Information Technology Capital Investment Program

Project Status Report

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

From: Dane Silcox

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Agency: Department of Emergency Services and Public Protection
Project: Criminal Identification and History Repository Modernization

Project Manager: Al Johnson

Reporting Period: Project Inception through 06/30/2020

Total Funds Requested: $19,269,602

Total Funds Allotted to Agency: $19,269,602

Accumulative Total Capital Fund Expenditures to Date: $9,809,448

Brief Project Description/Summary:
The Automatic Fingerprint Identification System (AFIS) upgrade project has been combined with the Master Name Index and Computerized Criminal History (MNI-CCH) modernization project into one project that will replace both systems with an integrated solution. These two systems form the underlying infrastructure for the state's criminal history repository. The AFIS is a 12 year old vendor based fingerprint identification system provided by 3M Cogent and is currently out of date, difficult to maintain, and subject to numerous outages and bugs. The MNI-CCH is a poorly documented 35 to 40 year old criminal history system developed in-house using older outdated software language that is no longer supported by the agency and generally not supported in the private sector. The single maintenance person for this system is eligible for retirement. (Retired effective January 1, 2018)

Summary of Progress Achieved to Date:

07/16/2020

The replacement and modernization of the AFIS and MNI/CCH systems continue to move forward and have reached the fifth contractual milestone.

Milestone 2 signoff achieved May 17, 2019

Milestone 3 signoff achieved August 29, 2019

Milestone 3a signoff achieved December 6, 2019

Milestone 3b signoff achieved April 27, 2020

Milestone 4 signoff achieved June 26, 2020

There have been several issues that will delay the full implementation until February 2021. The issues have been mitigated and previously delayed milestones have been achieved. COVID19 has moved project meetings completely an online format. At this time we do not expect an impact to schedule related to the pandemic. In the next 3 to 4 months the project will begin LiveScan deployment state-wide, will complete Factory Acceptance Testing and move into System User Acceptance Testing.

Major Highlights

Efforts to ensure criminal history quality and synchronization with the FBI will continue through complete migration t the new criminal history system

Completed the acquisition of state network redundancy software and hardware to ensure secure redundant network connectivity to the cloud environment

1/14/2020 Status Report

On February 4, 2019, the project with Idemia Identity and Security kicked off. The teams have been working through the milestones and have made good progress as follows:

1. Milestone 2 signoff achieved on May 17, 2019

2. Milestone 3 signoff achieved on August 29, 2019

3. Milestone 3a signoff achieved on December 6, 2019

At this time, the project is three months behind the documentation aspect of the project. We are working with the vendor to ensure any delays are mitigated ensuring project success. Efforts to date have produced hundreds of page of requirements and system design documentation.

Major Highlights

- Finalized communications with the regional Connecticut Police Chief Association (CPCA)

- Reached agreement with Gemalto Cogent to deliver the AFIS system data, sample data analyzed, and first extract o entire database has been delivered to Idemia for review

- On December 16, 2019 28,176 batch DRS messages were processed through Triple I production with minimal issues related to timing. The team is planning to process both DRS and MRS batch messages in the first quarter of 2020 reaching synchronization.

- Finalized changes to the 2017 NCHIP to utilize funding for network equipment and additional support to build out network for communication with the cloud environment

- Reached agreement with court operations on methodology to stand-up interface for all court data

- Plans have been formulated to establish LiveScan devices in the courts throughout the state to eliminate hard card fingerprint rolling for warranted arrests served at courts

- Efforts to improve interfaces with police department report management systems are underway. These improvements are expected to improve data integrity and linkage with arrest and dispositions.

- Efforts continue to ensure criminal history data is up-to-date and ready for conversion to the new systems

07/15/2019 Status Report

On February 4, 2019, the project with Idemia Identity and Security kicked off with a presentation to the Commissione Department of Emergency Services and Public Protection, the Colonel of State Police, State Police Office of Administrative Services, Command Staff and project team staff. Idemia provided and overview of the project timeline high level overview of requirement, team onboarding, system and requirements definition. This was the first mileso outline in the contract executed on December 20, 2018 and represents the beginning of the technical effort to modernize and replace the Identification and Criminal History repository for the state of Connecticut. Over the past several months, the project team has been working through the second and third milestones. On May 17, 2019, the second milestone was signed-off by project staff with work continuing towards the third milestone and an expected

completion by the end of July 2019. The expected project completion remains on schedule for the last quarter of 2020 as outlined in the contract. See Milestone Schedule below.

- Multiple weeks of requirements and documentation review with project documentation deliverables for Milestone 2 as follows

    - Requirements Definition Document – (RDD) – SABIS

- Requirements Definition Document – (RDD) – LiveScan

    - Configuration Rules (MBIS System Administration Guide)

    - LiveScan Implementation Plan

- Agency Maintenance Requirements Definition Document

    - Reference Table Maintenance

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    Statute Maintenance Requirements

    - COLLECT Requirement Definition Documents

- Attended multiple regional Connecticut Police Chief Association (CPCA) meetings to communicate upcoming changes, provide detailed information and request their participation in project based police department surveys. Currently 44% of surveys sent out have been completed

-Surveys will enable the preparation for the LiveScan replacement and network activities associated with arrest submission into the new system

- During April the project team tested batch record updates with the FBI in order to correct multiple records in the Triple I and correct long-standing synchronization issues. Completion of the synchronization will aid in the project goal to be National Fingerprint File compliant with the implementation at the end of 2020

-During May, the scope of work agreement with Gmalto Cogent was signed. Backgound investigations have been completed on Gemalto staff in advance of work to extract fingerprint data and images. Meeting are underway to extract test records for quality control purposes in advance of the first complete extraction

- Idemia Identity and Security has provided the NAS drive to store extracted data fromGemalto Cogent

- Efforts continue to ensure criminal history data is up-to-date and ready for conversion to the new systems

12/31/2018 Status Report

On December 20, 2018 the contract between the State of Connecticut and Idemia Identity and Security USA, LLC was executed moving the replacment and modernization of the Connecticut Criminal Identification and History Repository project to the next stage. This contract to develop and maintain the modernized repository will transform systems and operations for The Department of Emergency Services and Public Protection, Division of State Police. Over the next two years the project will deliver new systems and operational processes that will meet the objectives outlined in the investment brief.

Currently efforts continue to analyze and clean the MNI-CCH, AFIS and FBI data by restoring missing records, correcting invalid values and removing unwanted data in preparation for the implementation of a new integrated SABIS and MNI-CCH system that will achieve NFF compliance.
MNI-CCH Data Cleanup:
Completed since last status:
-Disclosable / Non-disclosable RAP identification process (Resynch) – The batch process that determines whether charges are disclosable or non-disclosable on a RAP sheet was not processing the correct population of ID_SPBIs thereby forcing SPBI to manually initiate this process for every RAP sheet that was worked. The same 75,000 ID_SPBI were processed every night. A change was made to use a timestamp to invoke the Resynch for every ID_SPBI that has been 'touched' since the last run of the process. For the first run, all 1,229,356 criminal ID_SPBIs were processed correcting every criminal ID_SPBI on MNI-CCH. Going forward only those ID_SPBI with modification will be processed (less than 1,000 nightly). SPBI no longer has to run this process manually.
Working:
-Name/DOB Criminal History checks using SQL Server – Infrastructure built, file requirements established, search criteria implemented:
o Department of Education – Testing - Ran 3 files in parallel mode with SPBI
o Department of Consumer Protection – Awaiting Test file, have not heard back

- FBI Data Cleanup and Analysis – Categorized every PERSON in MNI-CCH
o Reportable to FBI – identified those that are correctly reported and those that are not but should be
o Non-Reportable to FBI – identified those that are correct and those that need to be expunged from FBI
-Judicial Data Errors – Working with Larry D'Orsi at Judicial Operations
o Meeting set up to establish error reporting process for CRMVS input errors

Complete:
- Gemalto AFIS Production Problem: AFIS demographic data (SPBI ID, UAR ID, Arrest Date, Name, DOB, gender, etc.) is sent from the Gemalto AFIS system to the MNI-CCH system using a message queue (MQ) process which is read and processed by MNI-CCH online programs for both criminal and applicant identifications. This process fails on occasion causing dropped criminal and applicant records from reaching MNI-CCH
 Estimated Totals for 2018 (Primarily due to outages in 10/2018 and 5/2018)
o 1247 Criminal Arrest Identification Records dropped
o 395 New Applicants Identification Records dropped
o Unknown - Applicant Identification records dropped where Applicant already exists in MNI-CCH
Remediation Complete:
o Re-process dockets that fall into Suspense and match to Gemalto AFIS for fingerprint Identification
o Add skeleton Applicant records to MNI-CCH Person and Alias tables for missing applicants
o SPBI Manual Effort –
 Correct the Criminal arrests that did not get 'hooked' to the FBI
 - Add missing Applicant data to skeleton MNI-CCH Applicants
 - Productionized 12 SQL Server processes to clean data (arrest dates, duplicate dockets, fingerprint support flag) and migrate dockets from Suspense and Error Extract to Arrest. Migrate ~500 dockets weekly to Arrest tables

- Missing Dockets: Successfully recovered 56,823 missing dockets (35,700 CR and 21,123 MV) from Judicial dating back to January 2000.

Migrated from Suspense to Arrest - 143,817 Criminal and Motor Vehicle dockets were successfully moved from MNI-CCH Error and Suspense Tables to the MNI-CCH Arrest Table.

o 8,600 New PERSON records

o 143, 817 New ARREST Dockets

o 306,000 New Offense records

Corrected Invalid Fingerprint Supported Flag – Successfully updated 101,463 dockets on MNI-CCH Arrest table that had the Fingerprint Supported flag set to 'N' that should be set to 'Y' based on matches to AFIS. These dockets will now be sent on an Out of State and Federal RAP sheets.

Suspense Cleanup: Removed 90, 689 MV Dockets from Suspense that are not no longer accepted by SPBI

Corrected 276,012 Person related flags; Family Violence, Alcohol, Hazardous Materials, Narcotics, CDL, Commercial Vehicle

o Corrected 11,431 Suspense Dockets with missing data. (Arraignment date, Narcotics, Alcohol, Hazardous Material, Commercial Vehicle, CDL flags, Detained Surety, Arresting Officer).

o Dupe UARs – Corrected 180 dockets assigned to the incorrect ID_SPBI

- On-Going:
- Correct Incorrect Arrest Date
- Eliminate Duplicate Dockets
- Correct Fingerprint supported flag
- Suspense and Error Extract migration to ARREST
- Restore applicant ID_SPBIs to MNI-CCH that are dropped due to GEMALTO QM failures
- Report on Error Extract Dockets

07/30/2018 Status Update

Contractual Document

Status – Contract signature is pending completion of contractual documents by the Procurement Office of DAS

- **Terms and Conditions Documents**

  - Documentation review began during the last several months and is close to being finalized

- **Exhibits**

  - Exhibit documents are still under review by the Attorney General

  - Documents cannot be reviewed by agency and vendor until AG review is completed

Project Advance Work

While advance work can be completed in anticipation of the contract execution the major efforts related to the project will not be started until the contract is signed

Interface Development

- Applicant Fingerprints process review and development of business rules 85% complete

  - Remaining: Identify and document business rules and screen data elements

  - Complete documentation of LiveScan screen data elements.

- Criminal Fingerprints process and business rules is 75% complete
  - Remaining: Identify and document business and screen data elements

- Collect System In-state Messaging process and documentation 25% complete
  - Remaining: Prepare ICD with messaging rules, review and confirm process with SPBI business unit

- Collect System - FBI Messaging (NLETS, NCIC, Triple I) 85% complete
  - Remaining: Review and confirm process with SPBI business unit

- Connecticut Information Sharing System (CISS) interface status is preliminary

- Judicial Criminal Motor Vehicle System (CRMVS) review and interface development is 90% complete
  - Remaining: Work with the vendor to verify the data elements in the ICD

- Rap Sheets documentation and business rules is 25% complete
  - Remaining: Complete documentation of all data elements and business rules surrounding existing Rap Sheets

- Offender Based Tracking System (OBTS) data analysis – Not started

- Deadly Weapon Offender Registry Unit (DWOR) – Not started

- Report Management System – Not started

- Sex Offender Registry (SOR) – Not started

MNI-CCH Data Cleanup: Ongoing effort to prepare the criminal history repository for conversion continues.

Recently Completed:

- **6/23/2018 – Corrected 101,463 Invalid Fingerprint Supported Flag** – Fixed Fingerprint Supported flags were set to 'N' and should have set to 'Y' based on matches to AFIS. These dockets will now be sent on an Out of State and Federal RAP sheets.

- **Migrated Dockets from MNI-CCH Suspense to Arrest**

  - **7/21/2018 –** Plan to bring over remaining non-fingerprint supported dockets (Summons, Tickets)

  - **6/30/2018 – 4,000** - Non-fingerprint supported dockets related to the 8,600 new PERSON records added during the migration on 6/9

  - **6/9/2018 - 143,817** Criminal and Motor Vehicle dockets were successfully moved from MNI-CCH Error and Suspense Tables to the MNI-CCH Arrest Table.

- **8,600 New PERSON records**

- **143, 817 New ARREST Dockets**

- **306,000 New Offense records**

Working:

- o **Missing UARs in MNI-CCH** – Identified **8,900** fingerprint supported dockets in MNI-CCH that do not have a UAR assigned in the MNI ARREST_UAR table. These UARs can be identified in Judicial.

- o **FBI Message Database** – Developing database to hold FBI messages that cause 300-400 error notifications per week to be printed in SPBI and worked manually. These NOT ON FILE errors are due to timing issues related to when the ID is created in AFIS and sent to the FBI and when it is established in MNI-CCH.

- o **Dockets Assigned to the Incorrect Person** - UAR issues at the Arresting Agencies and Judicial have caused hundreds of dockets to be assigned to the wrong person. Developing an automated means of fixing dockets.

- o **Invalid Conversion ID_SPBIs** –Identified 400 ID_SPBIs (range 20000000-29999999) in MNI-CCH that were created during the 2004 AFIS conversion. Must be changed to valid ID_SPBIs. – Fingerprint and SPBI units and SPBI working on manually

Complete:

- o **Missing Dockets:** Successfully recovered **56,823** missing dockets (35,700 CR and 21,123 MV) from Judicial dating back to January 2000.

- o **Suspense Cleanup:** Removed **90, 689** MV Dockets from Suspense that are not no longer accepted by SPBI

- o Corrected **276,012** Person related flags: Family Violence, Alcohol , Hazardous Materials, Narcotics, CDL, Commercial Vehicle

- o **Corrected 11,431 Suspense Dockets with missing data**. (Arraignment date, Narcotics, Alcohol, Hazardous Material, Commercial Vehicle, CDL flags, Detained Surety, Arresting Officer).

- o **Dupe UARs** – Corrected 180 dockets assigned to the incorrect ID_SPBI

On-Going:

- • **Incorrect Arrest Date –** Corrected the arrest date on **500 dockets** based on updates made in Judicial that were never updated in MNI-CCH. Will continue to run this process

- • **Duplicate Dockets:** Correct MNI-CCH dockets where more than one version of a docket exists on multiple MNI-CCH tables. (i.e. 'T' docket exists in ARREST and '0' Docket exists in Suspense for the same base docket ID). Continue to run this process to clean these dockets.

01/11/2018 Status Update

1) Contractual Document Development

- • Technical attachment review with MorphoTrak was finalized by the first week of January 2018

- • The agency attorney assigned to assist DAS procurement with the Terms and Conditions document left the agency in early December to take an attorney position with DAS Procurement. The first assignment is the completion and negotiation of overall contract terms and conditions. These documents are still outstanding and will require review and finalization with MorphoTrak

- • The development and implementation timeline is estimated to take 24 months from contract signature.

2) Resources

- • A COBOL contractor was brought on in October to back-up the single maintenance individual who announced his retirement in November effective January 1, 2018.

- • The contractor left the agency on December 26th. A replacement has been identified and a start date of February 5th is targeted

- • Two additional resources dedicated to the project have been contractually hired utilizing NCHIP funds. These resources are dedicated to significant aspects of the project included in next steps below.

3) Data Cleanup Effort Summary

- • **Established a SQL Server test environment and developed programs/ procedures for data cleanup:**

- o *Established a Development* environment in SQL Server which includes production data from MNI-CCH, Judicial, AFIS, FBI.

- o Developed daily backup and load procedures for each database

- o Developed an Audit Framework for backup / recovery of data fixes.

- o Developed Programs and procedures for

  - ▪ Deleting Incorrect dockets on MNI-CCH

  - ▪ Adding Dockets t from Judicial to MNI-CCH

  - ▪ Pushing these changes to MNI-CCH Production DB2

  - ▪ Cleaning up Suspense and Error tables by removing MV dockets not accepted by SPBI and identifying an ID_SPBI for those dockets that can be attached on the ARREST table

- o Created **27** lookup table – (Statutes, Verdicts, Agency Codes, City Codes etc.)

- • **Developed Operational Reports to provide critical access to Judicial, MNI-CCH and AFIS data for technical and business data verification.**

- o ReconData Report – Summary Report of docket counts on Judicial and MNI-CCH
- o Reconciliation Report – Judicial and MNI-CCH Report by Docket
  - Arrest, Charges, AFIS, Statute sub reports
- o Most Serious Crimes Report – Identifies most serious crimes in Suspense and Error Extract
- o ShowPerson Report – Shows Person data by ID_SPBI on Judicial, MNI-CCH, AFIS
- o 27 MNI-CCH LookUp Tables Report
- o Data Dictionary – Identified the definition, source, target and Judicial mapping for **571** data element on **23** MNI-CCH tables**.**

- **MNI-CCH Data Cleanup:**
  - o **Missing Dockets** - Recovered MNI-CCH Production dockets. Restored data from Judicial.
    - Criminal Dockets – Includes all criminal dockets dropped between 01-01-2004 and 10-27-2017.
    - Motor Vehicle Dockets (Awaiting fix to ReSync program to continue with remaining missing MV dockets)
  - o **Dupe UARs** - Corrected dockets matched to the incorrect ID_SPBI due to duplicate UARs, Judicial Typos and inefficiencies in current Batch programs. Continue to identify and correct these errors.
  - o **Suspense Cleanup** –
    - Identified dockets that can be moved from Suspense table to ARREST using Name, Date of Birth and license no. match to ARREST table.
      - o Correct MNI-CCH dockets where more than one version of a docket exists on multiple MNI-CCH tables. (i.e. 'T' docket exists in ARREST and '0' Docket exists in Suspense for the same base docket ID)
      - o Successfully removed non-criminal Dockets from Suspense
      - o Corrected invalid Flags in MNI-CCH by mapping data to Judicial
- **MNI-CCH Data Element Analysis -** Completed Data analysis of all data elements on the MNI-CCH tables, identified valid and invalid values and documented issues in issue log.
  - **Judicial Data Clean up:**
  - o **Firm Names** - Identified **420** invalid firm names on Judicial which have been corrected by the Judicial Department
  - o Identified Arrests where Date of Offense is greater than Verdict Date. Judicial is correcting problem.
  - **AFIS Data Cleanup:**
  - o Identified individuals with multiple Criminal SIDs assigned to them. Fingerprinting Department is addressing issue
  - o Identified FBI IDs with multiple criminal SIDs assigned to them. Fingerprinting Department is addressing issue.
  - **Production Fixes:**
  - o Corrected problem with ReSync program that determines whether a charge should be put on the RAP Sheet. (Production 805 Abend)
  - o Correcting Statutes in production programs so Motor Vehicle dockets and offenses are processed.

8/18/2017 Status Update :

1) Due to resource limitations contract development has been delayed. Our previous anticipated contractual signing for the summer will extend into the Fall of 2017 which will extend the completion of the project into late Fall 2019 or possibly early 2020. We have assigned the Project Manager of the project to the contract development team to help with the contractual documents. Issues related to attorney assignment will slow the process due to familiarity with the project. We have been working with the contractual department since the beginning of 2016.

2) The existing CCH maintenance resource identified as a single point of failure for our production maintenance may be retiring in the immediate future. We are looking to find a back-up COBOL resource.

3) The data clean-up team discovered that 6 arrest flags have not been updated correctly and 2 of these flags, the Family Violence and Alcohol flags, were not updated correctly between 01/01/2010 and 12/31/2014. On 7/22/2017 a production fix was completed correcting these issue.

4) The data cleanup team is developing a process that will be used as one of the foundations of the data cleanup work. This process will pull data from Judicial and populate the Arrest or Suspense tables. The process will have multiple front ends. One of these pieces will identify mismatches between MNI-CCH and Judicial and create a driver table of missing

Issues and Risks:

Emergency status granted by DAS procurement due to significant ongoing system and vendor issues with the existing out-of-date AFIS system and ongoing data integrity and maintenance issues with the legacy in-house MNI-CCH system

The delays in finalization and execution of the contract has increased the risk associated with the project. The contract was signed in December 2018, 18 months from the originally projected completion.

Obtaining Gemalto Cogent data in a timely manner for conversion to the new system

Next Steps & Project Milestones:

1) Meet scheduled deliverables as outlined in the contract

2) Continue to identify and resolve data integrity issues in advance of migration and conversion to new systems

3) Prepare DESPP network to meet connectivity requirements of project

4) The following project milestones were established in Exhibit 3 of the contract delivering the new system. Estimates have changed based on achievement of milestones

		Estimate	Actual
Project Kickoff Meeting		January 31, 2019	February 4, 2019
System Requirements Review		March 31, 2019	May 17, 2019
System Design/Requirements Review	(Phase 1)	May 31, 2019	August 29, 2019
System Design/Requirements Review	(Phase 2)	July 31, 2019	November 15, 2019
System Design/Requirements Review	(Phase 3)	February 29, 2019	April 27, 2020
Product Test Readiness		March 31, 2020	June 26, 2020
Pre-Ship Review		August 31, 2020	
System User Acceptance Readiness		September 30, 2020	
System User Acceptance Review		November 30, 2020	
Training Readiness Review		December 31, 2020	
Operational Readiness Review		January 31, 2021	
Final Acceptance Review		January 31, 2021	
Go-Live		February 20, 2021	
Project Management Review		April 30, 2021	