Report
to
The LEGISLATIVE FINANCE COMMITTEE

Children, Youth and Families Department
Status of the Enterprise Provider Information Constituent Services Project
March 22, 2016

Report #16-02

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March 22, 2016

Monique Jacobson, Secretary
Children, Youth and Families Department
P.O. Drawer 5160
Santa Fe, New Mexico 87502-5160

Dear Secretary Jacobson:

On behalf of the Legislative Finance Committee (Committee), I am pleased to transmit the program evaluation on the Status of the Enterprise Provider Information Constituent Services (EPICS) project. The objectives of the evaluation are to assess the status of implementation, including, planning, project management and oversight, budget allocation and expenditures and interfaces with other systems.

The report will be presented to the Committee on March 22, 2016. An exit conference was held on March 14, 2016, with the Children, Youth and Families Department and the Department of Information Technology to discuss the contents of this report. The Committee would like a plan to address recommendations in this report within 30 days of the release of the report.

I believe this report addresses issues the Committee asked us to review and hope your department will benefit from our efforts. We appreciate the cooperation and assistance we received from your staff.

Sincerely,

David Abbey, Director

Cc: Senator John Arthur Smith, Chairman, Legislative Finance Committee
Representative Jimmie C. Hall, Vice-Chairman, Legislative Finance Committee
Dr. Tom Clifford, Secretary, Department of Finance and Administration
Darryl Ackley, Secretary, Department of Information Technology
Keith Gardner, Chief of Staff, Office of the Governor
Timothy Keller, State Auditor

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EXECUTIVE SUMMARY

The Child, Youth and Families Department's (CYFD) Enterprise Provider Information Constituent Services (EPICS) system is intended to replace the mission critical Family Automated Client Tracking System (FACTS), providing a web-based system for child welfare, juvenile justice, early childhood services, and behavioral health. Planned functionality such as creation of a unique early childhood identifier, interoperability between agencies, and inclusion of child care licensure data have resulted instead in development of separate data systems. The scope of the EPICS system continues to change while project costs continue to increase. CYFD's estimated project costs have increased 111 percent since the project started in FY12, from $12.6 million to $26.6 million, a figure that does not include protective services functionality.

The evaluation assessed the status of EPICS system implementation, including, planning, project management and oversight, budget allocation and expenditures and interfaces with other systems.

The evaluation found CYFD has not prioritized planning for the child protective services component, putting federal compliance and significant federal funding in jeopardy. Also, the EPICS project has been scaled down resulting in the creation of additional data silos, additional vendor costs, and program integrity concerns. EPICS project management is not typical of large complex IT projects resulting in significant project risk. By not adequately planning the entire EPICS project, implementation and the project timeline continues to be extended.

In year five of the multi-year, phased project, EPICS project planning and implementation are incomplete, total project costs are unknown and CYFD is relying on costly staff augmentation contractors to support the project. CYFD has implemented Phase 1 Provider Management and Phase 2 Client Management on budget, but behind schedule. In November 2015, also behind schedule, CYFD implemented Phase 3 Service Management for all program groups with the exception of Juvenile Justice Services (JJS) facilities.

Although CYFD cited budget and staffing constraints, it currently costs 52 to 95 percent more per FTE to have IT contractors supporting EPICS development than in-house IT staff. In addition, CYFD's current disaster recovery plan has not been fully tested and the plan lacks detail and policy is needed to be in line with best practices.

A web-based case management system, such as EPICS has the potential to improve decision-making for children and families by allowing CYFD to gather a more comprehensive set of information that can be seen in real time by various stakeholders and decision-makers. However, improving project planning and management, and reprioritization to secure Federal funding is needed. The report includes a series of recommendations to improve the EPICS project and maximize federal dollars.

BACKGROUND INFORMATION

Background. The Children, Youth and Families Department (CYFD) provides prevention, intervention, rehabilitative, and after-care services to New Mexico children and their families. CYFD's mission is also supported by a wide variety of information systems deployed across four program areas – Early Childhood Services (ECS), Juvenile Justice Services (JJS), Protective Services (PS) and Behavioral Health Services (BHS).

In FY11, CYFD initiated an IT project to consolidate CYFD's legacy system (FACTS) and 25+ stand-alone systems into to an enterprise web-based system, Enterprise Provider Information Constituent Services (EPICS). Enterprise systems are large-scale application software supporting business processes, information flows, reporting, and data analytics in complex organizations. The Family Automated Client Tracking System (FACTS) originated in November 1997 as primarily a Protective Services Case Management System, funded by matching federal dollars (75 percent federal, 25 percent state) at a cost of $16.3 million. CYFD contracted with a design, development and implementation vendor to design and develop its mission critical system FACTS under the federal State Automated Child Welfare Information System (SACWIS).

When a SACWIS designation and compliance is achieved and a state accepts federal dollars to offset the build of a case management system, then the law requires adherence in the reporting of data as a condition of funding. A SACWIS is required to maintain the reporting of data to the Adoption and Foster Care Analysis Reporting System and the National Child Abuse and Neglect Data System. SACWIS is expected to be a comprehensive automated case management tool that supports social workers' foster care and adoptions assistance case management practices including functionality for child protective and family preservation services. The current FACTS application is the mission critical system and the foundation of CYFD as it provides case management functionality for all its clients. FACTS supports service delivery and practice for the safety, permanency and well-being of New Mexico children and their families. New Mexico is obligated by the Federal government to maintain FACTS as a fully-functional, SACWIS-compliant data and reporting system for the protective services program area. In FY13 CYFD stated there would be no more major releases of FACTS, the only changes will be based on Federal, State, inter-agency and programmatic needs.

By implementing EPICS for child welfare programs, CYFD must have a federally approved Advanced Planning Document. The Advanced Planning Document is the request for federal financial participation and provides the business case and plan to support the federal expenditures for information technology acquisitions.

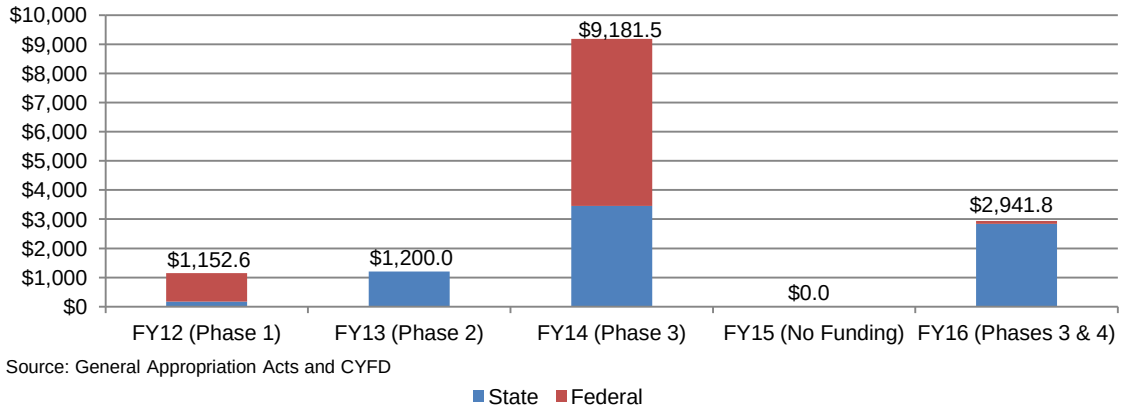
In FY14, CYFD ceased operating its Joint Accounting System, to implement the SHARE Accounts Receivable (AR) module at a cost of $309.7 thousand with funding from Laws 2012. CYFD's Joint Accounting System was one of a handful of third party systems not integrated with SHARE. CYFD previously used their legacy Joint Accounting System to account for overpayments made to foster care and childcare provider from data provided by FACTS. By implementing the SHARE AR module CYFD can track foster care and childcare providers as customers to bill for overpayments. Overpayments occur when a provider receives payment for services it is not entitled or is paid for services never rendered. Theoretically, EPICS should be integrated with the SHARE AR module but as of this writing it is not clear if CYFD has included the integration in its project planning. With the Department of Information Technology's (DoIT) impending SHARE upgrade, CYFD will have to work closely with DoIT and the Department of Finance and Administration to ensure data interfaces with FACTS and EPICS comply with the SHARE upgrade requirements.

Management and Staffing. Since the initiation of the EPICS project, CYFD management has changed, including three cabinet secretaries, three chief information officers and two application development deputy directors. CYFD hired a new chief information officer (CIO) in August 2015, eight months after the retirement of the previous CIO. The new CIO has taken active role in assessing the status of the EPICS project, including CYFD's IT governance structure and other responsibilities associated with its Information Technology Services (ITS) division.

ITS division supports the network infrastructure and all IT systems, including the mission-critical FACTS application for all CYFD staff. CYFD's help desk, which serves as ITS' Service Desk, is the single point-of-contact between CYFD staff and the IT service organization. The Applications Development section consists of teams that support the mission-critical FACTS application and CYFD web applications. The web applications include the Agency Reporting and Tracking Enterprise System, Provider Criminal Background Check System, and Contracts and Amendment Tracking System. CYFD plans to incorporate these web applications in the EPICS system.

Project Budget. Currently CYFD is in year five of the multi-year, phased EPICS project and anticipates the project to continue until FY19. The EPICS Master Project is following a multi-year, phased project deploying software "subprojects" on a regular basis throughout the project. Sub-projects are defined on a state fiscal year and dependent upon funding. Through FY16, CYFD has received $14.5 million for the project, which includes a combination of state general fund appropriations and federal grant dollars. Appropriation legislation detail and description of project phases are shown in **Appendix B.**

Chart 1. Summary of EPICS Project Funding
(in thousands)



Source: General Appropriation Acts and CYFD

CYFD requested in its FY17 IT budget request $10.1 million to continue its multi-year, multi-phased project, adding requirements that were not defined in the prior phases. The General Appropriation Act of 2016 did not provide additional funding for FY17.

Expenditures. CYFD has sufficient funding to continue Phase 3 of the project through FY17. However, Phase 4 funding will be spent by the end of FY16. Of the $14.5 million funding CYFD has spent $9.8 million, with a fund balance of $4.7 million as of January 2016.

Table 1. EPICS Project Budget and Expenditures Summary
(in thousands)

Funding Source	EPICS Project Phase	Original Budget	Expenditures	Fund Balance
FF	Phase I Provider Management	$1,152.6	$1,152.6	$0.0
GF	Phase II Client Management	$1,200.0	$1,199.7	$0.3
GF	Phase III Service Management	$3,454.2	$3,441.2	$13.0
FF	Phase III Race to the Top (RTTT) includes Am I Eligible?	$5,727.3	$2,823.7	$2,903.6
GF & FF	Phase III Summer Food Program (RTTT)	$232.8	$134.2	$98.6
GF	Phase IV Juvenile Justice	$2,708.5	$1,026.6	$1,681.9
Total		**$14,475.4**	**$9,778.0**	**$4,697.4**

Source: SHARE and CYFD

Maintenance and Support. Eventually FACTS will be incorporated into the EPICS system but until then CYFD is required to maintain federal compliance. As a result, CYFD has continued to enhance FACTS using federal dollars, with 50 percent state matching funds. Since FY12, CYFD has received approximately $7.8 million in federal funds, with a total of $15.6 million including the state share. While CYFD IT plans indicate it has completed 367 enhancements, from FY10 through FY15 it has not accounted for actual expenditures of all the enhancements. CYFD has stated actual expenditures are unknown based on multiple projects and operational tasks performed by staff. As a result, there is potential for non-compliance with federal cost allocation requirements.

With the EPICS system partially implemented, CYFD is using computer systems enhancement funding (C-2 funding) for recurring maintenance and support costs for EPICS, instead of base budget. It is not clear why the Department of Information Technology has allowed CYFD to use C-2 funds for maintenance and support. CYFD spent $174 thousand for FY14 and FY15 for recurring EPICS maintenance and operations costs using C-2 funding for items such as security testing software. CYFD plans to spend at least an additional $170 thousand in FY16. This is consistent with CYFD's FY17 IT budget request which included an estimated $202 thousand for maintenance and support. As a result, the implementation cost of the EPICS system is skewed and it may not be appropriate use of C-2 funding. CYFD reported in its annual IT plans once EPICS is fully implemented in production, recurring costs will be covered by the current operating budget.

Table 2. EPICS Maintenance and Support Cost

FY14	FY15	FY16	FY17 Estimate	Total
$22,770	$152,169	$170,312	$202,200	**$547,451**

Source: CYFD

CYFD'S EPICS PROJECT PLANNING IS INCOMPLETE, TOTAL PROJECT COSTS ARE UNKNOWN, PLACING FEDERAL DOLLARS AT RISK

Key project management best practices include planning, executing, monitoring and controlling, and closing. Best practices in project management include the right mix of planning, monitoring, and controlling. These practices are essential to complete a project on time, on budget, and with high quality results. The Human Services Department replaced its case management and eligibility system with the Automated System Program and Eligibility Network (ASPEN) system using a project management office (PMO) vendor. The ASPEN project was well managed and is a model for best practices in project management and oversight.

A project management plan (PMP) is a formal document developed in the planning phase, used to manage project execution, control, and project close-out. The primary uses of the PMP are to document planning assumptions and decisions, facilitate communication among stakeholders, and documents approved scope, cost and schedule baselines. A PMP includes other key plans for issue escalation, change control, communications, deliverable review and acceptance, staff acquisition, and risk management. These other project plans are key components of project management and carry through from the start to finish of all projects.

Risk management has been identified as one of the most significant best practices for software development [Brown, 1996]. Simply identifying the possible risk factors is not enough. Risk exposure is a combination of the probability a specific risk could materialize into a problem and the negative consequences for the project if it does. Mitigation actions are selected to reduce either the probability or the impact of the risk. Also, indentifying contingency plans if risk control activities are not effective is important. Risk management is a continuous process.

Control processes are used to make sure the project is proceeding as planned and that deliverables meet required standards. The processes include holding regular project meetings, documenting key decisions and formally testing and accepting major deliverables, which must be clearly verifiable and associated with measurable milestones, and establishing a regular reporting process to provide formal reports on project status.

Conducting a post project review is the last critical step in the project life cycle. Post-project reviews provide an opportunity to reflect on how the last project or previous phase went and to capture lessons learned to help enhance future project performance [Kerth, 2001]. During such a review, identifying things that went well creates an environment to repeat the successes and identifying things that did not, providing an opportunity to change and prevent those problems in the future.

CYFD has not fully planned the EPICS project, resulting in piecemeal funding and implementation, and significant cost increases. In its FY12 IT budget request, CYFD states it has been planning to replace its disparate, legacy systems with an enterprise web-based system since 2006. However, CYFD has not evaluated the full scope of the EPICS project or defined requirements for replacing its mission critical legacy system, FACTS and may have underestimated the complexity of the project. As a result, CYFD's estimated project costs have increased 111 percent since the project started in FY12 from $12.6 million to $26.6 million. Without initial overall requirements, CYFD lacked sufficient information about the project scope to give a reasonable estimate early in the project and a realistic timeline.

Since FY12, CYFD has implemented three phases of the EPICS web-based solution:

1. *Provider Management, implemented November 2013*, replaced several Access databases to support the Child and Adult Care Food Program (CACFP) system. Improvements include online submission of menus by child care providers, streamlined and reduced paperwork, and increased provider participation. In addition, the background check system was improved by automating the approval process of a CACFP provider in addition to securing the entry point of an individual into the system.

2. *Client Management, implemented August 2014*, built foundational client and staff management components. Improvements include enhanced client security components and integrated CYFD human resource tracking and reporting.
3. *Service Management, implementation November 2015*, replaces several CYFD stand-alone solutions such as Juvenile Justice Facilities Incident and Roster Management, the Agency Reporting and Tracking Enterprise system (ARTES) which includes Domestic Violence and Juvenile Community Corrections, and CYFD Contract Tracking system. Service Management also expanded background check functionality for Protective Services (PS) and Human Resources (HR).

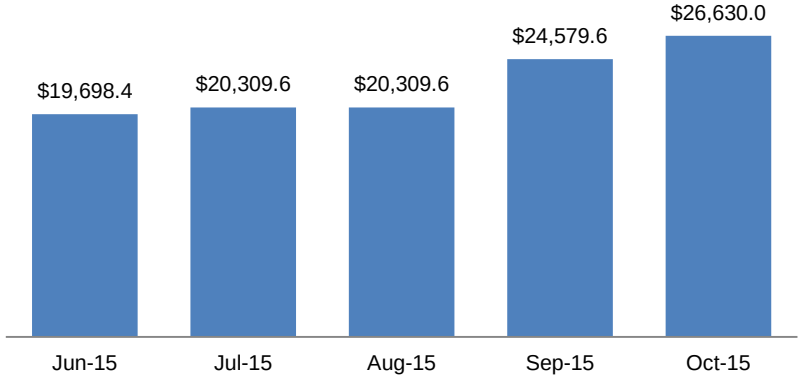
Although three phases are in production and other EPICS phases continue to be under development, it is not clear how CYFD Information Technology Services Division communicates the status of the EPICS project to CYFD program staff, caseworkers, and CYFD providers. CYFD's website has a tab for News and Events, but it is limited to links to selected monthly news media reports regarding CYFD issues and events. In addition, there is a providers tab with a drop-down menu that includes "Web Services" without any indication if a new provider would know how to access EPICS. As a best practice, the Human Services Department (HSD) provided its employee's access to an ASPEN Fact Sheet, a monthly newsletter, frequently asked questions, training schedules and general information memorandums to keep employees informed regarding the status and impact of the project.

By not adequately planning the entire EPICS project, implementation and the project timeline continues to be extended. In June 2013, the EPICS Master Project Lifecycle indicated the project was scheduled for completion June 30, 2017. CYFD also did not receive C-2 funding in FY15 which impacted the project timeline. Currently CYFD is in year five of the multi-year, phased EPICS project and anticipates the project to continue until FY19. However, due to lack of funding for FY17 it is likely the completion date will be extended.

Among the most common project management mistakes, inadequate definition and planning tops the list. Poor up-front definition and planning can cause serious problems in many areas later in the project, including lack of business support, poor estimates and scope control.

While CYFD defines phases on a state fiscal year basis within allocated funding, it does not ultimately know the total project cost. The estimated total project costs do not include the Phase 5 FACTS Protective Services. Furthermore, from June 2015 to October 2015 CYFD has changed the total estimated project costs four times. According to CYFD it uses the Project Management Body of Knowledge (PMBOK) estimation methodologies and techniques, including subject matter experts who are contractors to develop project estimates. Published by the Project Management Institute, PMBOK presents a set of standard terminology and guidelines for project management. LFC staff did not evaluate CYFD's estimating methodology.

Chart 2. EPICS Estimated Total Project Costs
(in thousands)



Source: CYFD EPICS Project Documents

Not planning for child protective services component (Phase 5) puts compliance and significant funding in jeopardy. The Protective Services phase is high risk due to complex Federal requirements and will be the largest phase of the entire EPICS project. It is not clear why CYFD delayed planning this phase. CYFD must have a federally approved Advanced Planning Document to secure additional funds for development, prior to making any modifications to the SACWIS system by implementing EPICS for child welfare programs. CYFD has the potential to lose federal funding participation (50 percent match), if it does not submit an Advanced Planning Document for approval to Department of Health and Human Services Administration for Children and Families to ensure SACWIS compliance. SACWIS is the record hub for all children and families receiving child welfare support and contains a complete case management history.

In FY14, CYFD contracted Flowstone Consulting Inc. to assist in planning its anticipated Phase 5 FACTS Protective Services. Although the consultant created a project plan for developing the required advance planning document, as of this writing it is not clear if CYFD met the planned submission date in January 2016 or when it will be submitted.

In addition, by prioritizing protective services last, CYFD has foregone federal matching dollars and adversely affected use of data. States may receive federal reimbursement for expenditures related to planning, design, development and implementation of a SACWIS system. Some planning, design, and development of EPICS components for juvenile justice and child care will likely be reused for child welfare. If CYFD prioritized the child welfare portion in EPICS project planning, CYFD could have leveraged federal funds in the early phases of the project.

In the 2014-2019 Child and Family Services Plan, protective services noted the implementation target for the EPICS child welfare system is 2018. As a result, CYFD has put a moratorium on changes to FACTS except for federally mandated modifications. CYFD goes on to state the moratorium has posed a challenge to protective services in obtaining data quickly: specifically, that "Accepted changes to FACTS for mining new data requests can be lengthy and retrieval of such data can be cumbersome." However, the current CIO has spent vast amount of time reallocating resources towards maintaining and enhancing FACTS based on customer needs.

Instead of developing requirements for the entire project, CYFD defines phases and develops requirements on a state fiscal year basis and as a result, key elements and functionality may be overlooked. For example, in its FY17 IT budget request, CYFD includes development for an EPICS administration tool to improve user setup and management because of the potential for thousands of EPICS users. An administration tool is essential to manage user accounts and permissions and is a standard for managing a multi-user computing environment. If CYFD had evaluated the entire scope of the project adequately it may have realized the user accounts would grow with each phase deployment. CYFD also plans to redesign incident management for Phase 4 Juvenile Justice because it did not have a good definition of Juvenile Justice's program needs. Some change requests indicate key functionality requirements may have been overlooked. For example, its open change requests indicated for the Protective Services Background Check Unit, the automatic sex offender registry check was not activated. A business analyst tested and did not see the functionality in the system. Gathering requirements is the foundation to any successful IT project. As the requirements change, the cost is likely to change. Requirements are critical for scoping, defining, estimating, and managing the project.

LFC staff also determined CYFD is not maintaining a requirements traceability matrix. Requirements traceability follows the life of a requirement through implementation. A traceability matrix is a type of document that helps correlate and trace business, application, security or any other requirements to their implementation, testing or completion. It evaluates and relates between different systems components and provides the status of project requirements in terms of their level of completion.

The EPICS system has been scaled down resulting in the creation of additional data silos, additional vendor costs, and program integrity concerns. EPICS was originally described as the heart of the Race to the Top (RTTT) effort intended to eliminate existing information silos and incorporate 25 or more disparate databases and represent the state's early learning data system. However, original plans have not been carried out.

For example, New Mexico's initial Race to the Top application included:

- a proposal for creating a unique early childhood identifier;
- building of a federated database system with a common data interface allowing for interoperability between agencies;
- providing a mechanism for all participating state agencies to collect data in a uniform way;
- housing an automated attendance system;
- collecting home visiting data; and
- developing a licensed provider regulatory oversight system.

The RTTT phase II application cut out many IT components for EPICS because the grant award was less than what was budgeted in the phase I application. Some of the components that were not cut have been outsourced to vendors or to other agencies. For example, the licensure database has been developed by a vendor. Other goals such as data requirements for creation of a unique child ID and data warehouse components are listed in DoIT's EPICS progress report (FY16-Q1) as being managed by the Public Education Department (PED) through a request for proposals (RFP) for a new data system outside of EPICS, the Early Childhood Integrated Data System (ECIDS).

Over $2 million in unspent Race to the Top funding has been redirected to a new data system ECIDS, a potentially more costly option with goals which mirror original goals for EPICS. In its RTTT phase II application for funding CYFD noted:

> "CYFD will not implement a federated database due to resource constraints. Instead, CYFD will use web services for interoperability between different agency systems. These web services will leverage the statewide unique identifiers, making data exchanges between agencies easier and more reliable."

Web interoperability is not a viable solution for linking non-federated databases; rather the alternative solution to a federated database is to establish an interagency early childhood data warehouse. PED has taken the lead on this data warehouse - Early Childhood Integrated Data System (ECIDS). A data governance committee has been established, a data base design, and data sharing agreements have been put in place.

Race to the Top is now funding ECIDS, in essence creating a new data system, counter to the original proposal of consolidating existing databases in EPICS. A January 2016 meeting of DoIT's Project Certification Committee certified $1.7 million for PED's Race to the Top funding, for use in the ECIDS bringing the total appropriation to $2.1 million. The move to a data warehouse rather than a federated data system as originally intended under EPICS could prove to be more costly. According to the Early Childhood Data Collaborative, a federated data system can be less costly to develop and can simplify legal issues around sensitive data.

Licensure data was to be included in EPICS; however CYFD contracted with the University of New Mexico which subcontracted with a Florida company for an additional database. Instead of including a data system for the FOCUS Tiered Quality Rating and Improvement System (TQRIS) in EPICS as originally intended in its RTTT grant application, CYFD contracted with UNM to develop a request for proposals (RFP) for the development and establishment of a fully operational practitioner registry. In the RTTT application, EPICS was to include child care provider data in the FOCUS TQRIS system, with information about educators, professional development, teacher licensure, and children enrolled. According to the grant application, the role of UNM Division of Continuing Education was to provide training and technical assistance in order to help programs access and use the database. UNM was not listed in the application as developing or housing a separate database apart from EPICS. UNM subcontracted with WELS Systems Foundation, LLC, a Florida based company specializing in web-based early learning systems, to develop the database.

Despite recognizing the opportunity to consolidate other web-based data reporting systems, CYFD has yet to include the functional requirements in EPICS. This would eliminate the need for a sole source vendor. In FY15, CYFD continued to issue a sole source contract to ADE, Incorporated for web-based data collection and reporting system for Juvenile Justice Services (JJS). It appears ADE has been a sole source vendor for CYFD since FY10, with expenditures of $270 thousand. In FY13, JJS instituted a freeze on development for this application as the department committed to the development of a new, internally developed web based case management system (EPICS). EPICS is anticipated to absorb the functionality of the existing case management system as well as other applications being used to collect data on JJS clientele, such as the ADE — CYFD application. CYFD stated recent delays in that development process may drive a need to re-evaluate the freeze as needs for application functionality continue to arise. ADE hosts this application on its server and "owns" the software which makes up the application. CYFD JJS "owns" the data contained within the application. According to CYFD it currently did not consider including requirements for the EPICS design to provide the same functionality as the ADE – CYFD application.

CYFD reports budget shortfalls with Race to the Top funding to DoIT yet has identified $1.9 million in unspent funds to the Federal government. These unspent funds have been reallocated from personnel services and benefits for state employees to contract services. Furthermore, the amendments are represented as allowing the state to accomplish its goals within the timeframe of the grant contradicting what is currently being reported to DoIT. In DoIT's FY16-Q1 project report, CYFD identifies potential budget shortfalls due to grant time constraints and is seeking funding alternatives to mitigate the issue. In the meantime, data requirements essential to EPICS have been turned over to PED which is creating a new data system ECIDS. In two separate amendments last year, the U. S. Department of Education and U. S. Department of Health and Human Services approved changes in allocation of funding reprioritizing unspent funds.

> "April 7, 2015 Amendment: Early Childhood Data Systems-The State will reallocate $1,546,004 of unspent funds for Early Childhood Data Systems over years 2, 3, and 4 of the grant. The reallocation of funds will be from salaries to contractual, equipment and other categories. In addition, fringe benefits will be reallocated to contractual other categories. Reallocating these funds will allow the State's early childhood data systems project to accomplish its goals within the timeframe of the grant."
>
> "August 4, 2015 Amendment: Early Childhood Data Systems-The State will reallocate $430,111 of unspent funds for Early Childhood Data Systems over years 3 and 4 of the grant. Reallocating these funds will allow the data systems project to accomplish its goals within the timeframe of the grant. This reallocation to the contractual category will allow for the project team to build more capacity though engaging in contracts to perform some of the necessary work steps. Funds in the "other" budget category will be used to purchase necessary licenses and geocoding reference data sets. A total of $228,500 will be reallocated from Project 2 (FOCUS/TQRIS) to support the completion of the data system."

CYFD's current available RTTT IT funding is $5.7 million. The grant expires December 2017. PED, as the grant coordinator reported in January 2016 it will seek a no cost extension for the grant. Additionally, RTTT has added scope, which exceeds the length of the grant. It is not clear at this time if the re-baselined schedule accounts for the additional scope.

Program integrity issues with EPICS remain a concern. A previous 2013 LFC report flagged issues with program integrity involving the CYFD IT system. For example, the report flagged the inability to track attendance in childcare. Additionally, CYFD does not follow federal best practices for preventing and finding fraud, waste, and abuse as they have an inability to share data with some other state databases. Namely, CYFD does not participate in the Public Assistance Reporting Information System (PARIS). The LFC report also found CYFD had an inability to perform cross-checks between CYFD providers and the sex offender database. CYFD indicated to the LFC that it would implement time and attendance functionality in EPICS by July 2016, would participate in the public assistance reporting information system when neighboring states begin utilization, and that CYFD now performs cross-checks with the sex offender database registry. CYFD still does not participate in PARIS.

Regarding the sex offender database cross-check LFC staff found a change request (CR#9415) flagging that while the sex offender registry check was built into EPICS, the functionality had not been activated. It is unclear how long functionality was not in place and if the issue has been resolved.

EPICS project management structure is not typical of large complex IT projects, providing significant risk for a successful project. Instead of using an IT project management vendor, EPICS project management is a combination of CYFD IT staff and ACRO contractor staff. CYFD cited budget constraints for establishing this type project management structure. Along with other responsibilities of overseeing daily activities of the division, CYFD's deputy director of Application Development was the primary project manager, through December 2014. As a result, the deputy director's daily workload may have caused competing demands and time constraints for the project and limit the effectiveness of project management activities. Other New Mexico large complex IT projects such as the Human Services Department's ASPEN project and Workforce Solutions Department's Unemployment Insurance system project used a contracted project management vendor to successfully complete their projects.

With the departure of the deputy director, it appears project management processes and procedures were not well documented, as the current CIO could not locate this information when requested by LFC staff. It appears CYFD's change control, risk management, and communication plans are not formally documented. These are elements of project management best practices as previously described.

CYFD currently places significant reliance on contractor staff for project management. In FY15, CYFD assigned one state employee as a part-time project manager, with two contracted ACRO project managers that are also assigned part-time. It appears one of the ACRO project managers is the primary individual for tracking the budget and expenditures. The other ACRO project manager is a prior CYFD employee who was an IT business analyst and may not have project management expertise. CYFD stated to ensure project deliverables are on task the EPICS project manager and lead technical web developer hold daily meetings. The meetings are tracked in CYFD's project management tool, Redmine. However, its project management tool has some limitations as discussed below.

Also, CYFD internal staff may not have the specific project management expertise and training needed to effectively take a project from inception to closeout. External project managers often bring a level of objectivity that may not always be present with internal staff, for various reasons. This objectivity can be of great value when it comes to the actual project outcomes and deliverables, and ensuring business requirements are met. In fact, the nature and complexity of the project may necessitate very specialized expertise to ensure functionality and compliance with federal requirements. Because EPICS is a complex project, it warrants CYFD reassessing its project management structure and the potential for hiring or contracting a full-time project manager or vendor.

While CYFD's project management tool includes the capabilities to track issues, scheduling, document management, and workflow, it does not have budget and resource management, and reporting and analyses functionality. Initially CYFD was using Microsoft Project for project management reports and as of July 2014, CYFD uses a separate reporting software tool (Jasper) to compile project management reports. The contract ACRO project manager tracks project expenditures in a spreadsheet and reconciles expenditures with funding sources monthly. As of October 2014 the EPICS project team uses a web project management tool Redmine as the foundation to assist project managers and technical staff.

The Redmine project management tool includes the capabilities to track issues, scheduling, document management, and workflow but does not provide a comprehensive percentage complete for the overall project. According to CYFD, the business analyst and developer report the percentage complete of tasks in Redmine. Simply reporting the percentage complete is not enough to provide accurate and data-driven end dates. In order to objectively measure project schedule and cost performance, the project manager needs to know the following:

- When was the task scheduled to start and complete?
- What was the original task effort?

- When did the work actually start?
- How many hours have been spent on the task?
- How many hours are remaining?

EPICS external project oversight, including independent verification and validation, needs improvement. CYFD and its independent verification and validation (IV&V) vendor did not report project schedule variances appropriately to the Department of Information Technology (DoIT). DoIT monitors the EPICS project as part of its quarterly reporting process, requiring CYFD to provide DoIT monthly status reports. DoIT also requires IV &V reporting for large IT projects. CYFD's IV&V reports do not always reflect an accurate status of the project. For example, throughout Phase 1, the IV&V vendor reported the project was on schedule, yet available documentation indicates Phase 1 was behind schedule.

CYFD re-baselined the project schedule to accommodate variances in reporting. Due to risks associated with phased funding, grant timing constraints, transition in project team members, DoIT has rated the project status as "yellow" pending review of key project criteria. Yellow status means all scope, budget, schedule or project issues are manageable, but one or more is escalated or require executive management intervention for resolution.

It appears CYFD has re-baselined the project schedule to maintain "on-time" status for all three phases that have been implemented. The original completion for Phase I was June 30, 2012, then revised to June 30, 2013, but not implemented until November 1, 2013, several months behind schedule. In addition, IV&V reports did not indicate Phase 2 Client Management was implemented two months behind schedule.

CYFD's project management plan shows Phase 3 Service Management to be completed June 2015, and then changed the completion date to October 2015. However at the time of implementation in November 2015, five months behind the original schedule, Phase 3 Service was not a 100 percent complete. In October 2015, JJS elected to run a three month pilot at one facility, with new functionality deferred until the pilot is successfully completed and all JJS facilities throughout the state receive training on EPICS. With statewide training slated for January 2016 through April 2016, the remainder of Phase 3 is to be implemented April 2016.

Because of inconsistent reporting, CYFD is in the process of awarding a new IV & V contract to a different vendor. While DoIT relies on agency monthly reporting and IV & V reports, until recently it did not consistently validate the content. Although the scope and schedule have changed, DoIT showed EPICS overall project status as green through the third quarter of FY15 (March 2015). DoIT recognized the inconsistent reporting in the fourth quarter of FY15. DoIT and CYFD are partnering to assess methodologies, processes, procedures, and tools to help plan, monitor and track project scope, schedules, budget, risks, and quality to ensure project objectives are successfully met.

Information technology (IT) governance needs improvement. CYFD's IT governance structure for the EPICS project is limited to naming the key stakeholders, including the cabinet secretary, deputy secretary, and CIO and division directors. IT governance is defined as the processes that ensure the effective and efficient use of IT in enabling an organization to achieve its goals. CYFD stated its Information Technology Change Control Committee (ITCCC) meets on a monthly basis to discuss the various on-going IT projects and their statuses. Further stating all change requests and incident reports are evaluated, prioritized, and coordinated by the ITCCC. However, governance structure does not include detail roles and responsibilities and defined processes, with appropriate documentation.

In addition, although project documentation states change control will be monitored and managed by the project team it appears a formal change management plan is not in place. Changes to requirements upset schedules, costs, and resource allocation and can happen due to both external and internal factors. Change control in projects is a formal process. A change control management plan ensures all changes made to a project are brought about in a controlled and coordinated way that reduces any disruption to ongoing project activity and remains cost effective without placing a large requirement on generally scarce resources.

Recommendations:

Children, Youth and Families Department should

- Assess the project needs and requirements to determine how to best fully complete EPICS implementation;
- Submit its Advanced Planning Document to Department of Health and Human Services Administration for Children and Families for approval to leverage federal funds for the Protective Services phase;
- Assess its project management structure, and for the remaining project phases, consider contracting for a project management vendor;
- Define and document IT governance roles, responsibilities and processes; and
- Develop a formal change control management plan.

CYFD CONTINUES TO RELY ON MORE COSTLY CONTRACTORS TO AUGMENT ITS STAFF TO SUPPORT THE EPICS PROJECT

Currently it costs CYFD 52 to 95 percent more per FTE to have information technology (IT) contractors supporting EPICS development than in-house IT staff. Estimated contractor full-time equivalent (FTE) cost is between $141 thousand to $180 thousand compared with the current CYFD FTE cost of $92.5 thousand (base salary of $70 thousand) for IT application developer and IT project manager positions. Like other state agencies, hiring qualified IT application developers and other IT professionals is a challenge primarily due to state salaries for IT professionals being substantially lower than the private sector. The State Personnel Office along with DoIT conducted an IT salary study. However after two years the results are not yet published.

In 2010 LFC reported CYFD IT staffing would be more cost effective than contract support. The LFC review of CYFD IT staffing reported CYFD could maintain its mission critical system with limited contract support if authorization is granted to fill IT positions and training focused on staff assigned to support its mission critical system. Although CYFD intends to grow and train staff in existing software development tools, it appears CYFD has not maintained in-house expertise to maintain its mission critical system FACTS and EPICS. CYFD continues to be dependent on contract staff despite the LFC's 2010 report.

Instead of contracting with a design, development and implementation vendor, CYFD contracts for individuals with technical expertise to augment its staff to support the development of the EPICS application. Therefore CYFD risks spending state funding ineffectively. Individuals noted as key personnel in ACRO Services Corp. (ACRO) and contracts include web developers, business analysts and project managers, with contracts with TEKSystems having web developers. CYFD contracted with ACRO and TEKSystems from the inception of the EPICS project. CYFD has used ACRO services for several years, with at least two ACRO individuals supporting CYFD for at least 15 years in various capacities. CYFD currently has five application developer positions assigned to EPICS, two currently vacant, compared with 18 contractor developers assigned to the EPICS project. In addition, there are five IT business analyst positions, also with two vacancies, compared with three contract business analysts. CYFD's cost per IT developer in FY16 is $165,690. With resource limitations of the department's IT staff to maintain and operate the system, CYFD will require ongoing reliance on staff augmentation at considerable cost.

Table 3. CYFD IT Position vs. Contractor Position Average Cost Comparison

Average Cost per CYFD IT Position	Average Cost per Contractor Position	Additional Contractor Cost
$92,544.59	$180,344.60	$87,800.01

Source: LFC Analysis

Contracts with ACRO and TEKSystems include a technology knowledge transfer deliverable however CYFD has not reduced its need for contractors. The deliverable states technology knowledge transfer shall include but is not limited to teaching staff, mentoring staff, leading staff in tasks identified by CYFD management. Contractor shall provide timely demonstrations and proof of concept expressions, reports, on-the-job training, demonstrations, and any other technology knowledge transfer as requested and when deemed necessary. As of this writing, CYFD could not provide documentation to support the technology knowledge transfer deliverable. If technology knowledge transfer was successful, CYFD could reduce its constant need for contractors.

The majority of other states have developed their child welfare systems using a design, development and implementation (DDI) vendor. Of the 35 operational and federally approved Statewide Automated Child Welfare Information System (SACWIS) systems, only four were developed in-house. Of the four developed in-house, only one is SACWIS compliant. New Mexico's legacy system FACTs was also developed using a DDI vendor and has been compliant with federal requirements for a number of years. Currently, the SACWIS website indicates there are several states that have compliant web-based systems.

Also, Indiana for example, although not SACWIS compliant, it is using updated and innovative new programs, such as Casebook®, that provide real-time case management in addition to meeting federal reporting requirements. Casebook® is an internet-based application that uses web technology, available to states and localities. The Administration for Children and Families (ACF) at the U. S. Department of Health and Human Services awarded the state of Indiana one of the first-ever waivers as part of an innovative program instruction that paved the way for states to adopt modern, cloud-based and commercial off-the-shelf (COTS) software to support child welfare agencies. This pivotal development enables Indiana to request federal funding for key costs of Casebook. The waiver comes about a year after ACF released an important program instruction (ACF-OA-PI-13-01) in June 2013. The program substantially expanded the opportunity for states to receive federal funding when adopting COTS software by detailing a process for states to receive a waiver of regulations concerning proprietary software.

In addition, other states such as Michigan conducted project planning activities with the assistance of a planning contractor. The state of Michigan, with its planning contractor, analyzed other SACWIS projects including Oregon, Illinois, Nevada, and Arizona to gain an understanding of the length of time required for each phase of the project.

CYFD contracts with two main vendors to support the EPICS project at a total cost of $11.2 million between FY12 and FY16. CYFD issued its contracts either under statewide price agreement (SWPA) or through the request for proposals (RFP) process, primarily for web software development, project management and business analysis for the EPICS project. CYFD awarded professional services contracts totaling $11.6 million for EPICS Phase 1 through part one of Phase 4, of which 97 percent is allocated to ACRO and TEKSystems.

Table 4. CYFD FY12 – FY16 EPICS Contract Summary

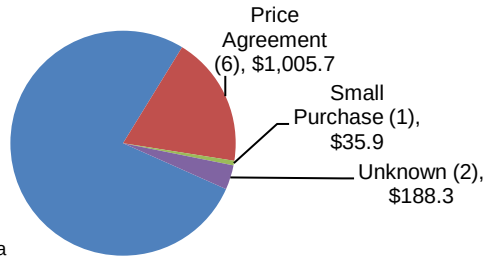
Vendor	Description Service	Total
ACRO	Web software development, project management, business analysis	$5,373,089.0
CAaNES	Security Assessment	$56,025.0
Horizons of NM	Independent Verification and Validation	$209,881.8
New Mexico Abilities	Independent Verification and Validation	$46,613.3
TEKSystems	Web software Development	$5,885,688.0
Total		**$11,571,297.1**

Source: CYFD Contracts

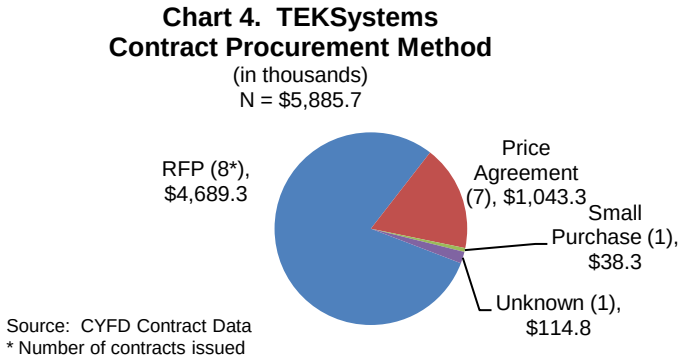
Since FY12, CYFD has issued 24 contracts to ACRO and 17 contracts to TEKSystems to support the EPICS project. LFC staff determined from FY13 to FY16, CYFD only issued two RFP for the 15 contract awards to ACRO. Two RFP for 15 contract awards indicates CYFD may have limited competition and may have not issued the procurement appropriately.

Chart 3. ACRO Contract Procurement Method

(in thousands)
N = $5,373.1



Source: CYFD Contract Data
* Number of contracts issued



Lack of clear deliverables hampers effective planning, contract management, and oversight for most IT contracts. Some of CYFD contract actions demonstrate limited IT planning and increased risk for the State**.** With the exception of the security assessment contract and IV&V contracts, CYFD used broad language to describe requirements in its statements of work for the EPICS project. CYFD's IT professional services contracts are not deliverable based; without specific deliverables including due dates and performance measures, tasks in the scope of work (SOW) are broad. For example, the web development SOW (Contract #18252) states the contractor shall work with the EPICS development team in the software implementation of EPICS business components according to requirements and design, yet specific requirements are not mentioned. In contrast a deliverable-based contract with functional requirements would be more specific. For instance, the web software should provide "navigation" tabs to allow user to navigate backward through the data and review what was entered, without losing the previously entered data. Another specific functional requirement would state the system shall provide a mechanism to upload and retrieve file attachments, associated with a specific case.

Also, in the associated RFP, technical requirements were limited to providing staff with a minimum of five years experience in performing web software development using JAVA programming language. In addition, a contract SOW task states the contractor shall work on incident requests and change requests from prior EPICS versions but does not include quality assurance criteria and required completion time.

As a best practice, the Government Finance Officer Association advocates deliverable-based milestone schedules as the best way to protect an organization against implementation risk. Payments are made according to a predefined milestone schedule, with payment contingent on receipt and acceptance of deliverables that were defined before the contract was signed. The contract statement of work can specify the deliverables. Furthermore, milestone payments provide sound contract protection because no funds are expended until the government is satisfied with the quality of the deliverable. At no point in this type of contract does the government make payments based on consultant hours — payments are made only when a deliverable of value has been received and is of acceptable quality.

Ineffective use of statewide price agreements may have resulted in over payments. While CYFD leveraged statewide price agreements to contract for IT professional services, in some instances it did not apply the agreed upon hourly rates correctly. As a result, there is likely potential for overpaying for actual time and effort (time). Instead of applying the billing rate to the hours worked, the contractor's compensation is based on a fixed cost per deliverable, without specific deliverables. It appears CYFD does not have documentation supporting how the fixed price per deliverable was determined. In addition, several contracts included key personnel "TBD" yet CYFD's contract documentation did not indicate when specific individuals were named as key personnel to replace "TBD" however invoices included specific individuals. Consequently, adequate contract administration practices are not in place.

There also were instances where contracts issued under statewide price agreement exceeded the maximum allowed compensation of $200 thousand per year. For example, in FY15 CYFD issued a contract for a business process analyst under a statewide price agreement for $268 thousand. LFC staff could not determine why DoIT and the Department of Finance and Administration approved the contract when it exceeded the allowed compensation. In addition, CYFD also issued two separate contracts for web developers within the same year that when combined exceeded the maximum allowed per year. Furthermore, it appears CYFD circumvented the administrative rule for small purchases by issuing one contract under the threshold and then another for the same service and scope of work six months later within the same year. Administrative rule states procurement requirements shall not be artificially divided so as to constitute a small purchase.

CYFD cannot effectively monitor contractor performance without explicit performance measures. CYFD did not adequately define contract performance measures. CYFD contract performance measures are subjective and not quantifiable. For instance, performance measures state the contractor effectively performs the activities required to accomplish the deliverables and deliverables are completed accurately, but does not provide any specific definitive descriptions.

Best practices in contract performance management include quantifiable metrics. For example, schedule and progress metrics provide an indication of whether or not the development effort is proceeding as planned. Schedule and progress metrics can be used to obtain general information about whether the overall schedule target is being met and to obtain information about specific tasks or parts of the development effort that may be behind schedule. Some examples of performance standards using schedule and progress metrics are given in the following table.

Table 5. Examples of Progress Metrics for IT Development Contracts

Measure	Standard
Actual number of: • Requirements defined • Components designed • Components coded • Peer reviews completed • Qualification test procedures successfully executed • Requirements verified	Greater than or equal to 90% of planned number
Milestones completed	Within 7 days of schedule
Schedule variance	Less than 10%
Number of requirements changed	Less than 10% of total number of requirements defined
Percent of design changes due to requirements errors	Less than 5%

Source: LFC Files

Without adequate performance measures and clear deliverables CYFD cannot ensure payments are for tasks completed. CYFD does not have a formal acceptance process of contract deliverables, making it difficult to determine if all tasks for each deliverable are complete. ACRO and TEKSystems deliverables are identified on monthly invoices without any indication of the percentage of completion of a deliverable, what tasks were completed, and when. In addition, although CYFD's monthly reporting to DoIT includes the percentage complete it may be inconsistent with when it will be complete. For example, CYFD reported Phase 3 – Service Management as 100 percent complete in November 2015 and yet CYFD reported all tasks will not be 100 percent complete until April 2016. As previously stated CYFD's project management tool does not provide percentage complete information for the overall project. Other than the chief information officers (CIO) sign-off and approval of the vendor invoices, CYFD does not have a formal acceptance process for vendor deliverables. While the contracts state deliverables are to be completed within the total compensation amount for each, LFC staff determined vendors invoiced the maximum amount.

A deliverable management process identifies the procedures used to coordinate the review and approval of contractual deliverables. In addition to documenting the approach to deliverable review and approval, the process covers who participates in deliverable tracking and the tools used to track the progress of the deliverable. Deliverable management is necessary to ensure the state only accepts deliverables that meet contract requirements. The purpose of a deliverable management process is to facilitate timely review of contractor deliverables; ensure deliverables are tracked and all events are recorded, and to ensure a copy of each deliverable and all supporting materials are maintained in the project library.

As a best practice, a Deliverable Expectation Document (DED) provides an outline of the expectations for approval of a project deliverable. For example, deliverable description, applicable industry standards SOW reference, acceptance criteria and schedule specifying the expectations of a deliverable. The DED is reviewed and approved by the appropriate individuals to ensure agreed-upon expectations are clearly defined before the deliverable is actually developed.

Recommendations:

Children, Youth and Families Department Information Technology Division should

- Transition from use of contractual IT staff to state employee IT application development positions as a cost savings measure;
- Evaluate the potential use of Casebook® and other states web-based systems;
- Assess its planning processes to define IT requirements in greater detail and consider issuing a request for proposals to complete the project using a design, development and implementation vendor. This step could lead to additional contracting options and create greater efficiencies in contractor selection and project management as well;
- Establish clear contract deliverables, to include specific functional and technical requirements;
- Establish quantifiable contract performance measures for IT development to ensure contractors effectively performs the activities required to accomplish the deliverables and deliverables are completed accurately; and
- Develop a documented contract deliverable management process.

ALTHOUGH CYFD HAS A CURRENT DISASTER RECOVERY PLAN, IT HAS NOT BEEN FULLY TESTED AND POLICY IS NEEDED TO BE IN LINE WITH BEST PRACTICES

Although CYFD has policies and procedures for its information technology services division, policies and procedures for disaster recovery appear to be incomplete and not finalized. CYFD's current disaster recovery plan, dated August 2015, was recently updated however it is not clear when the original disaster recovery plan was written and how many times it has been revised. According to CYFD, a general disaster recovery plan timeline was documented in prior versions but no longer in the current one and that the original plan was authored in 2008. Being able to go back in time to understand changes is also near impossible without knowing when changes were made. Version control ensures the latest version is being used and problems associated with multiple copies of documents dissipate.

CYFD's disaster recovery (DR) testing and failover process procedure is in draft. The DR plan states it shall be tested yearly, or more frequently, as determined by the DR team. Yet CYFD has not conducted complete DR testing since April 2012. Since then CYFD has tested parts of the DR plan periodically. Currently, CYFD has a FY16 test plan however it is set-up in a piecemeal fashion by quarter. Testing is an essential component of any effective DR and business continuity planning strategy. DR testing helps ensure an organization can really recover data, restore business critical applications and continue operations after an interruption of services. Without complete testing there is potential the plan will fail and CYFD cannot verify whether recovery procedures are correct. While CYFD has not conducted a disaster recovery risk assessment, it has one scheduled for February 2016.

Because FACTS and EPICS are CYFD's mission critical systems it is vital these systems are able to operate effectively without excessive interruption. CYFD IT Services Division is responsible for ensuring FACTS availability 24/7 and in the event of a disaster the first priority is to restore the FACTS database and resume operation in a short timeframe after a disaster has been declared. CYFD defines a disaster as an event that prevents access to the production application environment for greater than 72 hours. Seventy-two hours to declare a disaster does not seem not appropriate given the nature and sensitivity of CYFD's mission critical services. Eight hours without access to FACTS could be detrimental to a child. An unexpected power outage occurred on June 18, 2015 at 12:45 P.M. at 300 San Mateo building causing an improper shutdown of CYFD applications, servers, and systems. Virtual servers in the data center did not shut down properly. CYFD IT Services Division restored FACTS by 8:00 P.M. on June 18, 2015. The software to aid the shutdown of the virtual servers was not configured as the result of a recent upgrade and CYFD remediated the issue in August 2015.

Instances of power outages are common at CYFD's IT Services Division location in Albuquerque, which impacts access to FACTS at 44 field offices throughout the state. While outage periods seem to vary, CYFD has conducted lessons learned to improve the time to restore FACTS and all the applications, network printers and peripheral devices. The downtime was reduced to four hours on one occasion. The DR plan states the FACTS system must retain nearly uninterrupted operation for CYFD staff to perform its essential functions. However, it appears the CYFD staff could not access FACTS from another location during the eight hour power outage.

CYFD does not have a policy to direct the development, implementation, and testing of the disaster recovery plan. The existing disaster recovery plan for FACTS provides a good framework on which to build a more detailed plan and policy. When asked, CYFD referred to DoIT's contingency planning policy as its disaster recovery plan policy. While DoIT's policy establishes a set of requirements to create procedures to mitigate issues that may arise and hinder business functionality, it is not specific to CYFD IT operations.

Best-practice requires the organization to have a disaster recovery plan policy that addresses essential elements such as criticality analysis, testing, training, and plan maintenance. A disaster recovery policy establishes the framework for the management, development, and implementation, training and maintenance of a disaster recovery program, ensuring a disaster recovery plan is developed, tested and kept up-to-date.

CYFD has not conducted a comprehensive business impact analysis which is an essential component and first step in the business continuity and disaster recovery planning process. The DR plan states a project team assessed all CYFD units that are part of the business environment. This assessment identified critical systems such as FACTS, processes and functions; the impact of denial of access to CYFD services; and the "pain threshold" (the length of time CYFD can survive without access to systems, services and sites). However, the assessment lacks specific details. CYFD included estimating the cost of a disaster as it relates to lost productivity. CYFD IT Services division estimates that each hour of FACTS interruption will cost CYFD $13.2 thousand in lost workforce member productivity and with an average of 600 FACTS users, $105.6 thousand per day. CYFD also included the disruption in client services, indicating if activity on a case cannot be documented, necessary services for a client could be disrupted. The results of such disruption could range from inconvenience to a client to actual harm (physical or mental) to a client. However, CYFD did not identify what minimum recovery timeline should be.

A business impact analysis will determine and confirm an acceptable recovery time objective. Business impact analysis looks at the critical business functions and the impact of not having those functions available to the agency. It helps determine the realistic consequences of an outage and establish recovery timelines and goals. The business impact analysis includes work flow analysis and an assessment and prioritization of the business functions and processes that must be recovered. It should identify the potential impact of non-specific disasters or disruptions on business functions and processes, as well as estimate allowable downtime and acceptable level of loss or recovery point objective.

Also, with the lack of a documented business continuity plan, CYFD risks not meeting client's needs in the event of disaster and disruption of its mission critical system. CYFD does not have a centralized business continuity plan (BCP) and did not have appropriate documentation for its IT Services division. According to CYFD, each business unit and field office may have its own business continuity plans. Business continuity planning must be an enterprise wide program driven by senior management. If the CIO is given the responsibility for business continuity, others in the organization may view business continuity as an IT issue and not adequately address the business issues associated with business continuity. A business continuity plan outlines procedures and instructions an organization must follow in the face of a disaster and disruption; it covers business processes, assets, human resources, business partners and more.

While the Central Intake unit has a "Plan B" with instructions for filing out various forms, its assuming there is access to the local network. There is no indication what should be done if the local network is not available and is not clear who authored the instructions, when it was created or revised. Assigning business units and departments ownership for business continuity planning holds them accountable for planning, maintenance and execution. Having a centralized business continuity plan ensures critical services to be continually delivered to clients.

Many people think a disaster recovery plan is the same as a business continuity plan, but a disaster recovery plan focuses mainly on restoring IT infrastructure and operations after a crisis. Disaster recovery is just one part of a complete business continuity plan, as a business continuity plan looks at the continuity of the entire organization.

Although CYFD authorizes a disaster recovery manager to make necessary expenditures for hardware, software, communications infrastructure, and other equipment and supplies as determined necessary, its DR plan does not include an inventory of replacement equipment.

CYFD's disaster recovery plan includes the use of the Simms Building at the Department of Information Technology (DoIT). The Department of Information Technology (DoIT) has the responsibility for disaster recovery of the mainframe and the applications and data it hosts. DoIT is responsible for testing their plan regularly and include CYFD DR team in this process. DoIT is to provide CYFD with a copy of their mainframe DR Plan and testing results that should be included in CYFD's. It is the responsibility of CYFD Senior Management to ensure that the DoIT mainframe DR recovery time objective is acceptable to the business areas based on the results of the business impact analysis.

DoIT has implemented its disaster recovery strategy for the mainframe and installed applications, however, a plan has not been formally documented and fully tested. DoIT's mainframe recovery strategy involves the use of a site at New Mexico State University (NMSU) Data Center in Las Cruces, New Mexico. All mainframe applications and systems data is being replicated to a mainframe at the NMSU disaster recovery site in Las Cruces. The disaster recovery site is considered a warm site as the mainframe there is powered but inactive. DoIT estimates less than one minute of data may be lost in its disaster recovery strategy. Yet this disaster recovery plan is not, as yet, formally documented and not been fully tested.

DoIT completed phase one, with all mainframe client data is currently mirrored to partner NMSU in production. DoIT reported the mainframe disaster recovery plan will be documented and tested in 2015, and then will be made available to state agencies. DoIT's stated its goal is to test disaster recovery twice a year, coordinating the scope and documentation of the test plan with participating agencies, and tailoring it to accommodate investments appropriate to mainframe utilization by participating agencies: DoIT planned to initiate phase two, to include appropriate documentation, planning, and investment strategy in July 2015, with the first full test slated to be completed by December 2015. All test DR processes will be documented and distributed to all mainframe clients. In April 2014, DoIT provided the LFC an implementation plan, however, as of this writing DoIT has not provided an update on the status on phase two and therefore it is not clear if DoIT met its schedule.

Recommendations:

The Children, Youth and Families Department should

- Track changes and revisions to its disaster recovery (DR) plan and maintain a change log and version control to ensure the disaster recovery plan is current. For example, indicate the version number and date of last update;
- Ensure full testing of the disaster recovery plan is done at least annually, documented and team members receive training on the plan;
- Develop a DR plan policy, the policy should state
  - CYFD Information Technology Services Division will develop a comprehensive IT DR Plan.
  - A formal business impact analysis (BIA) and risk assessment will be undertaken in order to determine the requirements for the DR Plan.
  - The DR Plan will be periodically and completely tested in a simulated environment to ensure that it can be implemented in emergency situations and the management and staff understand how it is to be executed.
  - All employees must be made aware of the DR Plan and their own respective roles.
  - The DR Plan (including BIA and risk assessment) is to be kept up to date to take into account changing circumstances.
  - Ensure the findings from a comprehensive business impact analysis are documented in the DR Plan;
  - Review and update the business impact analysis to reflect any significant changes in business operations and lessons learned during the testing process; and
  - Include a detail inventory of replacement equipment in the plan to ensure replacement equipment may be order in a timely manner.

State of New Mexico
CHILDREN, YOUTH and FAMILIES DEPARTMENT

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March 17, 2016

Mr. David Abbey, Director
Legislative Finance Committee
325 Don Gaspar, Suite 101

Dear Mr. Abbey:

This correspondence serves as the Children, Youth and Families Department's (CYFD) response to the Legislative Finance Committee's (LFC) evaluation report "Children, Youth and Families Department – Status of the Enterprise Provider Information Constituent Services Project" provided on March 15, 2016. As Cabinet Secretary for CYFD, we provide the following response to the findings and recommendations set forth in this report.

Upon starting my tenure as the Secretary for CYFD in January 2015, our leadership team immediately identified potential issues with the Enterprise Provider Information Constituent Services (EPICS) project. Areas such as inadequate project cost management, lack of adherence to software development best practices, and an overall lack of the technical capability or capacity to manage large, enterprise-level information technology (IT) projects were identfied. By August 2015, subsequent to the retirement of the then incumbent Chief Information Officer (CIO) and Deputy Director of Software Development, we hired a new CIO and immediately tasked him with performing an internal assessment of the EPICS project. His findings have been consistent with the findings identified by the thorough and diligent evaluation performed by the LFC program evaluator, Brenda Fresquez. Moreover, Ms. Fresquez has identified additional areas of concern that will serve as a roadmap for continued improvement for not only the EPICS project, but in other areas of IT as well, such as disaster recovery. It is important to note that as stated in the report findings and without disagreeing, a significant portion of the findings deal with issues that predate the current leadership's tenure with CYFD. That stated, the current leadership is committed to rectifying the issues identified and implementing the proposed recommendations.

The mismanagement of the EPICS project that has occurred for several years beginning in 2010, the additional systemic shortcomings identified by our leadership and the LFC evaluator, and the current budget constraints, have led CYFD to undertake a short-term / long-term strategy for remediation. Consistent with our strategic plank of "Shoring up our Core", and in an effort to reduce risk to the organization, IT is in the process of formulating a plan to ensure the current mission-critical legacy system, Family Automated Client Tracking System (FACTS) remains viable while we re-assess and formulate our strategy for the completion of the migration of the remaining program areas, Protective Services (PS) and Juvenile Justice Services (JJS).

Areas that we are currently addressing or have already addressed in the FACTS environment include:

- Conducting an independent technical assessment of the FACTS database environment and formulating a remediation plan based upon the assessment findings **(target date: July 2016).**

- Addressing the critical software performance issue areas related to the age of the FACTS system **(complete)**.
- Creating a framework for triaging and addressing known issues (bugs) with the FACTS **system (in process)**.
- Revoking the "enhancement freeze" implemented by the previous leadership and implementing a change management framework for critical enhancements to the FACTS system based upon return on investment (ROI) justification that will allow our CYFD staff to be more effective and efficient during the transitionary period to a migration of a modern web-based system for the PS and JJS program areas **(in process)**.
- Assigning a project manager, a business analyst, and a primary software developer to all major projects **(complete)**.
- Developing a project management office (PMO) and IT Governance framework that will oversee FACTS related projects **(in process)**.

Additionally, using the LFC report as a guide and a roadmap for remediation, and by partnering with our oversight agency, the State Department of Information Technology (DoIT), we are confident that we can implement the appropriate corrective actions to address the shortcomings associated with the EPICS project and applicable functional areas within IT.

Areas that we are currently addressing or have plans to address related to the EPICS project include:

- Acquisition of a new Independent Validation and Verification (IV&V) vendor associated with the EPICS project. The new vendor contract for FY2016 has been finalized and a proposed contract for FY2017 is currently in process.
- Continued work on the CYFD IT disaster recovery project and plan to include both EPICS and FACTS as well as a comprehensive fail-over test **(target date: September 2016)**.
- Assignment of a project manager, business analyst, and lead software developer to each current, in process EPICS project **(complete)**.
- Health-check assessment consisting of scope definition, requirements definition, and cost and resource requirements for the remaining activity in the ECS and RTTT projects **(in process)**.
- EPICS system design and architecture independent assessment to ensure modular design best practices and compliance with federal SACWIS regulatory requirements **(target date: to be determined, dependent upon funding)**.
- Conduct a comprehensive "Make vs Buy" analysis for the remaining PS and JJS program areas to include such areas as,
    - Federal SACWIS funding opportunities and compliance criteria
    - Communication with Indiana and Federal partners to assess possibility of pursuing a waiver for a COTS solution in order to leverage federal dollars.
    - Identification and demonstration of potential vendor system solutions
    - Interviews and demonstration of currently in-production systems in states with similar structure and needs
    - Initial CYFD requirements definition, needs assessment, and gap analysis
    - Issue a Request for Information (RFI) to gain additional information for both vendor-based systems as well as from deliverable-based, software development firms.
    - Create a formal Make vs Buy document upon completion
- Formulate and issue a Request for Proposal (RFP) for the remaining PS and JJS components of the CYFD program areas that will serve as the replacement for the remaining FACTS components. This system will either be built within the current EPICS architecture or will have the ability to integrate with the current EPICS system. The subsequent contract will be structured with explicit deliverables within the statement of work (SOW) thereby shifting the majority of the risk for performance to the selected vendor. Additionally, investigate the viability of procuring the services of an external project management firm. **(target date: to be determined, dependent upon funding)**

- Create a PMO and IT Governance Framework for CYFD to include, but not limited to, the following elements,
    - IT Steering Committee for all IT projects
    - Standard methodologies for all IT projects, including but not limited to,
        - Project Planning Process
        - Requirements Gathering Process
        - Change Management Process
        - Risk Management Process
        - Project Monitoring and Control Process
        - Role, Responsibility, and Interaction Model for project managers, business analysts and software developers
        - Vendor Management
        - Production Support Model
    - Standard templates for key project areas, including but not limited to,
        - Project Management Plan
        - Project Charter
        - Project Scope Definition
        - Project Requirements and Functional Specifications
        - Project Schedule/Timeline
        - Project Requirements Traceability Matrix
        - Project Risk Register

  (In process)
- Training for IT staff and key CYFD program stakeholders in the areas of Project Management fundamentals and Agile Software Development **(target date: April 2016)**.
- Define an operational support transition plan and enhancement roadmap for the currently in-production EPICS components for Early Childhood Services (ECS), Race-to-the-Top (RTTT),contract administration, and other subsystems that were consolidated into EPICS **(target date: December 2016)**
- Continue with the procurement and implementation of a vendor-based software system to address the current and future needs of the Behavioral Health (BH) program area. This system will have the ability to integrate with EPICS and any future system for PS and JJS **(in process).**

We agree with and support the recommendations identified and included in the LFC report. Below is a table that outlines the specific LFC recommendations and the CYFD response:

LFC Recommendation	CYFD Response
Assess the project needs and requirements to determine how to best fully complete EPICS implementation	CYFD agrees with this recommendation and is implementing project management best practices for the current, in process EPICS projects as well as plan and issue an RFP for the remaining PS and JJS areas for either a vendor-based system or a software development vendor. The RFP and subsequent contract will stipulate explicit deliverable criteria within the statement of work.
Submit its Advanced Planning Document to Department of Health and Human Services Administration for Children and Families for approval to leverage federal funds for the Protective Services phase	CYFD agrees with this recommendation and will submit an Advanced Planning Document (APD) in conjunction with our RFP development. Additionally, CYFD is currently working with our SACWIS liaison to issue a modified APD for the current year to assist with funding related to the short-term solutions related to the FACTS system identified in this response. Additionally, CYFD is regularly meeting with our SACWIS liaison for guidance related to maximizing our federal funding opportunities and for general guidance related to our proposed RFP content and criteria.
Assess its project management structure, and for the	CYFD agrees with this recommendation and is in the

remaining project phases, consider contracting for a project management vendor	process of implementing project management best practices as identified in our response to the LFC report. CYFD will evaluate the contracting of a project management vendor for the RFP planning, composition, issuance and resulting project implementation work for the remaining components such as a PS and JJS system, integration activity, etc., budget permitting.
Define and document IT governance roles, responsibilities and processes	CYFD agrees with this recommendation and is in the process of implementing an IT Governance framework as identified in our response to the LFC report. The initial kick-off meeting for the IT Steering Committee meeting where we will overview the IT Governance framework is tentatively set for April 2016.
Develop a formal change control management plan	CYFD agrees with this recommendation. A formal change control management plan will be rolled out in conjunction with our IT Governance framework.
Transition from use of contractual IT staff to state employee IT application development positions as a cost savings measure	CYFD agrees with this recommendation. Progress on this recommendation may be impacted by the current budget environment, however, CYFD will develop a production support and enhancement roadmap that will maximize IT staff state employee involvement.
Evaluate the potential use of Casebook® and other states web-based systems	CYFD agrees with this recommendation. An evaluation and demonstration of the viability of the Casebook® system, other vendor-based systems, and other similar state systems will be a component of our "Make vs Buy" analysis identified in our response to the LFC report.
Assess its planning processes to define IT requirements in greater detail and consider issuing a request for proposals to complete the project using a design, development and implementation vendor. This step could lead to additional contracting options and create greater efficiencies in contractor selection and project management as well	CYFD agrees with this recommendation and has already taken steps to move forward in this direction. It is anticipated that an RFP-based strategy will be a primary component of our future request for C2 funding. Additionally, as a component of our proposed PMO structure, the planning process will be documented by explicit project deliverables.
Establish clear contract deliverables, to include specific functional and technical requirements	CYFD agrees with this recommendation and will ensure that the contract that results from the anticipated RFP for the remaining program area components includes specific and explicit function and technical criteria in a manner that is modeled by the examples identified in the LFC report.
Establish quantifiable contract performance measures for IT development to ensure contractors effectively performs the activities required to accomplish the deliverables and deliverables are completed accurately	CYFD agrees with this recommendation and will ensure that the contract that results from the anticipated RFP for the remaining program area components includes specific measurement and verification criteria related to the contract deliverables.
Develop a documented contract deliverable management process	CYFD agrees with this recommendation and is currently developing a process of verifying and formally documenting that all deliverable elements of a contact SOW were met for the invoiced period.
Track changes and revisions to its disaster recovery (DR) plan and maintain a change log and version control to ensure the disaster recovery plan is current. For example, indicate the version number and date of last update.	CYFD agrees with this recommendation. CYFD will update the disaster recovery (DR) plan to include a change log, version control, and date of last update as recommended in the LFC report. CYFD will also create a DR policy and related procedure to ensure that the DR plan is updated on at least an annual basis.
Ensure full testing of the disaster recovery plan is done at least annually, documented and team members	CYFD agrees with this recommendation. While CYFD has tested elements of our DR plan, CYFD has a target

receive training on the plan	date of September 2016 to perform a comprehensive fail-over to our DR system. CYFD will also ensure that the DR plan is tested on at least an annual basis to include documentation of the results of the test and training associated with the plan.
Develop a DR plan policy, the policy should state • **CYFD Information Technology Services Division will develop a comprehensive IT DR Plan.** • **A formal business impact analysis (BIA) and risk assessment will be undertaken in order to determine the requirements for the DR Plan.** • **The DR Plan will be periodically and completely tested in a simulated environment to ensure that it can be implemented in emergency situations and the management and staff understand how it is to be executed.** • **All employees must be made aware of the DR Plan and their own respective roles.** • **The DR Plan (including BIA and risk assessment) is to be kept up to date to take into account changing circumstances.** • **Ensure the findings from a comprehensive business impact analysis are documented in the DR Plan;** • **Review and update the business impact analysis to reflect any significant changes in business operations and lessons learned during the testing process; and** • **Include a detail inventory of replacement equipment in the plan to ensure replacement equipment may be order in a timely manner.**	CYFD agrees with this recommendation as will ensure that our current DR initiative includes a DR plan policy that incorporates all of the criteria identified in the recommendation and is in accordance with IT best practices.

We fully appreciate the LFC evaluation process as it surfaced and confirmed shortcomings within our IT structure that needed to be addressed. We view this as an opportunity to recalibrate our IT Department and implement established and proven best practice frameworks for IT governance, software development, project management, and disaster recovery. Additionally, we view the current budget environment as an opportunity to be resourceful and innovative and will not be deterred in our resolve to implement the proposed corrective actions and recommendations identified in the LFC report.

Sincerely,

Monique Jacobson

Cabinet Secretary, Children, Youth and Families Department

APPENDIX A

Evaluation Objectives.
Assess the status EPICS system implementation, including, planning, project management and oversight, budget allocation and expenditures and interfaces with other systems.

Scope and Methodology.

- Reviewed applicable laws and regulations.
- Reviewed prior LFC reports.
- Reviewed CYFD's IT plans for FY12 through FY17.
- Reviewed the department's IT budget requests and business cases for EPICS.
- Reviewed available project management plans.
- Reviewed available project status reports submitted to the Department of Information Technology.
- Reviewed available independent verification and validation reports
- Conducted interviews with the Children, Youth and Families Department's Deputy Secretary, the department's Chief Information Officer, and other key project personnel.
- Reviewed available contracts, budgets and financial data.

Evaluation Team.
Brenda Fresquez, Program Evaluator

Authority for Evaluation. LFC is authorized under the provisions of Section 2-5-3 NMSA 1978 to examine laws governing the finances and operations of departments, agencies, and institutions of New Mexico and all of its political subdivisions; the effects of laws on the proper functioning of these governmental units; and the policies and costs. LFC is also authorized to make recommendations for change to the Legislature. In furtherance of its statutory responsibility, LFC may conduct inquiries into specific transactions affecting the operating policies and cost of governmental units and their compliance with state laws.

Exit Conferences. The contents of this report were discussed with representatives from the Children, Youth and Families Department during the exit conference on March 14, 2016.

Report Distribution. This report is intended for the information of the Office of the Governor; the Children, Youth and Families Department; Office of the State Auditor; and the Legislative Finance Committee. This restriction is not intended to limit distribution of this report, which is a matter of public record.

Charles Sallee
Deputy Director for Program Evaluation

APPENDIX B

Detail Summary of EPICS Project Funding
(in thousands)

Fiscal Year	Legislation	Funding			Purpose
		State	Federal	Total	
2012	USDA State Administrative Expense (SAE), Title 7, Ch. II - Food and Service Nutrition Service, Part 226, Child and Adult Care Food Program		$450.0		Phase 1 - To develop and implement the provider management component of the enterprise provided information constituent services system (EPICS).
	DHHS, Federal Child Care Development Funds (CCDF) 45 CFR Parts 98 an 99		$530.1		
	ITD General Fund	$172.5		$1,152.6	
2013	Laws 2012, Chapter 19, Section 7, (17)	$1,200.0		$1,200.0	Phase 2 - To develop and implement the client management component of the EPICS system.
2014	Laws 2013, Chapter 227, Section 7, (18)	$3,454.2		$3,454.2	Phase 3 - To develop and implement the service management component of the EPICS system.
2014	Race to the Top Early Learning Challenge Grant CFDA No. 84.412.A Funded by US Dept. of Education		$4,800.0	$4,800.0	Phase 3 - Race to the Top - for Early Childhood Services Division of CYFD to incorporate early learning programs in EPICS.
2014	Federal Child Care Development Funds (CCDF)		$927.3	$927.3	Phase 3 - Race to the Top - for Early Childhood Services Division of CYFD to incorporate early learning programs in EPICS system.
2016	USDA, SAE		$100.0	$100.0	Phase 3 - Summer Foods Expansion
2016	ECS General Fund (06700)	$132.8		$132.8	
2016	Laws 2015, Chapter 101, Section 7, (21)	$2,708.5		$2,708.5	Phase 4 - To develop and implement the juvenile justice component of the EPICS system.
Total		**$7,668.0**	**$6,807.4**	**$14,475.4**	

Source: General Appropriation Acts and EPICS Master Project Schedule

EPICS Phase descriptions:

- Phase 1 – Provider Management (FY12 - FY13) will replace the Children and Adult Care Food Program (CACFP) homes and centers system and the Background Check (BCS) system with a web based solution. The CACFP system and BCS are the entry point into CYFD's provider and client services.
- Phase 2 – Client Management (FY13 - FY14) component is the next logical step as clients are foundational to all CYFD business services. Client Management is a fully functional web-interface that program staff can use to document client information. The information will be linked to data in the legacy system FACTS to maintain centralized data.
- Phase 3 – Service Management (FY14 - FY15) building provider and client services in the first years provides the business foundation required for all other business components that follow. Phase 3 – Service Management will continue to build the remaining non-FACTS services, such as Agency Reporting Tracking Enterprise System (ARTES) and Screening, Admission, Releases Applications (SARA).
- Phase 3 – Race to the Top (FY14 - FY17) – The Race to the Top (RTT) Early Learning Challenge Fund grant provides federal funding to the Early Childhood Services Division of CYFD to incorporate early learning programs in EPICS. The RTT EPICS Data Systems Project is $4.8 million.
- Phase 4 – Juvenile Justice will build the FACTS Juvenile Justice services, such as Chronological Offense, Community Supervision, Detention Screening and Offense History.