29/2016</td>
<td>Michiko I. Wolcott</td>
<td>V1.02</td>
<td>Edits as requested</td>
</tr>
<tr>
<td>08/01/2016</td>
<td>Michiko I. Wolcott</td>
<td>V2.00</td>
<td>Final</td>
</tr>
</tbody>
</table>

### Quality Review

<table>
<thead>
<tr>
<th>NAME</th>
<th>ROLE</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sean Macey</td>
<td>Analytics Consultant</td>
<td>06/28/2016</td>
</tr>
<tr>
<td>Tina Worley</td>
<td>Client Lead/Project Manager</td>
<td>06/30/2016</td>
</tr>
<tr>
<td>Tina Worley</td>
<td>Client Lead/Project Manager</td>
<td>08/01/2016</td>
</tr>
</tbody>
</table>
SECTION 1 EXECUTIVE SUMMARY

1.1 BACKGROUND AND OBJECTIVE

During Fiscal Year (FY) 14-15, the Department of Children and Families took its first steps toward putting analytics into the hands of those who need insights for decision-making through the definition of the Operational Integration Plan for analytics. This plan presented a framework to ensure the Department could move toward its desired future state of analytics capability and maturity in an efficient and effective manner, while achieving maximum benefit for the investment made.

This report furthers one of the initiatives identified in the Operational Integration Plan, as a guide for implementing the foundations required to operate the analytics function within the Office of Child Welfare (OCW), consistent with the Results-Oriented Accountability (ROA) Program requirements for analytics and other related activities as identified in 409.997(2)(a-e). Specifically, this report addresses how OCW can structure the functions and the processes, properly resource, and ensure collaboration and transparency to improve efficiency and effectiveness of child welfare analytics in the state. By providing a path to structuring and integrating analytics functions and processes, it lays the foundation for programs such as ROA. As ROA is a process improvement and accountability program based on objective evidence from data, its Cycle of Accountability framework has much in common with the Analytics Lifecycle framework as seen below. Therefore, the plan for building the analytical foundations has been defined so that it consciously integrates the analytical initiatives with the ROA implementation plan.

Exhibit 1: ROA Cycle of Accountability vs. Analytics Lifecycle

For this report, “analytics” is defined as the transformation of data, through empirical analysis, into meaningful insights that inform strategic and tactical decisions. This includes report
generation, monitoring, tabulation, up to advanced statistical analysis and data science tasks, from which insights and/or conclusions are drawn for the purpose of decision-making.

1.2 SUMMARY OF RECOMMENDATIONS

To lay the foundations for effective child welfare analytics, the following six (6) activities are needed:

1. **Align strategies and initiatives among the areas of technology, data, analytics, and ROA.** Technology, data, and analytics each has a substantial influence on child welfare and specifically on the ROA program. Therefore, their strategies and initiatives must be aligned with each other as well as with the needs of child welfare policies and practices. As the specifics of the goals and how to achieve them are different, separate, but interdependent and complementary efforts are required to ensure that an effective foundation exists for ROA.

2. **Define and implement child welfare analytics governance.** The goals of analytical governance are similar to those of other types of governance: balance of interests, transparency, consistency, effectiveness, collaboration, and compliance.

3. **Build analytical capability and capacity.** A child welfare analytics center of excellence role should be designated within the OCW Performance and Quality Management Unit (PQMU). An analytical execution arm (internal or external) should be established with appropriate skill sets, resourcing levels, technology infrastructure, and processes. Furthermore, training of staff and child welfare resources is necessary to augment the capability.

4. **Leverage processes defined for the ROA Cycle of Accountability.** The Cycle of Accountability processes are deliberately broad and flexible enough to be applied to all activities related to child welfare analytics, adjusting as necessary.

5. **Achieve a balance between the current scope of responsibilities and critical foundational activities.** It is imperative the PQMU staff be able to focus on activities within its formal scope of responsibilities along with critical activities for the implementation of the foundations. Opportunities should be identified to transfer or offload non-critical activities, legacy activities, and other day-to-day activities that are not within the objectives of its formal functions. Inability to give sufficient focus to critical foundational activities will negatively impact implementation of analytical foundations, ROA implementation, and the success of Florida's child welfare analytics in general.

6. **Implement technology enhancements to support the growing need for analytics.** This includes possible upgrade of the analysis environment for PQMU as well as exploring options for upgrading or complementing FSFN's decision engine, among others.

The specific activities needed for the first 12 months are the following:

- Build a network of child welfare analytics practice.
- Identify the analytics owner for OCW and formalizing his or her role as the center of excellence for child welfare analytics in the state.
- Define and implement Institutional Review Board (IRB) governance for child welfare analytics in the state.
- Conduct an inventory of child welfare analytics in the state.
- Define and implement child welfare analytics governance.
- Establish regular review mechanisms to ensure alignment of interdependent initiatives (data, technology, analytics, and ROA).
- Institute necessary training for PQMU staff and other personnel.
- Expand analytical capacity and capability of OCW by leveraging the Policy and Services Research Data Center (PSRDC) at the University of South Florida, or a similar organization, as its analytics execution arm (i.e., Analytics Lab) to start.
- Consider supplementing capacity and capability through internship and collaborative opportunities with FICW.
- Offload non-critical/non-strategic activities and responsibilities as feasible and appropriate to allow focus on critical ROA and Analytics foundations implementation activities.
- Evaluate potential technology enhancements to support analytics.
SECTION 2  INTRODUCTION

2.1  BACKGROUND

During the FY14-15, the Department of Children and Families took its first steps toward putting analytics into the hands of those who need insights for decision-making. The Operational Integration Plan for analytics was presented with a framework and plan toward operationalizing analytics for the Department. Specifically, it was intended to serve as a guide to ensure the Department could move toward its desired future state of analytics capability and maturity in an efficient and effective manner, while achieving maximum benefit for the investment made.

This report furthers one of the initiatives identified in the Operational Integration Plan, as a guide for implementing the foundations required to operate the analytics function within the Office of Child Welfare (OCW), consistent with the ROA Program requirements for analytics and other related activities as identified in 409.997(2)(a-e). Specifically, this report addresses how OCW can structure its functions and processes, properly resource, and ensure collaboration and transparency to improve efficiency and effectiveness of child welfare analytics in the state. Proactively identifying the needs upfront provides the Department leadership with information required for setting priorities when considering the importance of the analytics function compared to other needs. Integration of the analytics processes with other OCW processes ensures the most effective and efficient use of limited resources. By understanding the best way to structure and integrate the analytics functions and processes, it lays the foundation for future processes to be implemented, while supporting other child welfare initiatives. The key components include:

- Identification of the staffing levels/changes need to support ongoing analytics efforts.
- Design of the required functional organization changes.
- Clear definition of process integration with existing Office of Child Welfare processes such as the ROA Cycle of Accountability.

Without a clear set of replicable processes, ongoing analytics efforts will not be effective or efficient and will require additional resources to achieve acceptable results.

The term “analytics,” for the purpose of this report, is defined as the transformation of data through empirical analysis into meaningful insights that inform strategic and tactical decisions. Therefore, any processing of data, including reporting, monitoring, tabulation, use of basic statistics as well as of advanced analytical methodologies, from which conclusions are drawn for the purpose of decision-making, is considered to be within the scope of analytics. Specifically, this report addresses two of the eight core components of the Information Management Framework—Analytics and Reporting/Dashboards—described in the Data Governance and Strategy deliverable of FY15-16 (“Data Governance and Strategy”) and shown in Exhibit 2: Recommended DCF Information Management Framework. It should be noted that Reporting/Dashboards refer to the activities related to generating the output, and “analytics” under the broader definition used in this report includes generating then using them for insights to inform decision-making.
2.2 CONNECTION TO ROA

With the support of state policymakers and legislators, the Department and its partners are implementing the Results-Oriented Accountability (ROA) Program to deliver greater innovation and reform. The Program will address existing and future challenges and drive positive change in Florida’s child welfare system. To do this, the Program will establish a robust and continuous cycle of monitoring, data analysis, research, evaluation, and quality improvement used to further advance the system’s efforts to improve outcomes, identify new programs and services impacting those outcomes, and enable research and evidence-informed practice, policy, and decision-making.
The Program conceived by the Legislature and whose design and implementation is provided in the ROA Program Plan ("Results-Oriented Accountability Program Plan") submitted by the Department in February 2015. It is focused on improving the outcomes of the children and families served by the OCW through evidence-informed interventions, practices, and policies. The Program is based on the "cycle of accountability" framework presented by Mark Testa and John Poertner in their book, *Fostering Accountability: Using Evidence to Guide and Improve Child Welfare Policy*. The cycle of accountability relies on operationalizing five key activities to further advance the efforts of state child welfare systems to evaluate performance on outcomes, identify new or promising interventions and strategies, review the validity of programs, and conduct continuous quality improvement to ensure the system as a whole is learning and moving toward the accomplishment of goals which positively impact children and their families.

The specific processes and tasks outlined within the ROA Cycle of Accountability have been fully developed in FY15-16 as a part of the ROA Program Plan and can be seen in the report, “Results-Oriented Accountability Program Process Documentation.” As ROA is essentially a process improvement and accountability program that heavily leverages objective evidence from data, data analysis plays an integral part of the program. In fact, the Cycle of Accountability has much in common with the Analytics Lifecycle framework seen below.

**Exhibit 3: Analytics Lifecycle**

While the need for data analysis for child welfare may originate outside of the Cycle of Accountability process, such as executive needs and external requests, the fundamental process for data analysis is the same. Therefore, the data analysis process in the Cycle of Accountability was developed specifically so that it can meet the analytics needs not only specific to ROA, but for any analysis needed for child welfare. It is important to acknowledge...
that the conclusions and recommendations in this report are foundational to any effort operationalizing analytics. Therefore, they are foundational to ROA and not a part of ROA. Furthermore, the functional organization, processes, and governance addressed in this report overarch rather than be limited to the ROA program.

2.3 RELATIONSHIP TO OTHER FOUNDATIONAL INITIATIVES

The Operational Integration Plan from FY14-15 identified key initiatives to address important gaps in order to operationalize analytics. This was partly motivated by the data assessment activities whose results and conclusions are summarized in the report, “Data Analytics: Final Report on Data Discovery.” Conclusions and recommendations were made about the business processes related to data and analytics, in addition to the results of the initial evaluation of the quality of some key data sources.

This report addresses the initiative of analytical foundations recommended in the Operation Integration Plan, which covers functional organization, business processes for analytics, and analytical governance, among others. In a parallel workstream, work to address some of the key data initiatives has been conducted, focusing on data governance and data strategy. As data and analytics are closely related, a question may arise as to how the analytical governance and strategy relate to data governance and strategy.

Historically, data governance and strategy have been managed under the technology umbrella, in part due to the fact that technology systems have been primarily responsible for producing and storing the data. Furthermore, it is relatively common to view data and analytics as one joint area, as the process of producing analytical insights are often intimately connected with the activities of processing and managing data.

However, there is a growing need to define roles and responsibilities for each of the three areas—technology, data, and analytics—while maintaining their interdependency. Specifically, the foundational initiatives for analytics should neither replace, contain, nor be contained in, the foundational initiatives of data or technology. This is because the roles of data, technology, and analytics in producing the final insights, and therefore the skill sets needed for effective management of each, are fundamentally different. To explain, one may think of a large bakery operation as an analogy. Data may be thought of as raw ingredients, analytics the research, and development of recipes, and technology the equipment such as ovens, mixing machines, and storage facilities. While each area must have working knowledge of the other two areas to be effective, the specific expertise required to excel in an area is fundamentally different from others, as being an expert in ovens does not make one also an expert in the quality of flour.

For OCW, each of the three areas has a substantial influence on child welfare policies and practices in general as well as specifically on the ROA program. For this reason, the strategies and initiatives must be aligned with those of each other as well as with the needs of the ROA program and the child welfare policies and practices in general. Specifically, the data governance and strategy work is focused on managing and governing the data asset (including FSFN data) relevant to child welfare; analytical governance and strategy is focused on managing and governing the analytical policies, resources, and processes; and technology governance and strategy should focus on managing and governing the technology asset.
Exhibit 4: Alignment of Strategies demonstrates the relationship among these areas and the ROA program, all in the context of child welfare.

For each respective area, the goals of governance include:

- Protecting the needs and balance the interests of each stakeholder,
- Ensuring transparency in decision-making,
- Ensuring consistency of implementation and practice,
- Reducing costs, minimizing redundancies, and increasing effectiveness through coordination and communication,
- Managing and/or reducing organizational friction, and
- Achieving greater consistency and efficiency in fulfilling compliance and audit requirements.

However, the specifics of these goals and how to achieve them are different between data, analytics, and technology. Therefore, separate but interdependent and complementary efforts are required to ensure that an effective foundation exists to support the programs and business needs. The analytical foundations presented in this report depend on the foundations of the other two areas, and in fact assume that there is also sufficient progress in the foundational initiatives of the other areas. The ROA program then builds on these foundations.

2.4 OBJECTIVES OF THIS REPORT

The organizational infrastructure for child welfare in the state involves various actors. In order to accomplish its mission, the OCW works with six DCF Region Offices, 17 Community-Based-
Care (CBC) Lead Agencies, and six Sheriff’s Offices to execute policy and practice for child protective investigations and case management services. This is supported by other entities, including the Florida Institute for Child Welfare\(^2\), independent service providers, and other researchers and research organizations. This infrastructure impacts how child welfare analytics are leveraged in the state.

The Performance and Quality Management Unit (PQMU) of the Office of Child Welfare was established in 2015 to lay the path toward ROA Program implementation. The unit consists of three sub-units: Data and Reporting, Performance Management, and Quality Improvement. Currently, much of the child welfare analytics is coordinated or executed by PQMU, although other units within OCW also performs some analytical tasks, supported by the activities of PQMU.

Since its inception, PQMU has undergone numerous changes in terms of structure, responsibilities, specific tasks and activities, processes, and skill sets, with further activities ongoing. FY15-16 focused on laying the initial groundwork for ROA, while resolving transitional activities and legacy responsibilities related to the recent inception of the PQMU structure. The details of the progress can be found in the ROA Progress Report, “Quarterly Progress Report on ROA Implementation – June 2016.” As a consequence, the current state remained very fluid throughout the fiscal year, and any detailed diagnostics of the current state would have been obsolete. Therefore, this report focuses directly on the future state and recommendations to the Department and to OCW for laying down the foundations for operationalizing analytics while discussing only the key high-level gaps that continues to exist.

One of the key challenges with analytics is that its intangible nature—its outputs are ideas and insights rather than something that can be physically touched, felt, or seen—can often produce strong feelings among those with vested interests, which can lead to a general breakdown in working relationships if not properly managed. This report also aims to provide a framework and a high-level plan for addressing these challenges.

\(^2\) The Florida Institute for Child Welfare (FICW) was established by F.S. 1004.615 for the purpose of advancing the well-being of children and families by improving the performance of child protection and child welfare services through research, policy analysis, evaluation, and leadership development. Its current staff includes the Director, a staff member, and five graduate assistants, and is in the process of adding another resource to be co-located at OCW. It also has access to faculty members and researchers from other academic institutions such as Barry University and Florida A&M University among others.
SECTION 3  THE FUTURE STATE OF CHILD WELFARE ANALYTICS IN FLORIDA

This section describes the recommended future state of child welfare analytics in Florida.

3.1 ORGANIZATIONS, COMMUNITIES, AND ACTORS

The future organizational infrastructure for child welfare analytics is one in which there is clear alignment with ROA and complements the activities in the Cycle of Accountability as operationalized in the ROA Process Document, “Results-Oriented Accountability Program Process Documentation.” The stakeholders are clearly identified, and there is wide involvement from the different organizations and resources in the child welfare system in Florida, as described in the ROA Program Plan. There is transparency and well defined accountability while maintaining the benefits of the public-private partnership.

3.1.1 FUNCTIONAL ORGANIZATION AND STAFFING FOR CHILD WELFARE ANALYTICS

3.1.1.1 OCW

OCW, specifically PQMU, is the central focal point for all child welfare analytics impacting child welfare policies and practices in the state as well as the enterprise owner of analytics for OCW. It has a clear view of the state of child welfare within Florida and serves as the coordination engine for child welfare analytics, including analytics within the Cycle of Accountability, other analytics for child welfare insights, and Tableau reporting and dashboarding for child welfare.

Given the wide variety of actors in the child welfare community in Florida, a formal network of practice in child welfare analytics is established. In this network of practice, experience, best practices, and opportunities for synergies and collaboration in analytics are openly shared among OCW, the DCF Region Offices, CBCs, Sheriff’s Offices, FICW, and others in Florida’s child welfare system. While a more traditional reporting structure is not compatible with a public-private partnership structure, there is full accountability and transparency into analytics activities impacting child welfare policies and practices while encouraging the local decision-making.

PQMU is equipped with a functional center of excellence (COE) for analytics, comprised at the minimum of a business owner of all analytics carried out by or on behalf of the state’s child welfare system. This role is not necessarily an expert in the execution of advanced analytics, but rather an experienced business user of the analytics output. Some technical knowledge about analytics is assumed; however, its main function is to bridge the gap between analytics and child welfare policies and practices, and to interface with internal clients and external entities, such as vendors and FICW, for child welfare analytics. Furthermore, it has business ownership of all analytics throughout the Cycle of Accountability, although not necessarily directly responsible for the execution of analytical activities. Ideally, this function or role exists separately from the existing sub-units within PQMU; however, this is not strictly required as long as the functional roles and responsibilities are clearly understood and formally communicated.
Each sub-unit is equipped with resources with the appropriate skill sets for its core needs, evolving with introduction of new processes and technologies. All PQMU staff, not just analysts, receives Lean Six Sigma training and can effectively perform initial root cause analysis prior to escalating to further analytical expertise, as defined in the ROA Process Document. Workload from increased participation in initial analysis activities is offset by increased efficiency gained from streamlining and standardizing processes that are routine and repeatable. Furthermore, cross-training of the resources have substantially reduced the risk from heavy dependency on a single person for critical tasks.

3.1.1.2 Analytics Lab and Other Providers of Analytical Services

There is a designated analytics lab for the execution needs of child welfare analytics, especially at the state level, and is accountable to the child welfare analytics COE function. This lab may be internal or external to OCW and may even be external to DCF. Third-party involvement for analytical execution is well coordinated and well leveraged across the state, and existing resources are maximized to conduct best and most meaningful analysis possible.

In the long run, OCW may choose to build an internal team of statisticians and quantitative social scientists, using external resources sparingly to provide flexibility in bandwidth. However, the analytics lab is external at least in the short term and remains external for some time, given that entities already exist with the necessary resource and technology infrastructure already in place. It is important to note that an external analytics lab is a viable option as a permanent solution, as long as the proper accountability structures and processes are in place.

Furthermore, there is a statewide data repository that houses data from various state agencies and other relevant organizations, making a wide array of critical data accessible for analytical purposes. Statewide data governance is in place, and SACWIS and/or CCWIS guidelines are met as appropriate for analytical purposes.

3.1.1.3 FICW

The legislative intent of FICW is to be the research arm of Child Welfare to collaborate with OCW with no authority for oversight. As such, FICW serves as the subject matter expert to provide guidance and support, injecting rigor, sophistication, expertise, and quality into child welfare analytics activities. FICW is also a downstream consumer of the results of data analysis within the Cycle of Accountability, as it is responsible for taking the insights generated and designing and planning the research and evaluation activities.

---

3 Legislation may already exist to support such collaborative (FS 163.62-2001). The Policy and Services Research Data Center (PSRDC) at the University of South Florida has leveraged this statute to create a data collaborative for Pinellas County. A more complete evaluation and interpretation of this statute is needed before determining its fit toward the vision of a statewide data repository or collaborative. The idea of statewide data initiatives is discussed more in detail in the Data Governance and Strategy report.
3.1.1.4 **Regions, CBCs, and Other External Entities**

The processes within the ROA program is primarily focused on statewide trends. This means that the Region Offices and CBCs continue to be responsible for their own analytical projects and initiatives when the problem or issue is localized. External analytical service providers continue to be leveraged to allow for additional flexibility in bandwidth, and potentially bring fresh perspectives and analytical methodologies. However, this is done with a clear accountability structure provided by the analytical governance program as explained below.

Furthermore, since ROA relies on the wide participation to diagnose and solve problems, resources from CBCs and Region Offices are trained on Lean Six Sigma approaches and methodologies. They also participate in statewide analytics activities as appropriate.

3.1.2 **Analytical Governance for Child Welfare**

Analytical governance concerns the establishment and enforcement of policies related to analytics, and the monitoring of their impacts. Much like its counterpart in data governance, its goals are to:

- Protect the needs and balance the interests of each stakeholder,
- Ensure transparency in decision-making,
- Ensure consistency of implementation and practice,
- Reduce costs, minimize redundancies, and increase effectiveness through coordination and communication,
- Manage and/or reduce organizational friction, and
- Achieve greater consistency and efficiency in fulfilling compliance and audit requirements.

As the name suggests, the subject of analytical governance is analytics rather than data.

In the future state, there is a clear governance structure for child welfare analytics, not only within OCW but across the various child welfare actors within the state, including the Region Offices and CBCs, Sheriff’s Offices, and FICW, among others.

The ultimate child welfare analytics ownership resides within OCW and specifically within PQMU. CBCs are brought into the fold in order to promote greater consistency and repeatability, while fostering better communication and collaboration across entities. The scope of the governance includes all analytics activities and initiatives in the state carried out by or on behalf of the child welfare system and therefore intended to directly impact child welfare policies and practices. These include but are not limited to data analysis, reporting, and dashboarding integral to the Cycle of Accountability, analytical research to gain insights into the state of child welfare, predictive analytics to be deployed for operational efficiency, data exploration activities to uncover and investigate new trends and phenomena previously
unknown to form new hypotheses, and other analytical activities that impact policies and practices of the child welfare system in Florida.

The governance structure consists of different levels of stakeholders, each representing the appropriate level of interest in the wider child welfare analytics community. The hotline workers, child protective investigators, and caseworkers drive the business interests from the child welfare practice perspective. The child welfare analytics stewards, responsible for taking the business interests and ensuring proper execution of analysis, represent the day-to-day management of the analytical needs and activities. The advisory group consisting of OCW Units, FICW, IRB, and Department technology and data interests (CIO and CDO, respectively), is responsible for taking the concerns of the analytics stewards as well as the interests of the functional areas represented, and advising the child welfare analytics owner, the Analytics COE function within OCW PQMU, who must ensure that child welfare analytics policies, standards, practices, and activities are aligned with state and Department strategies and direction. Exhibit 5: Governance Framework for Child Welfare Analytics in Florida illustrates this structure.

Exhibit 5: Governance Framework for Child Welfare Analytics in Florida

Given the intent of the public-private partnership, most of the tactical decision-making remains at the local level; however, those decisions are now centrally accountable under the governance structure. The specific details of the scope for governance is defined to fit the needs of child welfare policies and practices; it may be as extensive as to include policies and standards around specific vendors and tools, require certain level of reporting of its analytical activities, or simply be focused on transparency and the dissemination of best practices.
3.2 OPERATIONAL PROCESSES FOR ANALYTICS

3.2.1 PROCESSES FOR OPERATIONALIZING ANALYTICS

The processes defined within the ROA Cycle of Accountability (COA) are fully leveraged for all child welfare analytics on behalf of OCW, as they are sufficiently flexible to be applied to both COA-borne analytics as well as other needs for analytical activities. The processes take into account various aspects of analytics execution, including the source and/or reasons for the analysis need, level of depth needed, planning and design of the analysis, need to obtain additional data, prioritization, communication of results, testing, operationalization, and monitoring of practice changes from the insights generated. In fact, the COA processes are readily mapped to the analytics lifecycle as seen below.

Exhibit 6: Cycle of Accountability vs. Analytics Lifecycle

It is important to note that COA processes other than Data Analysis have sub-processes involving data analysis. However, the objective of the analysis is specific to the process under which the sub-process is defined. The report “Results-Oriented Accountability Program Process Documentation” provides complete and detailed documentation of the COA processes.

Any additional considerations for analytics originating outside of COA are properly addressed, including secondary processes and adjustments needed, and there is clarity in roles and
responsibilities for all efforts related to operationalization of the analytical activities, not just those that originate within COA.

3.2.2 ADDITIONAL PROCESSES SUPPORTING ANALYTICS

Process to Acquire and Share Data. Data sharing and acquiring for the purpose of analytics are streamlined and standardized as much as possible, so that the process is replicable for practically any data source to be obtained or shared. The Data Governance and Strategy report addresses the recommended data procurement and sharing processes in detail, and includes a Data Acquisition Playbook explaining the tasks step by step.

IRB Process and Governance. The policy and standards are defined and consistently applied to all child welfare analytical activities in the state.

Process to Engage External Entities. The existing processes to contract external entities for services continue to be leveraged, especially at the Department level. However, the process and standards for selecting the providers of analytical tools and services are now transparent, especially at the CBC level, and even leverage potential synergies with the state or with other CBCs to maximize the investment, to reduce redundancies, and to improve consistency across the state.

3.3 TOOLS AND TECHNOLOGY

3.3.1 TOOLS

Sufficient training and communication about the existing tools and software take place to better leverage those already at disposition. No additional analysis tools are necessary beyond additional licenses. This is constantly evaluated based on the needs of the resources.

3.3.2 TECHNOLOGY

The FSFN Adoption Initiative resolved some of the data quality issues at input as CBCs now understand the capabilities and proper uses of FSFN. In addition, ancillary upgrades are being performed in FSFN to partially address the quality of the information input for specific fields.4

The data analysis environment offers reporting that is optimized with proper indexing as well as appropriate infrastructure and hardware specifications reflective of the standards in big data analytics.5 Applications are up-to-date, platforms have migrated to those which are actively supported, and sufficient bandwidth is available so as to not prevent effective support of analytical activities. FSFN data users are properly trained and informed in their use and limitations of the application to reduce misunderstanding which may occur. The technology

4 See “Data Analytics: Final Report on Data Discovery” (FY14-15) for details.
5 Whether this environment is simply an upgrade of existing data mart or a new environment will need to be determined according to the constraints of the technology resources that can be made available. Furthermore, should PSRDC or a similar organization be leveraged as a data repository, the technology requirements may change as some tasks are offloaded to that organization.
architecture and processes allows for complete replicability of the analysis as demanded by analytics best practices.

Additionally, there is an integrated, easily configurable decision engine for housing productionalized analytics (such as scoring models, decision rules, etc.). The Department’s CCWIS system is operational and is equipped with sufficient functionality that allows straightforward configuration of the analytic models that are constantly being created and updated for driving operational practices.

3.4 Integration with Other Programs and Processes

There are three programs with which child welfare analytics integrates: data governance, technology governance, and ROA governance. The programs are well coordinated, with the roles of each governance clearly defined and understood, and the decision making is integrated and efficient to maximize the resources.
SECTION 4  GAPS AND IMPACTS

Below are the key gaps in order to achieve, and the potential impact of implementing, the future state of child welfare analytics.

4.1  ANALYTICAL GOVERNANCE FOR CHILD WELFARE

While secondary gaps in technology, resourcing, and other areas exist, the primary and most important gap remains the fundamental lack of analytical governance. The intent of public-private partnership is well understood; however, in reality, the CBCs and Regions operate separately from OCW, with no central coordination mechanism for child welfare analytics. This is reflected in the lack of common business processes concerning analytics among the entities, as well as in the inconsistent interpretation of IRB review requirements. The ROA Program is designed to address child welfare practice accountability and not specifically analytical accountability.

The lack of analytical governance also contributes to the fundamental communication gap with respect to child welfare analytical activities in the state. As stated previously, the various parts of the child welfare community are generally uninformed about analytical activities and initiatives, as there is little transparency of activities among the entities. This is being addressed in part by the ROA Communication Plan (“Results-Oriented Accountability Communication Plan”) submitted in June 2016. However, its focus is on inter-organizational/inter-functional communication that are primarily outbound (i.e., focused on dissemination of information) rather than inbound communication (i.e., engagement and input from the day-to-day workers in the field, local child welfare resources leading and/or conducting analytics, etc.) designed to travel up the chain; the latter is critical in a successful implementation of analytical governance and operationalization of analytics.

Furthermore, as described in the Future State, ROA governance, data governance, and technology governance should be coordinated for effective integrated decision making. Of these, ROA governance is of particular importance, since the specific needs and requirements of ROA are not explicitly reflected in the combination of data governance, analytical governance, and technology governance alone. While ROA governance does not have direct input into analytical governance, the decisions made by the ROA governance committee may indirectly impact decisions by the analytical governance process. Furthermore, analytical governance may impact ROA governance, since analytical policies and standards may make certain activities relevant to ROA easier or more difficult, as the ROA program is closely tied to data analysis.

4.2  ORGANIZATIONAL CHANGE MANAGEMENT FOR ANALYTICS

Organizational change management for operationalizing analytics is an often overlooked aspect in many analytical initiatives. Analytics originating from outside of the COA process have an even bigger challenge in getting acceptance from stakeholders, as their operationalization may not always be legislatively mandated as in the case of ROA. While acceptance due to statutory requirements still leaves with a potential challenge of obtaining
proper buy-in, this challenge is magnified when the acceptance purely depends on the buy-in from all stakeholders and participants.

A common challenge in operationalizing analytics is when the decision to implement data-informed practices is made at the management level while the workers in the field, whose day-to-day tasks and practices are impacted, are not fully involved in the entire process of defining and evaluating the insight. While Mark Testa recognized that “what is modern is the legitimacy of asking for the empirical evidence for a particular policy choice and the refusal to accept unquestioningly those justifications based solely on hierarchy, tradition, or faith,” it is also not unusual for objective and data-informed insights to be perceived by those impacted as a devaluation of ability and experience, leading to resistance in the adoption of the new insight and often leading to fidelity issues.

However, this can be managed by appropriate permanent organizational practices. Operationalizing analytics necessarily requires integrating the top-down communication with the bottom-up communication; however, currently it is generally top-down at the Department. Additional change management efforts are needed to close this gap, to secure the complete buy-in by all stakeholders of the policy and/or practice changes and therefore to increase fidelity to the intent of the analytical insights as well as to the fiduciary responsibilities.

4.3 RESOURCES AND STAFFING

There are two key resource gaps for OCW. First, there is no clear business owner of child welfare analytics, within PQMU or otherwise. While there are plans to co-locate an FICW resource with advanced analytics and research background, it is not appropriate for this resource to be the business owner of analytics on behalf of OCW, as this ownership is not primarily about the skill set but rather about the interest of the organization. Furthermore, there is a general misunderstanding not specific to DCF, regarding where the child welfare practice expertise end and advanced analytics skill sets begin. Advanced analytics methodologists are often expected to be also child welfare experts to an extent, yet this is often unrealistic and can lead to overspecialization, creating an unintended gap either on the child welfare practice side or on the advanced analytics side. Therefore, the analytics owner within PQMU has an important but currently unfulfilled role in the success of advanced analytics within child welfare.

Second, there is a gap in advanced analytics skill sets to support the child welfare analytics execution needs in a systematic manner. PQMU is currently not adequately staffed to fulfill the advanced analytics needs internally, in terms of both skill sets and capacity, for ROA as well as for other initiatives. This has already been identified in the ROA Program Plan, in which recommendations were made to leverage external entities for the execution of advanced analytics activities. The report, produced in FY14-15, recommended the use of FICW as the

---


7 As will be seen in the following section, the current recommendation is to leverage the Policy and Services Research Data Center (PSRDC) at the University of South Florida, which already has the necessary infrastructure, staffing, policies, and processes to fulfill advanced analytics execution on demand.
analytics execution arm of OCW. FICW has an instrumental role within the ROA Cycle of Accountability process; however, FICW does not currently have the needed infrastructure nor adequate staffing to meet the analytics execution needs of OCW. One key factor that prevents FICW from becoming an analytics lab for OCW is its funding for resources is dependent on state appropriations. For this reason, it is difficult to project a future dependency on FICW resources beyond expert guidance. There is a gap, perhaps unintended, between the statutory intent of FICW and the funding it receives.

4.4 PROCESSES

The primary process gaps with respect to analytics concern the integration and alignment with other existing and to-be-defined strategy and governance processes. ROA governance has so far not explicitly taken into account the analytical governance being proposed for the future state. Alignment with data governance and strategy, as well as the clarification of technology governance and strategy, is an additional effort which cannot be addressed with the definition and implementation of analytical governance alone.

In addition, there are gaps between COA processes and processes needed to fully operationalize analytics, specifically when the analytics effort originates outside of COA. First of these concerns minor gaps in the COA processes themselves that cannot be resolved until the impact of the non-COA analytics to the process is better understood. The large majority of the expected deviations from the pure ROA process are in the Data Analysis process, and this has already been taken into account in the ROA Process Document. While the Research Review, Evaluation, and Quality Improvement processes should remain mostly without impact when they are applicable, the level to which the Outcome Monitoring process apply to non-COA analytics is unclear. As an example, insights from non-COA analytics may result in fundamental changes to the structure of the underlying data, which will impact how the outcome measures should be adjusted and monitored. It is also possible that non-COA analytics result in a different object to monitor and/or in different actors involved in the process. Furthermore, Outcome Monitoring may not be applicable at all depending on the specifics of the analysis. For some cases, this may be remedied relatively easily by adjusting the verbiage in the process; in parallel, the functional responsibility and the ownership must be made clear whether the monitoring is due to COA-borne analytics or otherwise. In general, adjustments may need to be made on a case-by-case basis—first to determine whether the process is applicable, then if it is applicable, to identify the impact to the process, the actors, and their roles and responsibilities specific to each case. The Outcome Monitoring process may require further review once the impact of analytics originating outside of COA is better understood.

The second concerns the greater need for organizational change management efforts in the implementation of the policies and practices resulting from non-COA analytical activities. This is because analytics originating outside of COA do not have the statutory mandated framework of ROA, likely requiring additional efforts to gain the buy-in of the stakeholders and especially the workers in the field. It should be noted that this is closely related to the need for different communication process as discussed earlier in Section 4.1 on gaps concerning analytical governance and in Section 4.2 on gaps concerning organizational change management for analytics.
4.5 TECHNOLOGY

The technology gaps primarily concern the infrastructure and architecture needs to support analytics execution and deployment. The magnitude of this gap depends on a number of key business decisions, which includes decisions on whether to house the analytics lab internally.

Furthermore, analytical endeavors generally produce rules and/or algorithms to be applied in practice, and these rules and algorithms frequently require configuration in a technology environment so that they can be deployed to the users. It is typical for a need to arise for additional technology or a different platform more configurable to meet growing demand, and potentially for a modified or even new technology deployment process. As the processes are formally implemented and mature over time, the volume of analytical activities is expected to increase. This increase is typically accompanied by progress in the level of analytical maturity and consequently, by different ways in which the results are implemented and operationalized. Often, these involve predictive algorithms and other decisioning rules which will come about with increased frequency. Explicit technology plans to meet the growing demand for analytics execution and deployment is not specifically addressed currently; an ongoing assessment will be needed.

4.6 IMPACTS OF IMPLEMENTING THE FUTURE STATE

The cost of implementing analytical governance is relatively low, requiring little to no special funding. A potential negative impact comes from the fact that analytical governance is almost completely about obtaining buy-in and agreement to collaborate. In an initiative that is designed to put control around concepts and ideas about which strong feelings can often exist, there can be strong resistance and unwillingness to participate, which can lead to general breakdown in working relationships if not properly managed.
SECTION 5  RECOMMENDED IMPLEMENTATION ROADMAP

5.1  OVERVIEW

The future state of child welfare analytics requires successful execution of four key initiatives:

- Child Welfare Analytics Operationalization and Governance Implementation Initiative
- Data Governance Implementation Initiative
- Technology Initiative (to be defined)
- ROA Program Implementation Initiative

The Data Governance (and Data Management) Initiative and the ROA Program Implementation are addressed in separate reports; hence the focus here is on the Analytics Governance Initiative. However, it is critical that all four initiatives are strategically aligned and that there be a regular feedback process in place to ensure proper integration of these initiatives. A minimum of quarterly review of the initiatives is recommended.

Other activities for the implementation of the future state are also described below. Additional details on the activities are found in Appendix: Detailed Timeline for Implementation Activities

5.1.1  CHILD WELFARE ANALYTICS GOVERNANCE IMPLEMENTATION

Exhibit 7: Child Welfare Analytics Governance Initiative Overview below provides a summary view of the initiative.
Exhibit 7: Child Welfare Analytics Governance Initiative Overview

As explained earlier, the goals of analytical governance are similar to those of other types of governance: balance of interests, transparency, consistency, effectiveness, collaboration, and compliance. It requires strong leadership and full support of the executive sponsors, as is the case with data governance and technology governance. However, one key difference is that, while technology governance and data governance tend to require some investment, analytical governance is almost solely about the buy-in and participation of the stakeholders thus requiring little to no investment. This is because analytics as a subject is much less tangible than data or technology: it is about empirical methodologies, algorithms, hypotheses, and knowledge capital, rather than about assets. On one hand, this facilitates the financial case for implementing analytical governance; on the other, it requires more effort as the stakeholders can have emotional involvement and the implementation can become highly political.

Furthermore, the idea of governance in general is often erroneously equated with bureaucracy which slows down the decision-making process. Worse yet, in some cases, a governance structure is thought (and sometimes implemented) to be dictatorial rather than collaborative and consensus-building. These perceptions do not accurately reflect the benefits of a governance structure when it is well implemented. Similar to the ROA governance structure, the child welfare analytics governance program aids in consolidation, reconciliation, and prioritization of plans and efforts, ensures consistency in the execution of analytical policies and practices (such as the IRB standards), and speeds up decision-making by clarifying polices, roles, and responsibilities.
Therefore, a successful implementation of analytical governance requires well planned and executed involvement of all stakeholders, participants, and others impacted, with strategic vision, tactfulness, and clarity in communication. For this reason, it is recommended that OCW establish a path toward formal analytical governance by taking a gradual approach as follows:

1. **Build a network of practice for child welfare analytics in the state.** It is recommended to begin by opening up the channel of communication with interested participants in order to build rapport and a sense of community, laying the groundwork for further collaboration. This can be accomplished by establishing cadence for regular communication to create awareness of child welfare analytics activities in the state, and holding regular conference calls or meetings in which participants can share their experience, interests, and opportunities for collaboration, among other activities. The current child welfare analytics workgroup can be leveraged and extended for this purpose.

2. **Define and implement IRB governance for child welfare analytics in the state.** Once the establishment of the network is underway, OCW can use IRB matters as a stepping stone toward a more comprehensive analytical governance. IRB policies, standards, and processes are needed in a short order for the implementation of the ROA processes. Furthermore, since IRB deals primarily with risk to human subjects, it is generally a matter of compliance and ethics which tends to reduce the emotional involvement of the participants. Specific steps for implementing IRB governance are:
   a. Define the scope of governance.
   b. Identify the stakeholders, participants, and others impacted by the governance.
   c. Define governance infrastructure (the participants in the various levels in the governance structure), including roles and responsibilities and communication protocol within the governance structure.
   d. Define the policies, standards, and processes needed for IRB governance.
   e. Draft the governance charter to document and sign off on the above.
   f. Plan and execute the communication for the roll-out of the governance.
   g. Implement and execute the governance.

3. **Conduct an inventory of child welfare analytics in the state.** In parallel, efforts are needed to gain a view of the current analytical activities and initiatives concerning child welfare. This includes analytical research projects, predictive analytics activities, software, tools, and technology for analytics, internal and external resources and their analytical skill sets, and other analytical initiatives impacting child welfare policy and practice.

4. **Define the scope and the infrastructure for child welfare analytics governance.** It is recommended that a workgroup of 6-8 stakeholders be established, as well as a steering committee of executive sponsors for executive input. Similar to the IRB governance, the specific steps are:
   a. Define the purpose and the detailed scope of governance, including the benefits to child welfare practice.
   b. Identify the stakeholders, participants, and others impacted by the governance.
   c. Define governance infrastructure (the participants in the various levels in the governance structure), including roles and responsibilities and communication protocol within the governance structure.
5. **Define and document analytics policies and standards.** It is critical that the rules are developed in collaboration with the appropriate governance participants in order to reduce friction and increase the likelihood of buy-in.
   a. Define the policies, standards, and processes for child welfare analytics.
   b. Draft the governance charter to document and sign off on the above.

6. **Implement and execute child welfare analytics governance.** Similar to the IRB governance, the final steps toward operationalizing child welfare analytics governance are:
   a. Plan and execute the communication for the roll-out of the governance.
   b. Implement and execute the governance.

**Exhibit 8: Child Welfare Analytics Governance Implementation Timeline** below shows an overview of the timeline for the implementation of these steps. It is important to note that all of the initial implementation activities can and should take place within the first 12 months. Therefore, this is not only a low-cost initiative but also a quick one whose results can be realized within a relatively short period of time if done properly.
5.1.2 OTHER ACTIVITIES FOR THE IMPLEMENTATION OF THE FUTURE STATE

5.1.2.1 CAPABILITY AND CAPACITY BUILDING

In order to build sufficient capability and capacity for analytics, the following are needed:

- **Analytics Owner Role.** This is a pivotal role in the success of child welfare analytics in the state that defines the business direction of child welfare analytics and lead the child welfare analytics governance for the state. The job requirements for this role must be formally defined and the right person identified for the role in short order to ensure key initiatives start off with the level of support and leadership needed for success.

- **Analytics Lab.** There is an immediate need to augment OCW’s capabilities and capacities in analytics, initially to support the ROA program implementation then to support the child welfare analytics needs. OCW may build this internally or partner with an external entity. It is recommended that OCW start by partnering with an external entity, and eventually consider internalizing this function in the long run should that be appropriate. Specifically, leveraging the Policy and Services Research Data Center (PSRDC) at the University of South Florida is recommended, as it has many advantages over others: it already has the necessary infrastructure, staffing, policies, and processes to fulfill advanced analytics execution on demand, as well as the general understanding of the research environment. Furthermore, its experience in hosting a data collaborative may be beneficial in resolving some of the challenges in data acquisition for research purposes.

- **Training.** The existing and new staff in PQMU must continue to be trained on Lean Six Sigma and other basic analytical methodologies and concepts for effective execution of the ROA program. In addition, other personnel supporting the child welfare system, including the OCW Practice personnel, DCF Region Offices, and CBC personnel, must be trained in the same as their participation in the ROA Cycle of Accountability analytics process is not only desired but also expected. Furthermore, PQMU staff must be cross-trained with back-ups defined in order to eliminate complete dependency on a single person for critical tasks. Finally, PQMU staff and others should be trained on the FSFN data, its usage, and limitations due to the FSFN application, to shorten the learning curve for each analytical activities involving FSFN.

5.1.2.2 CASE-BY-CASE ADJUSTMENT OF THE CYCLE OF ACCOUNTABILITY PROCESSES

As explained in Section 4.4, some minor exceptions or adjustments will likely be necessary to the process maps defined by the ROA Cycle of Accountability on a case-by-case basis in order to accommodate analytics efforts originating outside of COA. An application of a straightforward exception process is recommended so that these minor deviations from the standard process can be handled in the meanwhile.

5.1.2.3 TRANSFER OF ACTIVITIES

As explained earlier, it is imperative that the PQMU staff be able to focus on activities within the formal scope of responsibilities and activities critical to the implementation of the future state.
Therefore, it is recommended that PQMU look for opportunities to reassign non-critical tasks or enlist temporary resources as needed.

5.1.2.4 Technology Enhancements

The technology enhancements needed are primarily focused on improving the analytical environment for the PQMU staff. The following are needed:

- Increase the efficiency and effectiveness of the data mart by properly indexing the tables, ensuring replicability of the analysis, reconsidering the data mart model, and implementing additional infrastructure improvements as appropriate; alternatively, consider other solutions to replace the current environment.8

- Consider and evaluate options for more flexible, responsible, and adaptable platform and/or decisioning engine for the implementation of the analytical solutions such as decision rules and predictive scoring models. CCWIS consideration may be necessary as compliance issues may impact how analytical solutions are deployed.

- Review the technology needs related to analytics execution and deployment on a continual basis to ensure that barriers to successful implementation of analytical insights are reduced.

5.2 Risks and Dependencies

The following are the risks to and dependencies for the successful implementation of the future state:

- As with any strategic initiatives, the major sources of risk for successful implementation are executive support and resistance to change. The latter is particularly important, since analytics governance consists almost completely of bringing the stakeholders, participants, and other interested parties on board as pointed out earlier. The ROA Program Plan has laid out the framework for bringing them together in the context of child welfare practice; however, the inherently intangible and potentially emotional nature of analytics to the day-to-day workers in the field makes this risk particularly challenging.

- The lack of focus is a critical risk for OCW. This is a game-changing implementation that requires game-changing effort. It will not be possible if the OCW staff, and specifically PQMU staff, is not able to focus on the strategic activities. Specifically, a careful balancing between the workload of implementation with the day-to-day activities is needed. The risk/issue due to lack of resource and focus is more fully explained in the ROA Progress Report.

- Reduction of the complete dependency on a single person for critical tasks have two considerations:

8 As pointed out earlier, the specific solution or even the need thereof may depend on other factors, including how PSRDC and/or other third parties may be leveraged.
› It may lead to short-term operational impacts as transitions may have unexpected difficulties.

› The effort to reduce these dependencies likely requires additional resources and therefore additional funding, so that it does not impact critical responsibilities within the objectives of the function.

- The engagement of external analytics lab such as PSRDC will require that some operational funds be defined for such engagements.

5.3 FINAL COMMENTS

The Department and OCW set out in FY14-15 to raise its analytical maturity level and implement processes and structures for child welfare policies and practices that are data-informed, objective, and evidence- and research-based. The initiatives and activities set forth in this report, along with ROA implementation, will help the Department and OCW toward this goal. It is recommended that the risks and dependencies be properly managed while ensuring proper coordination of strategic directions among the interdependent initiatives to ensure successful implementation of the future state of child welfare analytics.
SECTION 6 APPENDIX: DETAILED TIMELINE FOR IMPLEMENTATION ACTIVITIES

6.1 12-24 MONTHS

The initial implementation of the following should occur within the first 12 months, with the continued implementation and adjustments to follow in Months 13-24.

- Build a network of analytical practice (i.e., network of resources who practice analytics) for child welfare.
  › Establish communication plan.
  › Begin regular conference calls or meetings for sharing knowledge, experience, and interests, and as well as identifying synergistic and collaborative opportunities.

- Identify the analytics owner for OCW and formalize its role as the center of excellence for child welfare analytics in the state.

- Define and implement IRB governance for child welfare analytics in the state.
  › Define the scope of governance.
  › Identify the stakeholders, participants, and others impacted by the governance.
  › Define governance infrastructure (the participants in the various levels in the governance structure), including roles and responsibilities and communication protocol within the governance structure.
  › Define the policies, standards, and processes needed for IRB governance.
  › Draft the governance charter to document and sign off on the above.
  › Plan and execute the communication for the roll-out of the governance.
  › Implement and execute the governance.

- Conduct an inventory of child welfare analytics in the state that includes:
  › Analytical research, data exploration, and predictive analytics activities.
  › Software, tools, and technology for analytics.
  › Internal and external resources and their analytical skill sets.
  › Other analytical initiatives impacting child welfare policy and practice.

- Define and implement child welfare analytics governance.
  › Define the purpose and the detailed scope of governance, including the benefits to child welfare practice.
  › Identify the stakeholders, participants, and others impacted by the governance.
Define governance infrastructure (the participants in the various levels in the governance structure), including roles and responsibilities and communication protocol within the governance structure.

Define the policies, standards, and processes for child welfare analytics.

Draft the governance charter to document and sign off on the above.

Plan and execute the communication for the roll-out of the governance.

Implement and execute the governance.

- Establish regular review mechanisms to ensure alignment of interdependent initiatives (data, technology, analytics, and ROA).

- Institute necessary training for PQMU staff and other personnel.
  
  - Continue to train existing and new staff in PQMU on Lean Six Sigma and other basic analytical methodologies and concepts.
  
  - Train other personnel supporting the child welfare system on Lean Six Sigma and other basic analytical methodologies and concepts, including the OCW Practice personnel, DCF Region Offices, and CBC personnel.
  
  - Cross-train PQMU staff and define back-ups.
  
  - Train PQMU staff and others on the FSFN data, its usage, and limitations.

- Expand analytical capacity and capability of OCW by leveraging PSRDC or a similar organization as a sustainable and consistent analytics execution arm (i.e., Analytics Lab) of OCW to start.
  
  - Define and execute contractual structure:
    
    - Draft and execute master service agreement between OCW/DCF and the Analytics Lab.
    
    - Formalize project-level contractual addendum structure (i.e., statement of work approach) that leverages the master agreement to facilitate project-level negotiations.
  
  - Define or adapt framework for IRB, data sharing/use, and other necessary project-level agreements.

- Approach FICW on supplementing capacity and capability through internship and collaborative opportunities.

- Create a work team to identify activities and responsibilities that can be transitioned to units outside of PQMU.
  
  - Identify activities and responsibilities not critical to the formal objectives of each function that can be transferred or offloaded.
  
  - For activities that can be offloaded, define how to offload.
  
  - Consider budgetary implications.
  
  - Formally transfer the execution responsibility for the activities as appropriate.
• Evaluate potential technology enhancements to support analytics.
  › Consider the fit of the current analysis environment (i.e., data mart) and evaluate improvements.
  › Evaluate options for decisioning engine to support future analytical needs.

6.2 36-60 MONTHS

• Continue the ongoing implementation, execution, and review of the following:
  › Network of child welfare analytics practice
  › IRB governance
  › Analytical governance
• Continue regular communication to ensure alignment of interdependent initiatives.
• Continue training activities.
• Continue to offload non-critical activities as needed.
• Operationalize statewide data repository and governance to support child welfare analytics needs.\(^9\)
• Evaluate additional needs as they arise.

\(^9\) A realistic timeline for the statewide data repository and governance to be in place is estimated to be between 36 and 60 months based on experience in other states. The Data Governance and Strategy report addresses data initiatives in detail.