



State of Missouri 2011 Governor's Award for Quality and Productivity Executive Summary

Team Name: Missouri Criminal Justice Modernization Program (MCJMP)

Nominator: Director Clifford Gronauer, Missouri State Highway Patrol, Information Systems Division

Nominating Department: Department of Public Safety

Category: Technology in Government

Executive Summary:

After assessing existing capabilities, the Missouri State Highway Patrol wanted to significantly upgrade its operational systems to enhance delivery of enforcement services and to streamline operational effectiveness. Other law enforcement organizations have embarked on similar efforts but they usually upgrade one or two systems at a time. The Patrol decided on an across-the-board modernization. The effort centered on five areas: Computer-Aided Dispatch, Mobile Computing, Computerized Criminal History, Records Management, and replacement of the State Message Switch.

A wide spectrum of employees was assigned to the project. Road officers were transferred from enforcement duties, the Patrol's information technology staff was dedicated to the effort, and the vendors were engaged to the fullest extent possible. The Patrol's command staff and division directors provided executive oversight and management guidance. The primary users (officers and staff) designed and validated every functional aspect of the new systems. Information technology staff provided project management, architecture design, and programming support.

The undertaking was complex and difficult. All five components work in tandem with many interface requirements, data sharing, and integrated structures and designs. A summary of the project elements follows:

Computer Aided Dispatch - This includes real-time GPS tracking of Patrol cars. Previously, two separate products provided dispatching and tracking, but with the new system these are combined into a single capability. Better mapping software has greatly increased verified address capabilities and includes history of previous calls to that location.

Mobile Computing - This component of the project changes the officer's workflow from a manual process to a paperless operation, including E-Ticketing. Officers can now scan a motorist's license and generate citations using a printer in their vehicles. The elimination of redundant data entry provides an officer with the capability to propagate repetitive information into multiple reports.

Computerized Criminal History - The new criminal history repository makes it easier to cross-reference data elements, expand identifying information, and offers a greater array of presentation capabilities. A highlight of this upgrade is a website allowing public access to criminal records. Users can register, pay a nominal fee, and print record checks for themselves or others.

Records Management System - Provides features that include suspect pictures, criminal history, residence and work addresses, identifying information such as tattoos and scars, and vehicles owned and driven by suspects. In addition, cross-referential capabilities match aspects of the suspect profile across other data repositories.

State Message Switch - This is the primary routing manager for requests to the many systems holding criminal justice data. It directs requests to the appropriate system(s), receives the results, and routes them back to the requester, appearing as a single transaction.

The end result of this effort is a set of modern, fully integrated systems that run on industry standard hardware and software platforms. To our knowledge, no other law enforcement agency in the nation, or worldwide for that matter, has attempted such a major modernization in one single effort. The outcome is a truly world-class application environment that will be the envy of every law enforcement agency around the globe.



State of Missouri
2011 Governor's Award for Quality and Productivity

NOMINATION FORM

I. GENERAL INFORMATION

Department: Department of Public Safety

- 1. Project or team name.** Missouri Criminal Justice Modernization Project (MCJMP)
- 2. List the name of all team members, job titles, state agency department, and/or community organization.** [please list alphabetically by last name]

All team members are employed by the Missouri State Highway Patrol.

Aylward	Edward J.	Sergeant	MSHP
Beck	Ronald G.	Prog./Analyst Mgr.	MSHP
Bogart	Christine A.	Corporal	MSHP
Burnette	Harold D.	Tech. Support Mgr.	MSHP
Carter	Howard G.	Prog./Analyst Mgr.	MSHP
Copas	E. Hope	CIT Spec. II	MSHP
Davenport	Noel C.	Sergeant	MSHP
Farris	Connie L.	CIT Spec. II	MSHP
Fisher	Doris K.	Prog./Analyst Mgr.	MSHP
Gronauer	Clifford R.	Director, Information Systems	MSHP
Heseman	Allan C.	Sergeant	MSHP
Hodgen	Mathew E.	CIT Spec. II	MSHP
Huhn	Mark A.	Tech. Support Mgr.	MSHP
Kroeger	Micheale J.	CIT Spec. II	MSHP
Lueckenhoff	Larry G.	Asst. Director, Information Systems	MSHP
Moyer	Jessica L.	CIT Spec. II	MSHP
Myers	Jeffrey N.	Tech. Support Mgr.	MSHP
Ponder	Rocky L.	Chief Operator	MSHP
Ruettgers	Dianne E.	Tech. Support Mgr.	MSHP
Schlueter	Timothy R.	Asst. Director, Criminal Justice Information Services	MSHP
Schoeneberg	Corey J.	Lieutenant	MSHP
White	Steven C.	Tech. Support Mgr.	MSHP

3. Describe the project (200 words or less)

After assessing existing capabilities the Patrol wanted to significantly upgrade its operational systems to enhance delivery of enforcement services and to streamline operational effectiveness. Other law enforcement organizations have embarked on similar efforts but they usually upgrade one or two systems at a time. The Patrol decided on an across-the-board modernization. The effort centered on five areas: Computer-Aided Dispatch, Mobile Computing, Computerized Criminal History, Records Management, and replacement of the State Message Switch.

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and management guidance. The primary users (officers and staff) specified and validated every functional aspect of the new systems. The information technology group provided project management, architecture design, and programming support. The undertaking was complex and difficult. All five components work in tandem with many interface requirements, data sharing, and integrated structures and designs.

4. Nomination category.

(Check only one)

- | | |
|---|---|
| <input type="checkbox"/> INNOVATION | <input type="checkbox"/> CUSTOMER SERVICE |
| <input type="checkbox"/> EFFICIENCY / PROCESS IMPROVEMENT
GOVERNMENT | <input checked="" type="checkbox"/> TECHNOLOGY IN |

5. Describe why you selected this nomination category.

This project involved a significant investment in technology to help produce the efficiency results we desired.

II. BACKGROUND

1. When did the team begin its work?

Procurement efforts were initiated in early 2008.

2. When did the team implement this project?

The last of the modules was implemented in March 2011.

3. How long has the project been implemented?

- | | | |
|---|---------------------------------------|--|
| <input type="checkbox"/> 0 - 3 Months | <input type="checkbox"/> 4 - 6 Months | <input type="checkbox"/> 7 - 9 Months |
| <input type="checkbox"/> 10 - 12 Months | <input type="checkbox"/> 12 or more | <input checked="" type="checkbox"/> On-going Project |

III. RESULTS/ACCOMPLISHMENT

1. What did the team accomplish? (150 words or less)

With a dedicated effort from multiple divisions across the agency, the team was able to purchase, customize, and implement the most complex set of applications in Patrol history. Five major systems were replaced with significantly upgraded features and multiple times greater performance and efficiency. In addition, the new systems are less costly to operate and the resulting improvement in efficiency and process improvement will produce tremendous time savings for the road officers. This will allow them to spend more time on the road, improving their visibility to the public.

2. Which of the following describes the benefits of the accomplishment? (Check all that apply and provide an explanation)

Cost reduction, improved process, and time savings are all an achieved result of this project. The new systems greatly reduce paperwork and redundant data entry on the part of road officers.

Dispatching has been significantly streamlined in both efficiency and accuracy and real-time access to criminal data repositories is greatly expanded. The project provides inexpensive access to criminal records for small law enforcement agencies; in the past they were excluded from full access because of cost. Analysis has shown that a 30% increase in time savings has been achieved for road officers. The resulting cost savings for consolidated operations and efficiencies gained in infrastructure changes is expected be in the millions of dollars.

☒ cost reduction

☒ time savings

☒ improved process

☐ other: describe

3. Explain how the accomplishments of the team are beyond regular duties and responsibilities (150 words or less).

To our knowledge no other law enforcement agency in the nation, or worldwide for that matter, has attempted such a major modernization in one single effort. With the leadership of the Patrol's Chief Information Officer (CIO), combined with top caliber executive management, and a strong dynamic team of information technology and business professionals, this bold effort has resulted in a huge leap forward in service and safety to the citizens of Missouri.

IV. MEASUREMENT/EVALUATION

1. Describe how the success of the project was measured and what outcomes were achieved.
(description should not exceed 300-500 words)

As a result of extensive testing and preparation, the transition to the new systems occurred with few problems. Small issues emerged but these were quickly resolved. Road officers immediately accrued major increases in their productive time. The elimination of redundant paperwork and unnecessary administration provided officers more time for enforcement and related activities. Dispatching increased in both efficiency and accuracy. Upgrades in Records Management provide features that include suspect pictures, residence and work addresses, information on tattoos and scars, and vehicles owned and driven by suspects. In addition, referential capabilities match aspects of the suspect profile across various data repositories - all of which are now available to troopers while in their cars. With only a mouse click, officers can instantly retrieve all the information available on a suspect or a previous event.

One of the first troopers to use the new system commented, "It's awesome" after realizing he could complete all necessary paperwork and reports with a single automated interface. In the past, violator data would have to be entered multiple times into several systems. All of this occurred after handwriting a citation onto a carbonless multicopy form.

The dispatchers in Troop C, one of the busiest in the state, remarked that with the CAD system, "It is ten times easier to run a Vehicle Identification Number (VIN)." These comments are representative of the overall positive response from the staff and officers using the new systems to do their jobs.

As part of the modernization, the Patrol also made major upgrades to its network, allowing faster response for the troopers in their cars, a wider range of automated interfaces, and enhanced encryption and security measures. Secure Socket Layer (SSL)/Virtual Private Network (VPN) capabilities allow Internet access to criminal records repositories and remote access by external users. Security was greatly enhanced with new monitoring, tracking, and audit capabilities. Senior management now has expanded capabilities for real time event tracking and officer monitoring.

2. Are the benefits derived from this project: (Check only one.)

☒ Recurring

☐ One-time

V. RECOGNITION/AWARDS

1. Has this project ever been nominated for the Governor's Award for Quality and Productivity?
If yes, when?

No

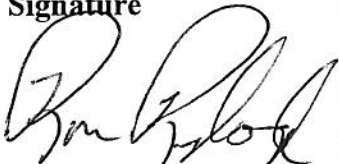
2. If yes, for which category was it nominated?

3. Has this project received any other awards or recognition in the past? If yes, describe.

Selected as one of three finalists in the Massachusetts Institute of Technology/Sloan Chief Information Officer (MIT/CIO) Symposium Award for Innovation Leadership.


VI. NOMINATOR'S INFORMATION

NOMINATING DEPARTMENT

Name	Signature	Telephone Number	E-Mail Address
Colonel Ronald K. Replogle		573-526- 6120	ron.replogle@mshp.dps.mo.gov

VII. DEPARTMENT COORDINATOR INFORMATION

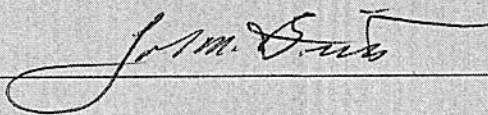
DEPARTMENT

Name	Signature	Telephone Number	E-Mail Address
Mary Beckwith		(573) 751- 5424	mary.beckwith@dps.mo.gov

VIII. DEPARTMENT DIRECTOR APPROVAL

DEPARTMENT DIRECTOR'S
NAME
John Britt

DEPARTMENT DIRECTOR'S SIGNATURE*



Nomination must be signed ONLY by the Department Director to be eligible for consideration. Nominations not signed by the Department Director will be returned to the agency coordinator.