Preliminary Results in from National Justice Information Sharing Survey

By Mark Perbix, NAJIS Survey Team

This past February, NAJIS with cooperation and support from the IJIS Institute and SEARCH, The National Consortium for Justice Information and Statistics, distributed the 2011 National Justice Information Sharing Survey. The survey was designed to "dig deep" into information sharing practices across the criminal justice community at all levels of government. The survey asked each respondent to identify each information resource they shared with other justice partners, what information is shared, and how it is shared. It asked the same questions for information resources that the respondent had access to within their environment: who did they receive information from, what information was shared and how did they access this information.

Detailed results from the survey will be presented at the NAJIS conference, which is being held in New Orleans this September

21-23. This article provides a profile of the respondents and their responses to several key questions.

Completing the survey was no small task because of the level of detail required. The average respondent took just over 30 minutes to complete the survey. Respondents from ninety-eight (98) agencies successfully completed the survey. Respondents from four hundred ten (410) agencies started the survey resulting in a completion rate of 24.9%. A total of one thousand forty-seven (1047) individuals viewed the survey website.

The survey was distributed through a variety of channels in an effort reach as many practitioners as possible. In addition to NAJIS's own distribution list, many other organizations were asked to distribute the survey announcement to their constituen-

cies. Chief among these was the Global Advisory Committee (Global), which consists of representatives from all major criminal justice and public safety organizations and disciplines. Additional outreach was made by the Justice Information Sharing Practitioners group, the National Criminal Justice Association, and the Association of Prosecuting Attorneys.

Respondent profile

Surveys were completed by agencies from 38 states and the federal government. The vast majority of respondents were from state and local government (93); five (5) responses were received from federal agencies.

The survey asked respondents to identify their jurisdiction and domain. Jurisdictions are listed in the table below. In some instances, respondents who identified their jurisdictions as "other" were aggregated into more typical categories. A non-profit association providing information technology services to a state sheriffs association

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President's Message - 2011 NAJIS Conference

Join Us this September in New Orleans

We're gearing up for another great conference this fall in New Orleans. Because of the poor economy, NAJIS decided to not hold a conference last year. A lot has happened in two years, and this year's conference looks like a winner.

Although times are still tough, many of you have made your plans to attend. We hope that more of you will consider attending after reviewing the conference agenda, which is included in this newsletter.

For those of you looking for new technology solutions or want to learn more about how others have tackled similar challenges, the NAJIS conference focuses on providing

practitioner – oriented sessions divided into both business and technical tracks.

We also have a bigger vendor exhibit area than ever before if you want to learn more about specific products and technologies.

The NAJIS website lists all of the vendors supporting our conference.

Get Involved!

NAJIS is an all-volunteer, practitioner-based professional association. We strive to offer educational and networking opportuni-

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Inside this issue:

National Justice Information Survey

was redefined as a state jurisdiction. A homeland security respondent was redefined as a federal jurisdiction.

Jurisdiction	Count
State	55
County/Parish	22
City/Municipality	12
Regional (Intrastate)	3
Regional (Interstate)	0
Special District	1
Federal	5
Tribal	0
Total	98

Respondents were also asked to identify the criminal justice domain in which they worked. Domain categories and the number of respondents in each are listed in the table below.

Reported Domain	Count
Community Corrections	3
Community Corrections + Corrections	2
Corrections	5
Courts	5
Criminal History Repository	11
Criminal History Repository + Law Enforcement	3
Defense	1
E911/CAD	3
Homeland Security Fusion Center	3
ICJIS/Portal	4
Jail (Pre-trial Detention) / Pretrial Services	1
Law Enforcement	26
Parole	2
Pretrial Services (Bail Services)	2
Probation	3
Prosecution	10
Public Safety and Commerce	1
State Administrative Agency	10
Victim Services	2
Not specified	1
Total	98

Like the identification of jurisdictions, categorizing domains was not without its challenges. Many respondents represented agencies or programs that spanned multiple domains. This wide variety and combination of domains are reflected in the domain categories identified above.

Information System Usage

The first area addressed by the survey focused on what information systems were used by the respondents. A total of thirty (30) different types of information systems were identified in the survey:

- Arrest/Booking
- Automated Fingerprint Identification System (AFIS)
- Computer-Aided Dispatch (CAD)
- Corrections Offender Management
- Court Case Management
- Criminal History
- Criminal Intelligence (gangs)
- Driver's License
- Firearm Registration
- Geographic Information System/Mapping (GIS)
- Homeland Security
- Jail Management System
- Juvenile Justice
- Medical Records
- Motor Vehicle Registration
- Parole Case Management
- Persons of Interest
- Police Records Management (Incident Reporting) (RMS)
- Pretrial Services (Bail)
- Probation Case Management
- Property
- Prosecutor Case Management
- Protection/Restraining Orders
- Public Defender
- Sex Offender Registry
- Social Services
- Suspicious Activity Reports
- Traffic
- Victim Notification
- Wants/Warrants
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Respondents were asked to identify what

information systems they used and whether the information system was "owned or controlled" by the respondent's agency or "owned or controlled" by another agency. For those agencies that "owned or controlled" an information system, respondents were asked if the system was a commercially available application (Commercially available Off-the-Shelf or "COTS" product) or a custom developed application.

Of the 98 total respondents, the most frequently used systems were:

Criminal History	80	(81.6%)
Wants/warrants	70	(71.4%)
Arrest/Booking	66	(67.3%)
Driver's License	62	(63.3%)
Sex Offender Registry	58	(59.2%)

Since the largest group of respondents represented the law enforcement domain, it is not surprising that the most frequently used systems are those that focus on law enforcement and public safety activities. These systems are typically used for query or information gathering purposes and are found at the state, regional or national level, and provide aggregated information from multiple sources. These systems also are typically not owned or controlled law enforcement users, and the survey results reflected this: two-thirds (67.3%) of these systems are not owned or controlled by the agencies using them. For all systems included in the survey, most respondents or users did not "own or control" the systems they used, although the disparity is not as pronounced as for the law enforcement users: almost 6 out of 10 respondents (58.9%) said they used systems that they did not own or control.

Agencies that indicated that they owned or controlled the information system(s) they used were asked to identify if they used commercially available off-the-shelf products (COTS) or custom developed applications. Again, the systems most frequently reported were law enforcement oriented. The breakdown of the most commonly used systems is provided in the following table.

Simple (or sometimes not so simple) Act of Sharing Information Can Make Us All Safer

The effective use of information technology can dramatically improve public safety officials' ability to gather, evaluate, interpret and disseminate the vast amount of information available to the law enforcement and public safety communities. But getting the right information to the right people at the right time is hard work.

Consider enabling public safety organizations of every size to:

- Use technology to not only fight crime, but anticipate and prevent it

- Identify spikes in crime before they become a trend

- Utilize readily available tools across an enterprise

- Identify criminal activity patterns early, before they escalate

A Real Time Information Analysis Center can help public safety organizations accomplish these objectives. With a scalable, connected clearing house of data, public safety organizations can analyze and disseminate emerging information to those who can proactively respond. Many jurisdictions have recognized the growing need to develop such a center.

New York City's Real Time Crime Center (RTCC) is a world class facility with state-of-the-art technology that provides law enforcement officials with a clear advantage in proactively collecting, analyzing, and distributing timely, pertinent information to those who need it most. The crime center's movie-theater-size screen flashes information on criminals, victims, crime patterns, maps of hot spots in the city, and more. The center operates 24/7, with 15 analyst workstations and 26 trained staffers, mostly police officers.

Before the RTCC, detectives had to search paper files and disparate databases, which often took weeks or longer depending on the case. Now detectives can access the information they need in seconds. Detectives provide anecdotal evidence of how

the center and its access to millions of public and private records have made their jobs much easier. Pattern analysis lets them focus on crime hot spots; link analysis correlates relationships between criminals and other potential criminals and victims; and databases that contain information on physical characteristics, weapons and aliases help them connect the dots and solve cases.

Computer Aid, Inc. (CAI) was responsible for the technical architecture of NYC's RTCC application software and for the design, development, implementation, and initial support of the software. CAI also recently provided the design and plan forward for the Commonwealth of Pennsylvania's Fusion Center. This will be an all hazards information analysis center used for counter terrorism, crime abatement, and to maintain overall public safety. The design entailed working with all major Public Safety agencies, led by the Pennsylvania Emergency Management Association (PEMA) and the Pennsylvania State Police. Interacting agencies were on the local, state, and national level. CAI designed the blueprint for the Fusion Center to determine what the center will look like and to outline its vision and mission as well as what technologies will drive the center's actions.

Through the Pennsylvania Commission on Crime and Delinquency's County Justice & Public Safety Information Sharing (CJPSIS) Toolkit program, CAI works in partnership with state, county, and local governments to provide integration services to exchange justice data both within a county and from counties to state and local areas, thus enabling the collaborative exchange of information across non-connected participants. This is done by creating portals and dashboards that help public safety officials visualize the work that needs to be completed. A fully configurable workflow model helps to ensure that all steps are completed in a timely and accurate manner and facilitates the exchange of information between people and systems.

CJPSIS services that have been delivered or are being developed include the creation and exchange of criminal complaint information; the management of intermediate punishment of offenders; the management of offenders that are eligible for parole; and the compliance of time intervals for fingerprint and parole violation hearings. These have been identified as 'sweet spots' that provide significant returns or efficiency gains within the justice lifecycle.

Agencies large and small are focused on ways to collect, analyze and share information effectively for the greater good. This is no small task, but its effect on public safety can be immense.

CAI would welcome the opportunity to share lessons learned with you. Come visit our booth at the NAJIS conference in New Orleans to learn more!

President's Message

ties to our peers through our annual conference.

But being an all-volunteer organization has its challenges—the greatest of which is getting more people to join NAJIS and invest in our profession. We are constantly looking for a few individuals who would like to get more involved and support the programs that NAJIS offers. You can be that person! If you are attending the conference this year and you are interested in joining the NAJIS board of directors, please contact me or any of the NAJIS directors or officers. If you have attended past conferences or have not yet participated but still want to get involved, again, please contact me or any director or officer, and we'd be happy to talk with you about how you can participate. Our contact information is included in this newsletter or you can get it from the NAJIS website, www.najis.org.

After taking a year off, we're excited about hosting another conference and are ready to go!

Hope to see you in New Orleans.

Laura Radke

NAJIS President

2011 NAJIS Conference Agenda

Tuesday – September 20, 2011	
5:00-7:00	*Pre-registration and Welcome Reception*

Wednesday – September 21, 2011		
7:30-8:30	*Continental Breakfast and Registration*	
8:30 – 8:45	**Welcome, Laura Radke, NAJIS President**	
8:45-9:45	**Keynote: The New Normal**	
9:45-10:00	*Break*	
10:00-12:00	**NAJIS Roundtable: Conference Attendees Share Their Justice IT Projects and Problems**	
12:00-1:30	*Luncheon (Provided) - Justice Systems Applications Presentations*	
	Business Focus	**Technology Solutions**
1:30 – 2:45	**Session 2 – Funding Your Projects and Other Impossible Tasks**	**Session 3 - Cloud Computing**
2:45—3:00	*Break*	
3:00 - 4:00	**Session 4 — Using Computerized Information to Improve Public Safety**	**Session 5 — PANEL: eCitation Solutions**
4:00 - 5:00	**Session 6 – Adding Open Source Options to Your Application Portfolio**	
5:30	**Networking Reception**	

Thursday, September 22, 2011		
7:30 – 8:30	*Continental Breakfast*	
8:30 - 8:45	**Announcements – Evaluation Prize Drawing**	
8:45-9:45	**Plenary Session 7 – Work in Progress: Building an Integrated Information System in Post-Katrina New Orleans**	
9:45-10:00	*Break*	
	Business Focus	**Technology Solutions**
10:00-11:00	**Session 8 – Evidence Storage and Standards**	**Session 9 — Implementing NIEM and the JRA**
11:00 – 12:00	**Session 10 - The Evolution of a Court-based Protective Order Registry**	**Session 11 – Bridging the Gaps with N-DEx**
12:00 - 1:30	*Luncheon (provided) – "Your Brain is a Border Collie"*	
1:30 - 2:45	**Session 12 – IJIS Success Story: Winnebago County, Illinois**	**Session 13 – Identification Scanning Technologies**
2:45 - 3:00	*Break – Vendor Exhibits*	
3:00 – 4:00	**Session 14 – CJPSIS: Sharing Data to Improve Decision-making**	**Session 15 — National Missing and Unidentified Persons System—NamUs.gov**
4:00-5:00	**Plenary Session 16 – State of Justice Information Survey Results**	

2011 NAJIS Conference Agenda (continued)

Friday, September 23, 2011	
8:00 – 8:30	*Continental Breakfast*
8:30 - 9:30	**Plenary Session 17 - Emerging Technologies That Will Change the Justice IT Landscape**
9:30 - 10:30	**Plenary Session 18 – Automated License Plate Readers**
10:30 - 10:45	*Break*
10:45 – 11:30	**Plenary Session 19 – Disaster Recovery: Is It Really So Important**
11:30 – 12:00	**NAJIS Annual Meeting and Conference Evaluation**
Noon	**Adjourn**

2011 NAJIS CONFERENCE INFORMATION

NAJIS conferences focus on top concerns of justice system practitioners. This is the one conference put on by practitioners for practitioners. Conferences are designed to provide forums to exchange ideas, address problems and explore solutions. Ample opportunities are provided to network with speakers and other conference participants.

A vendor exhibition is also provided giving participants the opportunity to look at the latest in technology.

The conference fee includes a hospitality suite, three continental breakfasts and two luncheons.

For additional registration information, call 202-448-1720.

Conference Dates: September 21—23, 2011

Conference Registration fee: $495

Name:_____

Title:_____

Organization: _____

Address:_____

Address:_____

Phone:_____

E-mail: _____

Please make checks payable to NAJIS and send with this form to:

NAJIS
720 7th Street, NW
3rd Floor
Washington, D.C. 20001

VENUE AND HOTEL REGISTRATION INFORMATION

This year's conference will be held at the Hilton New Orleans Riverside Hotel conveniently located adjacent to the French Quarter in New Orleans, Louisiana. You will have ready access to shopping and other downtown attractions.

Make your hotel reservations now by calling

1-800-445-8667

Or

you can register directly from the NAJIS website— www.najis.org

When making reservations use the group code "NAJIS Annual Meeting" to secure the Federal per diem room rate of $98/night.

The conference hotel room rate is available until August 26, 2011

Rates are valid 3 days prior to and 3 days after the conference dates based on availability. However, you must call the hotel to receive these rates.

VENDOR INFORMATION

Vendors interested in exhibiting at the NAJIS conference can contact David Naisby at 717-214-7461 or dnaisby@state.pa.us.

Find out why one former participant said:

"I go to a lot of conferences and by far NAJIS is the most informational and FUN."

National Missing and Unidentified Persons System Provides Valued Service

By Michael O'Berry, National Forensic Science Technology

The National Missing and Unidentified Persons System (NamUs) is a free, online, publicly accessible tool designed to assist in resolving missing and unidentified persons cases. Funded by a cooperative agreement with the National Institute of Justice (NIJ) and operated by the National Forensic Science Technology Center (NFSTC), NamUs is a model of the success that is possible when information is shared across jurisdictions and among practitioner groups. In the two and a half years since the integrated system launched, NamUs has produced dramatic results: 153 NamUs-assisted case resolutions as of July 2011 or an average of 4.9 resolutions per month.

NamUs offers special advantages to law enforcement personnel, coroners, medical examiners and death investigators. Registered practitioners receive access to sensitive case information not available to public users including no-cost forensic science support and an automated feature to match missing persons cases with unidentified remains records originating anywhere in the country.

The NamUs program helps investigators resolve missing persons (MP) and unidentified persons (UP) cases by comparing forensic identifiers, collaborating with other agencies, engaging the public and providing high-quality forensic services. NamUs is comprised of two databases containing unique identifying information for MP and UP cases. These databases interface directly with each other to compare this information and produce potential matches that can then be verified by investigators or forensic experts.

NamUs serves as a national repository for case information, providing quick access to data for sharing with other investigators and accepting cases from other databases such as the FBI's National Crime Information Center. Registered users and forensic experts can enhance cases by uploading digital images, fingerprint cards, and dental x-rays. This feature allows for efficient comparison of data and images by forensic experts to help solve cases. With increased use by law enforcement, medical examiners and coroners, NamUs offers the promise of reducing the backlog of unidentified remains cases in the U.S. and streamlining the investigation of missing persons by rapidly matching cases across state lines.

Case Study – Ronald Norman

On December 8, 1991, Ronald Norman went missing from his home in Detroit, MI. He went for a walk and was never seen again. The following April, two fishermen came across a body floating in Lake Erie. The medical examiner determined the victim's cause of death was drowning and buried the remains as

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What Is NAJIS?

The National Association for Justice Information Systems (NAJIS) is an organization of individuals responsible for the acquisition, operation and management of local, state, tribal and federal criminal justice information systems.

All practitioners in prosecutor's offices, the courts, law enforcement, probation, corrections and allied agencies who design, improve, implement or supervise automated information systems can benefit from participating in NAJIS. Individuals who are investigating, evaluating and purchasing automated systems—both hardware and software—for criminal justice purposes are encouraged to join and participate in NAJIS activities.

NAJIS began in 1981 as the PROMIS (Prosecutors Management Information System) User Group and has grown to encompass the needs of all criminal justice agencies. The promotion of integrated criminal justice and new technologies is the focus of NAJIS.

NAJIS conducts an annual educational conference, publishes a newsletter and website with the goal of improving the criminal justice system through the practical application of technology.

National Justice Information Survey

Application	COTS	Custom
Police Records Management (Incident Reporting) System (RMS)	25	7
Criminal History	6	26
Wants/Warrants	8	22
Property	16	13
Computer-Aided Dispatch (CAD)	21	7
Arrest/Booking	10	18

Information technology (IT) capabilities in the law enforcement domain are arguably very mature, and this appears to be validated by the survey results. Most basic law enforcement IT capabilities, such as Police Records Management Systems (RMS) and Computer-Aided Dispatch (CAD) systems are implemented using COTS products. Over three-fourths (3/4) of law enforcement respondents indicated that they use COTS products. At the other end of the spectrum, most IT resources provided by state agencies such as criminal history systems, and wants and warrant systems are custom developed rather than COTS implementations – about three-fourths (3/4) of these systems are custom developed.

For the other major domains and high use applications, the breakdown between the use of COTS and custom developed applications follows a similar pattern where more COTS products appear to be used for the more standardized functional capabilities, such as AFIS and GIS, and custom-developed applications are used for smaller and more specialized purposes, such as Criminal Intelligence, Sex Offender Registration, and Corrections Offender Management.

Overall, based on all reported responses, custom-developed applications are used more often than commercially available products - 56.8% to 43.2%. This overall distribution appears to align with the fact that many of the applications reported on this survey address smaller, more specialized capabilities and markets. Thus, there are fewer opportunities to successfully develop and market COTS products.

Use of National Standards

The survey also focused on the adoption and use of national standards. Respondents were asked to identify if they used any of five national information sharing standards:

NIEM	The National Information Exchange Model
GJXDM	The Global Justice XML Data Model
EDXL	The Emergency Management Data Model
JRA/GRA	The Justice Reference Architecture - newly rebranded as the Global Reference Architecture
GFIPM	Global Federated Identity and Privilege Management

A large majority of respondents indicated that they have adopted NIEM (86.7%) or GJXDM (85.7). This high level of usage is not surprising given the fact that these are the two best-known national standards and initiatives, and respondents likely represent that part of the community that is most aware of these standards. Awareness and adoption of more recent standards and initiatives – specifically the JRA/GRA and GFIPM – was much lower at 17.3% and 3.1% respectively. In addition to being relatively new, these later two standards are much more comprehensive and complex, making adoption and use more challenging.

Use of National Resources

There are a variety of organizations and services available to the justice and public safety communities that focus on the adoption and use of national standards and information sharing technologies as a whole. Respondents were asked to identify those organizations and resources that they have used in support of developing information sharing capabilities.

Not surprisingly, the organization or resource that was most familiar to respondents was the Bureau of Justice Assistance, which funds many of the other resources and provides grant opportunities for information sharing activities at the state and local levels of government.

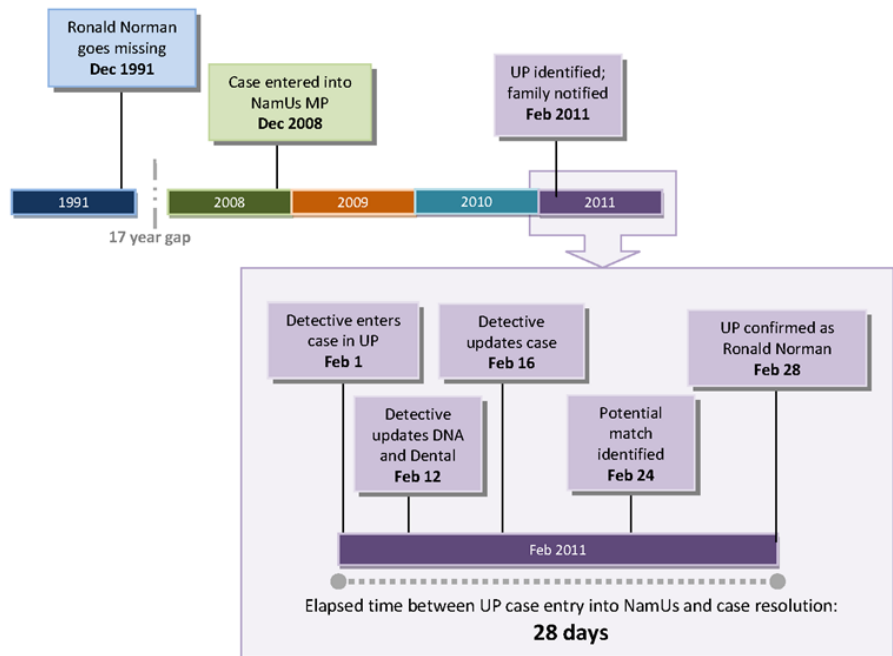| National Resource	Count	Percentage
Association of State Corrections Administrators (ASCA)	4	4.1%
American Probation and Parole Association (APPA)	6	6.1%
Bureau of Justice Assistance (BJA)	32	32.7%
Bureau of Justice Statistics (BJS)	17	17.3%
IJIS Institute	27	27.6%
Institute for Intergovernmental Research (IIR)	9	9.2%
Justice Information Sharing Practitioners (JISP)	21	21.4%
National Center for State Courts (NCSC)	15	15.3%
National Criminal Justice Association (NCJA)	14	14.3%
National Governors Association (NGA)	15	15.3%
National Institute of Justice (NIJ)	20	20.4%
SEARCH - The National Consortium for Justice Information and Statistics	30	30.6%
U.S. DOJs Global Justice Information Sharing Initiative, or "Global"	22	22.4%
Other	6	6.1%

NamUS

"John Doe." In 2008, Mr. Norman's case was entered into NamUs. The Michigan State Police entered the "John Doe" into the UP database and the NamUs automated cross-matching feature flagged the two cases as a potential match. Similar features, specifically missing teeth, a skull injury and the type of clothing Mr. Norman wore when he was last seen helped confirm the match. On February 28, 2011, the medical examiner was able to positively identify Ronald Norman.

For more information or to register with NamUs, please visit www.NamUs.gov.

Norman Case Resolution Timeline

Ronald Norman goes missing **Dec 1991**

Case entered into NamUs MP **Dec 2008**

UP identified; family notified **Feb 2011**

1991   2008   2009   2010   2011

17 year gap

Detective enters case in UP **Feb 1**

Detective updates case **Feb 16**

UP confirmed as Ronald Norman **Feb 28**

Detective updates DNA and Dental **Feb 12**

Potential match identified **Feb 24**

Feb 2011

Elapsed time between UP case entry into NamUs and case resolution: **28 days**

National Justice Information Survey

Adoption of Common Charges and Data Dictionary

Finally, for purposes of this article at least, respondents were asked if they used a common method of identifying charges across multiple systems (a common charge table) and if they used a common data dictionary across multiple systems. Forty-four (44) respondents indicated that they used a common charge table (50.0% of 88 total responses to this question). Thirty-seven (37) respondents indicated that they use a common data dictionary (41.6% of 89 total responses to this question).

While information sharing does not require the use of a common charge table or a common data dictionary, use of these can simply the information sharing process. Each addresses a major challenge in information sharing. Using a common charge table ensures content or value equivalencies of one of the most important pieces of information shared in the criminal justice system – charges. Using a common data dictionary

greatly eases the challenge of ensuring semantic equivalency of data elements used in multiple systems or across business domains. A common data dictionary fulfills the same role as NIEM when mapping data elements across multiple systems.

Perhaps the most notable observation about these responses is the fact that one half or more of the agencies that responded do not use either a common charge table or a common data dictionary. This illustrates and underscores the importance of national initiatives such as NIEM to enable the accurate information sharing across multiple systems.

Conclusion

The NAJIS National Criminal Justice Information Sharing Survey collected data on information sharing capabilities from only a small fraction of the criminal justice community. Ninety-eight (98) complete and valid responses were received. There are more than 17,000 police agencies in the United States and thousands of other criminal justice agencies when including prose-

cution, courts, corrections and allied agencies. It is not and cannot be considered a representative sample of information sharing capabilities for descriptive or predictive purposes.

It does, however, provide a glimpse into the level of technology use and information sharing that is occurring in the criminal justice community. Responses were received from all levels of government (except tribal); respondents represented all agencies and organizations involved in the criminal justice domain. This article focused on the profile of respondents and their responses to several key questions. We know who responded, what types of information technology they use, and how familiar they are with national initiatives promoting information sharing.

The final report will dig into the next level of detail – what information do these agencies share, with whom do they share it, and how do they share it. These findings will be presented at the NAJIS conference, September 21-23 in New Orleans. The final report will be made available through the NAJIS website, www.najis.org.