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

Email: dane.silcox@ct.gov

Agency: Department of Emergency Services and Public Protection

Project: Criminal Identification and History Repository Modernization

Project Manager: Al Johnson

Reporting Period: Project Inception through 12/31/2018

Total Funds Requested: \$20,612,480

Total Funds Allotted to Agency: \$9,894,093

Accumulative Total Capital Fund Expenditures to Date: \$450,458

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 The AFIS is a 12 year old vendor based fingerprint identification system provided by 3M Cogent and is currently out of date, difficult to maintain, and subject to numerous outages and bugs. The MNI-CCH is a poorly documented 35 to 40 year old criminal history system developed in-house using older outdated software language that is no longer supported by the agency and generally not supported in the private sector.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:

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 Repositor project to the next stage. This contract to develop and maintain the modernized repository will transform systems ai operations for The Department of Emergency Services and Public Protection, Division of State Police. Over the next t years the project will deliver new systems and operational processes that will meet the objectives outlined in the nvestment brief.

Currently efforts continue to analyze and clean the MNI-CCH, AFIS and FBI data by restoring missing records, correcti invalid values and removing unwanted data in preparation for the implementation of a new integrated SABIS and MI 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_SPB vere processed every night. A change was made to use a timestamp to invoke the Resynch for every ID_SPBI that ha 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 processe (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
- 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

Gemalto AFIS Production Problem: AFIS demographic data (SPBI ID, UAR ID, Arrest Date, Name, DOB, gender, etc.) ent 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:
- 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 nigrate dockets from Suspense and Error Extract to Arrest. Migrate ~500 dockets weekly to Arrest table
- Missing Dockets: Successfully recovered 56,823 missing dockets (35,700 CR and 21,123 MV) from Judicial dating b

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

o 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

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 all Out of State and Federal RAP sheets.
- o Migrated Dockets from MNI-CCH Suspense to Arrest
 - o **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:

- 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.
- 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.
- 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.
- Invalid Conversion ID_SPBIs -Identified 400 ID_SPBIs (range 20000000-2999999) 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:

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

- 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:

- Identified individuals with multiple Criminal SIDs assigned to them. Fingerprinting Department is addressing issue
- Identified FBI IDs with multiple criminal SIDs assigned to them. Fingerprinting Department is addressing issue.

Production Fixes:

- Corrected problem with ReSync program that determines whether a charge should be put on the RAP Sheet. (Production 805 Abend)
- $\circ \ \ \text{Correcting Statutes in production programs so Motor Vehicle dockets and offenses are processed}.$

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.
- 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 dockets that will then feed the data cleanup process. Another of the front end pieces will be a process that will delete existing data from the Suspense tables, utilize the mismatch process to identify missing dockets and then use the data cleanup process to pull the missing data from Judicial to Arrest.
- 5) The existing AFIS system has an out of warranty SAN server that is nearing capacity and well beyond its reliable service life. This server holds the software developed for the DPH long-term-care program and is integral to that programs continued success. In addition this server contains a complete copy of the AFIS fingerprint data. We have requested a quote to provide a backup server that would run in parallel with that system to provide stability during the transition to the new vendor.

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 ongoign data integrity and maintenance issues with the legacy in-house MNI-CCH system

Continued delays in finalization and execution of contract has increased the risk associated with the project. Currently the project implementation time line has been extended to the second half of 2020

Next Steps & Project Milestones:

- 1) Finalize contract for review and execution by both parties
- 2) Continue to identify and resolve data integrity issues in advance of migration and conversion to new systems
- 4) Analyze and Develop Interface Control Documents
 - 1. AFIS
 - 2. Judicial
 - 3. FBI NLETS/NCICs/III/NFF
 - 4. RAP Sheets
 5. Livescan RMS
- 4) The following project milestones have been established and will be scheduled with corresponding dates as soon as

Project Milestones:

- 1. System Requirements Review (SRR)
- 2. System Design Review (SDR)
- 3. Product Test Readiness Review (PTRR)
- 4. Pre-Ship Review (PSR)
- 5. System Test Readiness Review (STRR)
- 6. User Acceptance Test Readiness Review (UATRR)
- 7. User Acceptance Test Review (UATR)
- 8. Training Readiness Review (TRR)
- 9. Operational Readiness Review (ORR)
- 10. Final Acceptance Review (FAR)
- 11. Project Management Reviews