
Blank Best Practices Recognition Form

Part 1 - Project Summary

Project Title: OCR Out of State Infraction Initiative

Project Description (three sentences or less): Develop means and methods to process Out-of-State convictions paper forms received by DMV daily. Reduce the physical file storage required for storing and handling paper files of Out-of-State convictions. Develop a means via computer applications to post convictions to driver history files (mainframe systems) more efficiently and more accurately.

Nominating Person Contact Information:

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Project Manager Contact Information: (if different from above)

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Lead Agency for Project: Department of Motor Vehicles

Participating/Cooperating Agencies (if any): None

IST Team Members: Milan Joshi, IT Analyst 3, and Basil Jawad, IT Analyst 2

Business Client Team Members: Kathleen Flanagan-Beal, need title, Susan Archambault, need title, Audrey Hall, need title

Which National Agenda goals apply? (May be numbered 1-6 corresponding to the order given in the original document as well as to the rephrasing of the goals provided on the Best Practices web page).

#1 – DMV Initiative involves strong leadership promoting development of the applications – Commissioner Melody Currey and Deputy Commissioner Victor Diaz.

#2 – This initiative Required/Involved the coordination of collection and management of information – paper documents and data collection from many states.

#4 – Use and development of appropriate technologies to create solution, utilizing Optical Character Recognition (OCR), developing document management and storage database, and interfaces between various architectures (.Net, Java/J2EE, and mainframe).

#6 – Standards developed that define each states paper forms and specific data on each document listing various operator convictions from DLC and NRVC compact participants to record corrected and appropriate driver history updates and process required transactions such as privilege suspension.

Which steps in the management process does the project support? (Refer to the steps listed on the Best Practices web page. To avoid confusion with the numbered goals, use the wording provided and not the numbers. For example, say “Identify Problems” instead of just “2”)

(1) Establish Safety Goal: Process out-of-state infractions (convictions) received by Connecticut drivers from out-of-state authorities/agencies/courts.

(2) Identify Problem: antiquated manual processing, handling and storage of paper documents, inefficient and cumbersome processing and customer contact and document retrieval.

(3) Plan/Program/countermeasures developed to automate document processing improving efficiencies, effectiveness and corrected data collection, document storage and retrieval by a number of key data identified, and expedite out-of-state critical or priority infractions by queuing transactions in order of defined importance (alcohol related, CDL, Commercial Vehicle, Hazardous materials), provide base statistics on documents and infractions processed, and full audit trail of every transaction and process. Improved communications with customers by having information of convictions and infractions available in real-time to staff, including original image of the source document which is available for viewing and can be printed for mailing as needed.

Reference the priority in your traffic records strategic plan to which this project applies:

Project Cost: planned \$: N/A actual \$: 2,386.00

Extent of Project Implementation: As of April, 2011, our Business Unit has processed a total of 88,277 transactions from this process, posted infractions for 18,120 specific driver history actions, and processed 55,032 convictions records in 2010. From this project, the business unit has managed to complete all processing and updates, having all transactions up to date and significantly reducing or eliminating backlogged paper documents to process.

Summary of Project Benefits: What was improved, who benefited, and how? This project has resulted in more timely and efficient processing of infractions, traceable and auditable

transaction process, improved productivity of the business unit staff, and improved customer communications and inquiry processing. This project has also realized improved and more accurate data collection from all states we currently process. This project also provides the agency with an electronic document storage facility reducing or eliminating paper storage (extensive file cabinets) requirements and improving staff capability for document protection, review, retrieval, and reprint functionality.

Part Two: Project Detail

Guidance to completing this section—you may delete this italicized guidance section from your final document before returning it.

Project Description: *(your opportunity to write more than the three sentences permitted in Part One)*

Referring to the National Agenda Goals, tell how your project relates to each one you listed in Part One of this application:

Referring to the management approach to highway safety, tell how your project supports the management steps you listed in Part One:

#1: From the Commissioners and Deputy Commissioners office, through the business unit management, support for advancing technologies and bringing technologies to resolve issues in paper, efficiencies, and effectiveness of the agency has been consistent. DMV management has made every effort to promote and leverage technologies to improve the day to day operational requirements as well as operational knowledge and potential opportunities for improvements.

#2: This initiative required DMV to coordinate the identification and collection of data from numerous different forms mailed by states that have a defined compact participation (DLC or NRVC). Being a paper document that contained one to five infractions for one or more drivers added complexity and challenge for the efficient management of this information on paper documents as well as the data collected and digitized from the paper document..

#4: Having data on paper required a different view of applying technology (both hardware and software) to create an enterprise solution that was first capable of running independently (stand alone) and utilizing Optical Character Recognition (OCR) to gather the data from the paper documents and create an electronic (digital) data record. Bringing the document to a stored database provided a means to both maintain accurate records of infractions to a driver from the original document to the driver records updated, but also a means to verify data entry and ensure the data accuracy is efficiently and accurately corrected. Combining the technology of various architectures (PC's, Mainframe computers, scanning devices) and software (.Net, Java/J2EE, and mainframe systems in Cobol) required some care to ensure the systems processing is consistent and accurate.

#6 – A standard is defined for each state, for each different form, and differing infractions. Each paper document is “zoned” where data is identified and defined on the form, each presenting a unique identification for the form, and processing needs to scan, collect and correct data from the document, and finally post the document data to the appropriate driver history. The process also utilizes a standard defined that identifies ACD codes and other data that is governed by standards

for value, meaning, and content. Each document meets the standards currently identified AAMVA for DLC and NRVC compact participants infractions.

(1) Establish Safety Goal: Process approximately 3,000 out-of-state infractions (convictions) received by Connecticut drivers from out-of-state authorities/agencies/courts. Correct, store, and complete appropriate actions and driver history updates related to the infractions.

(2) Identify Problem: antiquated manual processing, handling and storage of paper documents, inefficient and cumbersome processing and customer contact and document retrieval. Client staff now have the original documents (as an image), data and process knowledge that improves customer communications, inquiries (what/when/where/why), and review in real-time, at their desk.

(3) Plan/Program/countermeasures developed to automate document processing improving efficiencies, effectiveness and corrected data collection, document storage and retrieval by a number of key data identified, and expedite out-of-state critical or priority infractions by queuing transactions in order of defined importance (alcohol related, CDL, Commercial Vehicle, Hazardous materials), provide base statistics on documents and infractions processed, and full audit trail of every transaction and process. Improved communications with customers by having information of convictions and infractions available in real-time to staff, including original image of the source document which is available for viewing and can be printed for mailing as needed.

Describe the major process steps for your project, including any unique aspects that enhanced success:

The agency participated in first rapid definition of the requirements and objectives for the process. DMV then utilized new methodologies (an “agile” software development approach) to address the new system as quickly and efficiently as possible. In this approach, the Business Unit management provided staff with detail “front line” knowledge to work with the applications team to develop the applications, provide direction for specific corrections, suggestions to improve the system to better meet the business objectives, and a strong sense of the Business Unit ownership from this participation. When the system was implemented, all staff were fully “trained” and ready to begin use. Overall, this approach and Business Unit commitment were critical to the success of the project.

Provide the evidence and reasoning used to determine the success of the project:

Out of 3,000 sanctioning letters previously processed 100% manually each week, 60% are processed through the system with minimal manual intervention. This rate of automated processing continues to rise as time allows for additional form (zoning) customization. Further, all violations are scanned, saved and available for review without the need to store paper records.

Why should this project be recognized as a best practice in traffic records?

Leveraging Commissioner and Deputy Commissioner commitment with Business management support, and bringing technology to bear on the collection and correction of driver infractions and related data to provide an environment that seeks to improve and encourage stronger stance is the “perfect storm” in Information Technology projects, and a necessary first step in

improving any traffic records system. Carrying these “lessons” forward to other projects and opportunities surrounding traffic records continues this forward and progressive management “attitude” to achieve even greater success. Because this project, this management team, and the success achieved to date, should be recognized for their best practices.

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Background

The Driver Services Division receives, on a weekly basis, approximately 3000 paper notices from out-of-state (OOS) agencies where there is a defined Compact agreement (i.e. Driver License Compact or Non-Resident Violator Compact) between DMV and other OOS agencies. These notices are currently processed manually by Driver Services staff, which requires an extraordinary amount of effort and time, as each conviction must be manually researched to determine and confirm the operator's license classification at the time of the conviction. It is estimated that a Driver Services' Processing Tech (PT) can process approximately 150 Compact notices per week. Given this, please refer to the table listed below for the approximated volume metrics associated with the processing of Compact-related notices.

Number of Compact Notices Received (Per Week)	Number of Compact Notices Processed (Per Week)	Pending Number of Compact Notices Requiring Processing on a Weekly Basis
3000	1800	1200
Number of Compact Notices Received (Per Year)	Number of Compact Notices Processed (Per Year)	Pending Number of Compact Notices Requiring Processing on an Annual Basis
156,000	93,600	62,400

Given the above, the Driver Services Image Scan Data Entry facility (AKA OCR) Project Team undertook a review and analysis of the processing time for 1336 Compact notices from the State of New York by five Driver Services' Processing Techs. The review found the average processing time for the five processors to be 58 transactions within a one-hour timeframe. Please see the attached document for further details regarding the review's promising findings.

The OCR is defined to assist Driver Services staff with automated processing of the daily notices and ultimately assists with data entry into the agency's mainframe applications. The premise for this facility is to gather, correct, and store data from the various Compact notices, and result in electronic transactions transferred to the agency's mainframe sanctioning process for automated driving history recording, posting, and notice-related actions.

Benefits Brief

This project will result in a number of potential savings and benefits to the agency, and will:

- Provide more efficient and timely data entry processing by reducing the processing time for these Compact-related notices and by providing for the timely posting of violations/convictions to the respective operator's driving history record;

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- Provide Driver Services management with the opportunity to efficiently reallocate some of its Compact-related processing staff to address other pressing needs of the Division;
- Provide complete internal traceability and accountability for all transactions processed within the OCR to specific DMV staff;
- Provide more efficient means for staff to do research of notices; immediate access to OOS images will be retained on the system and reduce the amount of time spent looking through the volume of OOS conviction reports when a customer calls the Driver Services Division demanding a copy of the report
- Improve data accuracy and data consistency resulting from processing notices we receive from every state;
- Provide complete electronic images of all notices with full traceability from the notice and provide a complete history of all documents recorded to date to a specific driver;
- Provide significant and efficient search capabilities using the driver's name (full name or partial), date-of-birth, DL number and/or processing dates in response to any customer service requests for information;
- Assist the agency in progressing towards the CIVLS document imaging vision, as well as being certified by the Office of the Public Records Administrator (i.e. State Librarian), for implementation of an electronic index, storage, and retention process that will eliminate the agency's need for long term compact-related paper storage/associated costs; and
- Provide the staff with some of the skills needed for the CIVLS modernization project.

Staffing and Skill Set

Currently, the two consultants (Milan Joshi and Basil Jawad) have strengthened their skill sets in supporting and developing .Net (dot Net) technology, by combining .Net facilities and framework with Java technologies and framework to produce a seamless application solution. Additionally, this skill set assists the agency in providing for the direction of the future CIVLS technology platform, .Net.

Given this, Basil and Milan have the skills which the agency can leverage in supporting the CIVLS modernization project (given its .Net application framework) as well as any other future agency needs for document management and scanning-related projects, if required. These same skills have already contributed to the agency in the IST Scanning project that has now been successfully in use for over six months.

Human Skills/Impact for Support and Enhancements

Support and Enhancements would require retaining Basil and Milan until DMV obtains staff with appropriate skill set to assume responsibility for the project. Their services would be for implementation, support, and enhancement of the OCR, and support IST Scanning project as well as any other imaging projects the Agency decides to pursue, if desired. Currently, Basil's contracted rate is \$70.00 per hour while Milan's contracted rate is \$89.00 per hour. The total cost for their services is dependent upon the agency's chosen direction.

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Hardware:

Kodak i55 \$988 as of last purchase – Total @ 2 units, \$1,976.00
 The Kodak i55 is preferred for its combined flatbed and feeder, as well as its faster processing capabilities. The current OCR scanner will be retained for the testing environment, while the two new scanners will be installed in Driver Services area.

Software:

Pegasus Client Licenses: \$551 (we have 5 open client licenses)
 Asprise Client Licenses: \$205 x 2 (we have 1 being used for the OCR test environment while IST is currently using 1 for its scanning project)

Current work stations with Windows XP and IE version 6 or higher should be sufficient.

Item	Kodak i55	
Scanners	\$1976.00	Two Kodak i55 Scanner
Pegasus Client (2)	-0-	No cost, using current open client licenses
Asprise Client (1)	\$410.00	One client license
Total Hardware and Software	\$2386.00	

Next Steps:

1. Agency decision on whether to move to production.
2. Contingent upon the agency's affirmative decision:
 - a. Draft project plan and resources
 - b. Order equipment
 - c. Set-up production environment
 - d. Perform ATP to ensure users acceptance
 - e. Complete user manual