

Information Technology Capital Investment Program
Project Status Report

To: Information Technology Strategy and Investment Committee
John Vittner, Office of Policy and Management

From: Michael Zimet, Director, Information Technology, OEC

Email: michael.zimet@ct.gov

Agency: Office of Early Childhood

Project: Office of Early Childhood - ECIS

Project Manager: Michael Zimet, Director, Information Technology

Reporting Period: Project Inception through 12/31/2019

Total Funds Requested: \$6,000,000

Total Funds Allotted to Agency: \$6,000,000

Accumulative Total Capital Fund Expenditures to Date: \$5,811,805

Brief Project Description/Summary:

The design of the Early Childhood Information System (ECIS) was to include two major components: A Transactional Data Collection System and a Database, that when extended, can function as a Data Warehouse for reporting across OEC's four (4) program areas (Early Care and Education (ECE), Home Visiting (HV), Birth to Three (B23), Workforce Professional Registry (WPR)). This will eventually allow the OEC to not only share and aggregate data across divisions, but also across other state agencies when necessary.

ECIS uses modern software and development techniques for building new systems and applications. The data once collected, is stored in the DAS BEST data center for security and backup in a manner that will adhere to FERPA and HIPAA regulations.

The Reporting component of the system will assist administrators to make timely assessments of their programs to improve outcomes and track quality, and meet state and federal reporting requirements

Summary of Progress Achieved to Date:

The transactional component known as the Early Childhood Education (ECE) has been running successfully in production since February 2016. We continue to work through minor production issues with our users to answer the questions/concerns. A complex ECE Batch Upload application has been built to allow large school districts to enter bulk child data from their various systems into ECE. It provides for online edit capabilities on individual records, similar to ECE, for enrolling children, searching or creating SASIDs. An updated ECE module has been developed that provides greater reporting capabilities and a smoother user experience based on user feedback and internal testing. This has been deployed and user feedback has been very positive.

Statistical reports are another module being built for ECE. These statistical reports will allow OEC Staff and Agency Staff the ability to gain insights into enrollment data. A robust and flexible reporting interface allows users to select multiple measures to be chosen to tailor the reports to the user's needs. Based on OEC Staff recommendations, 5 initial statistical reports have been developed and are in production and available to users of the ECE system. An additional 9 reports have been identified by OEC Staff and Agency Staff for development. These reports are anticipated to be in production by April 2019.

Another phase of development to the ECE module is scheduled to support the new OEC Application Portal and the new Security Model being adopted by DAS/BEST (ADFS). This release is scheduled to start development February 2019 and is scheduled for release into production by June 2019.

The Home Visiting Project is designed to capture demographics, education, income, health, household information, screenings, and follow up referrals for families and children up to eight years old. The project has been broken into three deliverables. The first deliverable includes Child, Family, and Caregiver information, incorporating historical MIECHV data (from vendor) case management and the Summary Table Report. This phase will be delivered in early June 2017. Tentative plans are for Release 2 to be completed by the end of August 2017 and Release 3 for December 2017. Release 2 was moved into production in September of 2017, this release included Federal reporting (Forms 1, and 4). Release 3 is scheduled for 2/23/2018 and includes new input fields and reports to support the new Rate Card feature. Release 3 will also see minor adjustments to the user experience based on user feedback. Release 3 was moved into production November 2018. Release 4 is scheduled for a 4/1/2019 release date that will have batch upload functionality to support data input from various external systems. Release 5 contains alerts, internal reports and redesign of some screens; based on early user feedback.

Matching Engine Project: Data from the Connecticut e-License database will be extracted, examined, and new or changed license information will be automatically updated in the OEC Early Childhood Professional Registry with changes passed back to the CCEI Early Childhood Professional Registry (current vendor). NAEYC accreditation program renewals will be automatically updated in the OEC Early Childhood Professional Registry and passed back to the CCEI Early Childhood Professional Registry (current vendor). Notification will be provided to the OEC staff of new accreditation or revoked/lapsed programs that need further examination and confirmation. The project is in production, but additional work is necessary to finalize integration with other internal systems. This will be on-going work as we bring into the ECIS portal other systems.

OEC Data Warehouse: Phase one has begun on this project. Infrastructure has been put into place to support the various functions of Master Data Management. Phase 2 of development of the project started in July 2018. This includes initial discovery of internal and external data sources. Phase 2 has been completed. Phase 3 of the project is for development of the ETL processes which include consumption and transformation of external sources, including data quality and integrity. Phase 3 was completed in December 2018. Phase 4 is the designing of the analytical and warehouse data structures and is in progress with an anticipated completion date of 2/1/2019. Phase 5 will be targeting data access via OEC Staff to provide analytical insights through different mechanisms. Phase 5 will be completed by June 2019. Additional phases will be necessary to refine, and expand the analytical and reporting capabilities.

The OEC's Data Warehouse goal is to bring all existing OEC application data together and planned new components' data to service internal and external needs of the agency. Data is structured to conform to the Common Educational Data Standards (CEDS) in the warehouse. This project has been slowed due to changing priorities with the ECE and Home Visiting applications.

OEC Portal: Work on an OEC portal that will manage user roles/permissions, modules, agencies, and user requests has started. User Acceptance Testing on currently developed pieces has been completed and discussions of next steps are under way. Integration of the Matching Engine into the portal has been completed and tested. Additional functionality has been requested and will be delivered in September 2018. Integration into SIM/SAM will begin in August 2018. Due to changes to the Security Model DAS/BEST is moving towards, we will now be leveraging ADFS instead of SIM/SAM. This Phase has begun, with an anticipated completion date of 2/8/2019. Phase 2 will consist of deployment, code testing, security testing, and user migration (in test, not production). Phase 2 is anticipated to start in February 2019, and should be completed by 4/5/2019.

The Child Attendance Project started later than initially planned. The project is expected to span at least four months once requirements have been finalized. An attendance module is being built to enhance the ECE and Home Visiting applications that will provide the ability to accurately track enrollment and mobility down to the agency and room children are receiving services. This module is anticipated to go live by June 2019.

Over the past year (2019) the OEC has continued to modify and enhance the ECIS platform with features such as Rate Card, enhanced reporting and planning of 5 new models for the Home Visiting module. We have also used OEC internal resources and funding to add additional enhancements to the ECIS ECE module which allows Child Care facilities to more easily enter their child data and submit their required reporting to the OEC with just a button click.

We have designed and commenced development on our new Single Sign-on Identity Server allowing the OEC to more easily create a Master Data Index across divisional data and have begun the foundation of tying ECIS into other agency systems such as Background Checks (BCIS) and e-License.

While the original plan for the use of bond funds included broader development of the four components, the agency has chosen to focus greater efforts on the two components discussed above due to agency and technology capacity. In addition, changing agency leadership has impacted the broad vision for the project.

Current agency leadership has a new set of digital and data priorities and the technology and research leadership is working to meet those expectations. The work supported by these bond funds has put the agency in a solid state and we are dedicating new funds to continue development and enhancement of this work.

Issues and Risks:

OEC continues to work towards total separation from SDE; mostly with the assistance of DAS-BEST. Software, hardware and support issues are being worked out.

Improvements have been made in getting work completed over the last year. However, a great deal of needed projects are in the works over the next year which will place a high demand on business participation in projects while performing their current jobs. Understanding the need to define what the business wants and getting that down on paper will be key to the IT Team meeting its goals. It is difficult to gather requirements while the business staff perform their daily activities. It is more of a learning experience for all concerned as overall priorities are established.

New Virtual Machines have been built that will provide a new Application Hosting environment. Work has begun to migrate off the existing environment, though due to changes in the DAS/BEST security model, delays have pushed back this integration. We anticipate completing this move for all ECIS modules and applications by March 2020 due to delays in our infrastructure buildout.

Next Steps & Project Milestones:

1. OEC Data Warehouse: This project is scheduled to be completed by December 2019.
2. Home Visiting-Tentative plans are Release 5 contains alerts, internal reports and re-design of some screens; based on early user feedback.
3. Home Visiting Rate Card and Reporting went live early fall 2019
4. ECE Reporter Module went live for limited users in Dec 2019 and is being expanded to cover all programs
5. The OEC Identity Server is almost complete and is expected to go into production 2nd Qtr 2020.