Pennsylvania Justice Network

5 Technology Park
Harrisburg, PA 17110

Director's Message

The Pennsylvania Justice Network (JNET) is the commonwealth's secure "virtual single system" for the sharing of justice information. Much of JNET's success can be attributed to the collaboration and cooperation of our many partner agencies. JNET works closely with state agencies in order to provide secure access to a multitude of data sources. This collaborative effort has allowed JNET to mature into the commonwealth's primary public safety and criminal justice information broker. Through the adoption of innovative concepts, cost-effective business practices and ongoing collaboration with key stakeholders, JNET is an internationally renowned platform for integrated justice services.

Many participants deserve credit for JNET's successes. A strong governance structure and decisive executive sponsorship has allowed JNET to grow, mature and enhance public safety with unprecedented results. Overwhelming participation from municipal, county, state and federal agencies has helped guide JNET through a decade of changes and integrated justice development. These key elements, coupled by JNET's dedicated staff and leadership, have resulted in several awards, hundreds of success stories, and a platform for cost-effective information sharing for commonwealth partners.

During fiscal year 2010-2011, JNET focused on cost saving initiatives such as the implementation of a username and password authentication solution. This alternative authentication model allows JNET Criminal Justice (CJ) users, who do not need access to Criminal History (CH) information, to migrate away from using digital certificates for authentication. Users have the ability to access JNET services without being tethered to dedicated computers and JNET has reduced security support costs by 35 percent.

In addition to the username and password migration effort, JNET initiated an extranet consolidation research project in order to provide criminal justice agencies with access to JNET's secure portal through the open internet as opposed to privately leased circuits. This multi-year initiative gained a significant amount of momentum and the agency is poised to begin pilot testing in fiscal year 2011-2012. The final result of this initiative will shift the financial burden from reoccurring telecommunications support to investments in application development and support for the user community.

Finally, JNET made additional investments into its service-oriented architecture (SOA) platform and developed multiple reusable exchanges and service calls, providing JNET with the ability to rapidly develop and deploy consolidated queries as part of its "Federated Services Approach." From a customer service perspective, business partners have the ability to rapidly connect to vital data via web services without burdening JNET development staff. This allows JNET staff to focus on new initiatives and allows business partners to rapidly invoke integrated services.

It is with great pleasure that I present JNET's annual report for fiscal year 2010-2011. The information contained in this report represents many of the successes, visions and objectives I have summarized for you here; although JNET's reach goes far beyond the aforementioned key initiatives. Each milestone, achievement and success story is a result of our ongoing collaboration. I thank each of you for your ongoing support and interest in JNET, and my team appreciates the opportunity to enhance your approach to accessing critical public safety information.

Dave Naisby,
JNET Executive Director

Table of Contents

Executive Summary

In fiscal year 2010-2011, the Pennsylvania Justice Network (JNET) continued to enhance public safety throughout the commonwealth by providing an integrated justice portal where Pennsylvania's criminal justice practitioners can access secure information in a timely manner. Some of the highlights from fiscal year 2010-2011 are listed below; additional accomplishments can be found later in this report.

Username and Password Authentication — As a result of this project, non-Criminal History users can now access JNET resources via a username and password instead of costly personal digital certificates. This project makes access to JNET applications easier for the user community while ensuring secure access to Criminal History applications. JNET users can now be more mobile with their logins and the reduction in digital certificates equates to significant savings in agency operating costs.

Through this effort, criminal justice users will be able to connect to JNET using only a web browser in a forced transport security layer (TLS) protocol encrypted session. This security model meets the 2010 CJIS policy requirement for encryption, is certified to comply with the Federal Information Processing Standard (FIPS) 140-2 and, because PKI digital certificates are being used, advanced authentication is also present as required by CJIS. The solution also complies with the Pennsylvania Criminal History Record Information Act (CHRIA).

Federated Address Search — The federated address search application allows users to make a single inquiry and automatically search several agency databases, including PennDOT, state and county corrections, state and county probation, public welfare and the PA courts databases. This results in a significant savings in time and resources.

Award — JNET was named a Laureate in the 2011 Computerworld Honors Program for the JNET Federated Address Search. Laureates' achievements were recognized publicly at a special ceremony and recipients were presented with a medallion.

PaJCMS Centralization — The project's goal is to centralize all county Juvenile Case Management System (JCMS) databases into one centrally located database and provide one central JCMS application for all county users. Significant hardware and software maintenance cost savings will be realized as counties decommission their web and database servers. Software support and maintenance will also gain efficiency as there will be only one database and application installation needed for the 64 counties which have a case management system. This year, JNET assisted the Juvenile Court Judges' Commission (JCJC) staff to co-locate most of the individual JCMS databases to the Commonwealth Technology Center and to develop and implement reliable methods of moving data to the new consolidated database.

Business Objects Reporting — During this fiscal year JNET developed several executive dashboard monitoring tools to depict various county/agency and user activity as it pertains to the JNET applications environment. Reports include monthly performance indicators (county scorecards), county probation and prison reports and electronic reporting error reports.

JNET Background Check Web Service — JNET is developing a web service which provides users with the ability to run background checks. Phase one included an employee background check and criminal background check. This new service is scheduled to be deployed as an application in the first quarter of fiscal year 2011-2012.

National Governors Association Policy Academy on Justice Information Sharing — JNET participated in the Policy Academy on Interagency Standardization of Justice Information Sharing. The goal of the project, supported by the U.S. Department of Justice, Bureau of Justice Assistance, is to assist states in developing a standardized justice information sharing system that will allow state agencies to share information, thereby eliminating redundancies and errors and lowering costs associated with sharing justice information. As a result of this effort, JNET's Steering Committee formally adopted the Global Justice Reference Architecture (GJRA) as a standard development model.

Cost Savings — JNET and JNET-related projects saved JNET users and the commonwealth over $2.3 million.

JNET Success Stories

Pennsylvania's criminal justice practitioners use JNET to perform their jobs more effectively and efficiently, which translates into improved public safety. Below are a few success stories received from the user community.

- Local and federal agents used a remote connection and laptop computer to access JNET while on-site during a raid of a suspected gambling operation in Cumberland County. During the warrant search, officers used JNET to run information through CLEAN, NCIC, AOPC, Domestic Relations and PennDOT.

- Officers in the Southwest Mercer County Regional Police Department use JNET to help probation officers locate parole absconders. In one instance, probation had a very grainy photo of the suspect. Although Southwest Mercer was unable to find a match searching WebCPIN and PennDOT, they were able verify his information by searching CLEAN. They then used the information from CLEAN to run a search in the photo search application, which returned the suspect's PennDOT photo. Using that photo, they went back to the area where the individual was first seen, located him and took him into custody. Southwest Mercer has assisted local departments by creating line-ups and wanted posters. They have also assisted neighboring Ohio police departments with photos, criminal history and line-ups that have resulted in criminal arrests.

- A Philadelphia drug raid was a success due to the ability to search many different databases in JNET. According to Detective Callaghan, "The case involved a ton of research and surveillance. JNET provided 'one stop shopping' for information, including criminal history and photos. Before JNET, I used to have to log on to several computers or call numerous people for information." Agents confiscated over $900,000 in cash, guns, paraphernalia and the largest seizure of cocaine in the history of Philadelphia.

- Police from Delaware County received a Megan's Law investigation request letter regarding a certain individual who was a lifetime registered sex offender. The department investigated the subject and found he did not register and had fled the area. They were unable to locate the suspect. Using the DPW look-up on JNET, they found a current address for the suspect and took him into custody on a Megan's Law Violation warrant. During a recent traffic stop, a police officer used JNET to confirm his suspicion that a license of questionable quality was, in fact, fraudulent. After further investigation, the license holder was arrested on several felony charges.

pennsylvania
JUSTICE NETWORK

- JNET facial recognition software (JFRS) is used on a regular basis by the United States Postal Service. For example, postal inspectors used JNET facial recognition to identify an individual. They had a photo of the person but did not have any identifying information. They uploaded the image into the JFRS system and ran it using only gender, race and hair color as the demographics. A promising candidate was returned within the first few results. Two different individuals were able to verify that this individual was the person in the photo.
- Detectives from Centre County use JNET on a daily basis to locate people and to determine if suspects have prior criminal records. CPIN's ability to create photo line-ups has been invaluable in several investigations. In one case, a detective imported a suspect's PennDOT photo into WebCPIN to create a photo line-up. A positive identification on a sexual assault was made possible—with only a first name and possible home town.

The Pennsylvania Justice Network (JNET) Five-Year Strategic Plan 2009-2014

The Pennsylvania Justice Network (JNET) is an integrated, secure justice portal providing an online environment for authorized users to access public safety and criminal justice information. JNET is the commonwealth's primary public safety integration service provider.

JNET is a result of a collaborative effort of municipal, county, state, bordering states and federal justice agencies to build a secure integrated justice system. Prior to JNET, each state agency had its own computer systems and databases. This resulted in a fragmented justice environment in which information sometimes took days or weeks to get to the appropriate agencies. JNET has helped to solve this problem and represents an unprecedented leap forward in information sharing and cooperation among local, county, state and federal agencies. Authorized users can access offender records and other justice information from participating agencies via JNET.

Commonwealth agencies contributing information within the JNET secure portal include the following:

- Administrative Office of Pennsylvania Courts
- Juvenile Court Judges' Commission
- Pennsylvania Board of Probation and Parole
- Pennsylvania Chiefs of Police Association
- Pennsylvania Commission on Crime & Delinquency
- Pennsylvania Commission on Sentencing
- Pennsylvania Department of Corrections
- Pennsylvania Department of Health
- Pennsylvania Department of Public Welfare
- Pennsylvania Department of Transportation
- Pennsylvania State Police

Based on open Internet and World Wide Web technologies and standards, JNET links information from diverse hardware and software platforms under a common, web browser interface. Firewalls protect agency networks and systems from unauthorized intrusion. JNET

has avoided "turf issues" that have traditionally plagued other integration efforts by leveraging existing agency systems, recognizing and ensuring agency independence and allowing agencies to maintain control of their information.

In 1996, an initial blueprint was established by the JNET Steering Committee which outlined the initial objectives for a successful integrated public safety system and organization.

In 2004, JNET conducted visioning sessions with key stakeholders and partners. From these sessions, JNET documented and published a five-year strategic plan.

In October 2008, the JNET Steering Committee participated in organizational visioning sessions to develop concepts for a new organizational strategic plan. To meet the objectives defined by JNET's governance committee, this 5-year strategic plan has been drafted to identify key projects, processes, and activities that JNET execute through June 30, 2014.

Despite the fact that this plan represents multi-year efforts, JNET and its governing body review and update the plan annually.

Vision

Through the full commitment of its business partners, leadership and staff resources, the Pennsylvania Justice Network will provide the Commonwealth of Pennsylvania with:

- A platform for related policy and operational discussions;
- A secure integrated justice infrastructure;
- A mature SOA platform;
- Agile business service solutions;
- Innovative and relevant technologies;
- Timely and cost-effective access to accurate and complete information.

Mission

The Pennsylvania Justice Network will provide integration leadership throughout the Pennsylvania criminal justice and public safety communities. JNET will continue to be a national leader in timely, accurate and secure information access and exchange.

Organizational Strategic Goals

1. The commonwealth and the Governor's Office of Administration will maintain the Pennsylvania Justice Network's established role as the commonwealth's primary public safety integration service provider.

2. The Pennsylvania Justice Network will provide a contemporary gateway for the delivery of public safety and criminal justice data among municipal, county, state and federal commonwealth consumers.

3. The Pennsylvania Justice Network will provide governance, standards, policy and technology support to public safety and criminal justice partners.

4. The Pennsylvania Justice Network will provide extraordinary customer service to the public, agency business partners and stakeholders and the user community.

5. The Pennsylvania Justice Network will preserve and enhance its information technology security platform.

pennsylvania
JUSTICE NETWORK

6. The Pennsylvania Justice Network will provide an enterprise-wide modeling platform for public safety and criminal justice business performance metrics.

7. The Pennsylvania Justice Network will pursue cost-effective technology solutions that will result in annual and long-term commonwealth savings.

Governance Structure
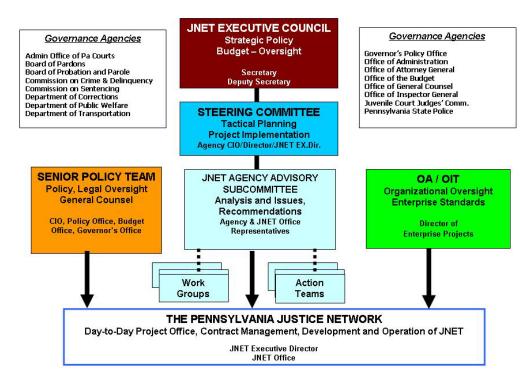
JNET represents an unprecedented example of how individual agencies, at different levels and in different branches of government, work together to share information and achieve a common goal. Building relationships and collaboration is critical to the success of JNET.

JNET provides a forum for participating agencies to collaborate and share ideas. The JNET Steering Committee is comprised of members from 16 commonwealth agencies who are appointed by each respective agency head. Each steering committee member has a voice in the strategic direction of JNET, how and what data is shared, and how policy and technical issues affecting their organizations and integrated justice are addressed. Steering committee members chair and staff the JNET Agency Advisory Subcommittee, and are advocates for JNET in each of their respective agencies. Through collaboration, commitment, cooperation and dedication, JNET has matured into one of the most successful integrated justice models in the nation.

The complete governance structure includes an executive council, senior policy team, JNET Steering Committee, JNET Agency Advisory Subcommittee, and the JNET office. The Secretary of Administration serves as the chairman of the JNET Executive Council and is responsible for appointing the chairman of the JNET Steering Committee.

pennsylvania
JUSTICE NETWORK

JNET Governance Structure

Governance Agencies

Admin Office of Pa Courts
Board of Pardons
Board of Probation and Parole
Commission on Crime & Delinquency
Commission on Sentencing
Department of Corrections
Department of Public Welfare
Department of Transportation

JNET EXECUTIVE COUNCIL
Strategic Policy
Budget – Oversight

Secretary
Deputy Secretary

Governance Agencies

Governor's Policy Office
Office of Administration
Office of Attorney General
Office of the Budget
Office of General Counsel
Office of Inspector General
Juvenile Court Judges' Comm.
Pennsylvania State Police

STEERING COMMITTEE
Tactical Planning
Project Implementation
Agency CIO/Director/JNET EX.Dir.

SENIOR POLICY TEAM
Policy, Legal Oversight
General Counsel

CIO, Policy Office, Budget
Office, Governor's Office

JNET AGENCY ADVISORY SUBCOMMITTEE
Analysis and Issues,
Recommendations
Agency & JNET Office
Representatives

OA / OIT
Organizational Oversight
Enterprise Standards

Director of
Enterprise Projects

Work Groups

Action Teams

THE PENNSYLVANIA JUSTICE NETWORK
Day-to-Day Project Office, Contract Management, Development and Operation of JNET

JNET Executive Director
JNET Office

JNET is represented on numerous committees and task forces, including the National Association of Justice Information Systems (NAJIS), Pennsylvania Commission on Crime and Delinquency's Technology and Automation Advisory Committee, National Governors Association Point of Contact for Justice Integration and federal Global Advisory Committee.

JNET representatives are board members of the Automated Fingerprint Identification System (AFIS), National Association of Justice Information Sharing (NAJIS), National Information Exchange Model (NIEM) and National Business Architecture Committee (NBAC).

The JNET office also provides technical assistance and presentations to other federal agencies, state agencies, counties and countries on integrated justice.
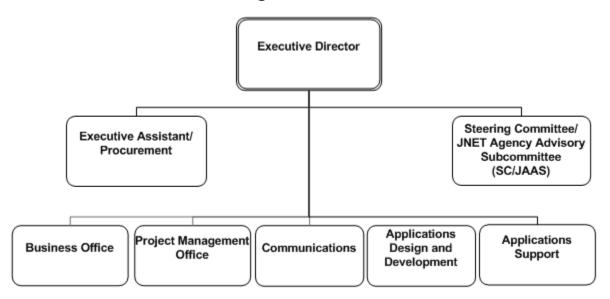
The JNET office takes direction from the JNET Steering Committee. However, organizationally, the JNET Executive Director now reports to the Chief Information Officer (CIO) of Pennsylvania.

pennsylvania
JUSTICE NETWORK

JNET Organization

The JNET office is comprised of commonwealth employees and contracted resources with the overall total, increasing and decreasing depending upon current projects, initiatives and organizational goals.

JNET Organizational Structure

Business Office

The JNET Business Office is responsible for oversight and support of the JNET project life cycle and works as a liaison with JNET stakeholders in order to elicit, analyze, communicate and validate requirements for changes to business processes, policies and information systems. The business office understands business problems and opportunities in the context of the requirements and recommends solutions that enable JNET to achieve its goals.

The business analysts within this area are responsible for explaining to software developers what requirements are needed for system applications and how end users intend to use new applications or services. The business analysts are also involved in validating the system through quality assurance and user acceptance testing (UAT).

The JNET Business Office is also responsible for training over 38,000 users across the Commonwealth of Pennsylvania. The training team provides instructor led classes, web-based training courses, webinars, user's guides and manuals, application help files and quick reference guides.

The training team works with all aspects of the JNET organization in the development of these materials. The team also provides support to the JNET help desk and solicits feedback from users to improve the training curriculum.

Communications

The JNET Communications Office is responsible for promoting JNET throughout the municipal, county, state and federal agencies within the commonwealth. The communications team is responsible for all aspects of communicating, working with the user community and providing solutions to all issues and inquiries through the JNET Help Desk. The help desk maintains a repository that provides statistical data used for reporting and process improvement modeling purposes.

The communications office is fully engaged in all application development projects. With input from a cross section of the user community, the communications team gathers certain application requirements through joint application development (JAD) sessions. This team also coordinates and assists in performing user acceptance testing, as required.

The communications office is the lead team on all JNET integration activities. These activities provide authorized users with access to JNET and additional services like the JNET messaging infrastructure, notifications, facial recognition, electronic reporting, juvenile tracking system, and the evaluation and coordination of biometric technologies as they relate to the offender identification process. The team also functions as the liaison with outside vendors and various state agencies associated with offender processing hardware and software.

The communications team is in contact with the JNET user community through the help desk, agency and county presentations, JAD and scorecard sessions and integration meetings.

Overall, this team is responsible for development and delivery of information and awareness across the JNET community.

Applications Development

The JNET Applications Development team is responsible for developing products and services defined by the JNET Executive Director. This team is responsible for software design, construction, testing and implementation. The JNET software development process integrates software development and quality assurance practices into a flexible, yet orderly, approach.

Applications Support

The JNET Applications Support team is responsible for maintenance and support of the production applications within JNET. The production application environment consists of these core application areas: web query applications, messaging infrastructure, security platforms, service bus technologies and end-user presentation layers. Primary functional areas within applications support are web hosting and maintenance, application enhancements, support and testing.

Project Management Office

The JNET Project Management Office (PMO) is responsible for managing JNET's most important projects. This team currently focuses on the coordinated planning, prioritization, and execution of projects that are tied to JNET's overall business objectives. The JNET PMO provides project management support functions in the form of software (Clarity and Microsoft Project), standardized policies and procedures, and training. The PMO provides

pennsylvania
JUSTICE NETWORK

management with accurate and timely information about all projects and major activities. The PMO also provides resource allocation planning in order to ensure that appropriate resources are assigned to projects.

JNET Applications/Hosted Applications

JNET is a secure network that provides access to data from various federal, state, county and local agencies. JNET provides a secure infrastructure for transporting this critical data and ensures that it is only accessible to authorized public safety and criminal justice practitioners.

During this fiscal year, the top three accessed applications were:

- AOPC
- CLEAN
- PennDOT

See Appendices A and B for JNET secure site application access statistics and summarized unique users accessing JNET.

JNET and Hosted Applications

Application	Description
AOPC Portal	This service provides access to docket sheets for Pennsylvania's Appellate Courts, Court of Common Pleas, and Magisterial District Judges. Authorized users can access the Law Enforcement portal, local rules, court calendars and warrant search.
Address Search	Provides practitioners with access to comprehensive address information through a unified search application. What once required ten individual searches to ten separate databases maintained by ten different agencies is now done with a single inquiry.
Automated Registration	Allows new users to apply for access to JNET electronically via their web browser and in most cases receive same or next day approval. Access requests for JNET are routed to the user's appropriate sponsor for approval. After approval is granted, the user is able to download their user digital certificate and access JNET immediately.
Crime Network (cNET)	cNET is a web-based police records management system which allows data sharing between agencies.
DOH Birth Record Inquiry	This application provides authorized JNET users with the ability to search for and retrieve birth certificate record information in order to verify citizenship.
DCNR ATV and Snowmobile Registration Inquiry	Allows authorized JNET users to search for all-terrain vehicles and snowmobile records by owner, vehicle and title information.
DPW Recipient Address Inquiry	This application system allows JNET criminal justice (CJ) users with the *DPW Recipient Address* entitlement to enter search

pennsylvania
JUSTICE NETWORK

Application	Description
System	criteria to determine if an individual of interest is actively receiving cash or food stamps benefits from the Department of Public Welfare. Returned search results include name, date of birth, the address that DPW has on record for the recipient and a DPW contact number.
DRO Warrants	This application provides authorized JNET users with the ability to query Domestic Relations warrants from all 67 counties using various search criteria.
Electronic Reporting Web Service	Allows authorized JNET users to query pre-built reports based on the electronic reporting data provided by county probation offices and county prisons.
Justice Data Flexible Search (JDFS)	Provides county jail and probation information to JNET business partners through web services, allowing the consumption of this information through either an inquiry or subscription service.
JNET Facial Recognition Investigative Search (JFRS)	Allows a JNET user to compare an unknown suspect's image to those archived in the Commonwealth of Pennsylvania's photo imaging network (CPIN).
JNET CLEAN	The JNET CLEAN application provides authorized criminal history (CH) users with access to CLEAN and NCIC.
JNET Federated Photo Search	This application allows the user to make a single inquiry and automatically search databases from PennDOT and WebCPIN, which contains photographs, from several other systems including HIDTA, DOC, PBPP, county prisons and county probation offices. Search results include a link to a map depicting the location of the subject's home address and surrounding area.
JNET User Provisioning System	Provides user roles self-provisioning and consolidates the JNET JTAC UI and registrar gateway into one contiguous application. The user provisioning system allows users to request security roles for further access to specific applications. Similar to the automated registration application, user requests for additional security roles are routed to proper approvers for approval or disapproval. Once approved for access, the user can immediately access the protected application.
JTS Inquiry	Allows justice workers to retrieve juvenile data provided by county juvenile probation office sources via a single-point search application and user interface.
Juvenile Watch List Inquiry	This application allows law enforcement officers and other authorized users to access juvenile watch list records. These records contain information provided by agencies responsible for monitoring juveniles under supervision.
Learning Management	JNET has utilized an online learning management system since

| Application	Description
System (LMS)	2002 to educate users. Recent enhancements have improved the ability to manage classes, user records and training facilities. Help Desk agents are able to correct problems within the LMS instead of having to log into remote servers to fix them.
Master Charge Code (MCC)	Master charge code allows agency charge codes to be linked to master charge codes.
Notifications	Notifications allow users to subscribe to real-time event messages for comparison against offender watch lists. When an event message is published, it is compared against millions of watch list records and the subscriber is automatically notified via email, pager or cellular phone. When a significant event such as arrest, disposition, want, warrant, state parole violation, PennDOT change of address or death occurs, users are alerted to check secure JNET for detailed event information. Virtual notifications are used by federal and municipal users without direct database access to JNET through the commonwealth network. Virtual notifications provide these users with the same functionality as traditional JNET notification services without the local database requirements.
PBPP-259 Form Processing	This system allows parole agents to enter Record of Interview Form (PBPP-259) information and supplementary notes online, submit the information and retrieve and print it for subsequent reference. It also includes a standard set of reports that are targeted for agents and agent management use, as well as the means for management staff to perform record reviews.
PCCD Constable Query/PCCD Deputy Sheriff Query	The PCCD deputy sheriff and constable query applications search a database containing deputy sheriff and certified constable information for all Pennsylvania counties.
PennDOT License/Registration Pickup	This application provides JNET users with access to PennDOT's lists of expired and revoked driver's licenses and vehicle registrations that can be picked up by an authorized law enforcement agency in the Commonwealth of Pennsylvania. Search results include a link to map depicting the location of the subject's home address and surrounding area.
PennDOT Photos/History	Provides JNET users with access to PennDOT's current and historical driver's license and photo records, as well as certified driving records.
PennDOT Vehicle Registration	Provides JNET users with access to PennDOT's certified vehicle records.
Pre-sentence Investigation (PSI) Index	This application allows authorized JNET users to search for AOPC pre-sentence related court documents by defendant information, docket number or search criteria.

pennsylvania
JUSTICE NETWORK
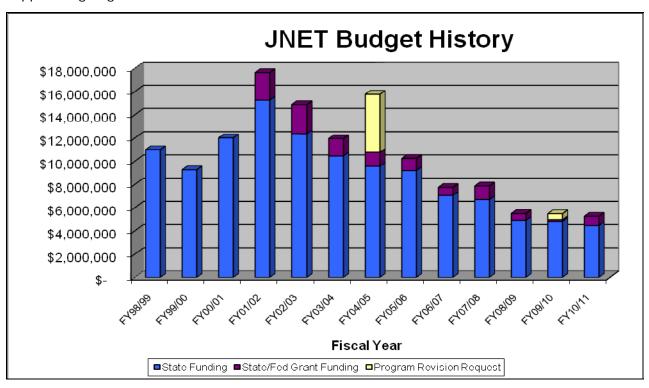
Application	Description
Sentencing Guidelines Software (SGS Web)	Sentencing guidelines software (SGS Web) is a web-based application developed by the Pennsylvania Commission on Sentencing. SGS Web provides official sentencing guidelines, calculations and history to the courts of Pennsylvania via the Pennsylvania Justice Network (JNET).
SID/OTN Lookup	The SID/OTN Lookup application allows users to find a state ID (SID) or offense tracking number (OTN) given the other identifier.
Federated Warrant Search	The JNET warrant search application allows authorized users to make a single warrant query that returns results from Pennsylvania State Police CLEAN, National Crime Information Center (NCIC), Administrative Office of the Pennsylvania Courts (AOPC), and Department of Public Welfare (Domestic Relations Section).
	Extensive enhancements were made to this application to improve the user experience and provide additional information requested by JNET clients.
User Transaction Log Lookup Report	This application system allows users to easily search through log files to find their transactions without JNET staff assistance. This application includes all user log entries collected by JNET. JNET monitors user transactions as part of its ordinary business practices in accordance with federal, state and agency information sharing policy and stores these transactions in log files. JNET users frequently request access to this historical information.
WebCPIN	The commonwealth photo imaging network provides access to over five million photos from CPIN arrest/booking centers, state and county probation and parole, state and county prisons and NY/NJ High Intensity Drug Trafficking Area (HIDTA). WebCPIN provides the functionality of creating photo lineups, performing investigative searches and printing wanted/missing person posters.

JNET Budget

The success of JNET can be attributed the effective use of both state and federal funds. The JNET state funding for operations in fiscal year 2010-2011 was $4,453,000. These funds support JNET's reliable and secure infrastructure, ongoing application development and support, procurement of contracted resources, deployment of JNET's architectural upgrade, and build out disaster recovery initiatives. As depicted in the JNET budget history graph, allocated funding for JNET has experienced a steady decrease.

For fiscal year 2010-2011, JNET received $805,475 in state grant funds to support the electronic reporting project, centralization of the juvenile tracking system database, enhancement of the warrant query service and building a federated background service. After the projects are developed and implemented, general operating funds will be used to support ongoing maintenance.
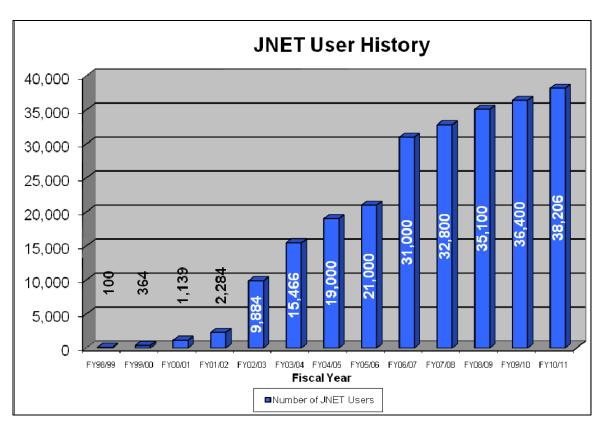
JNET Budget History
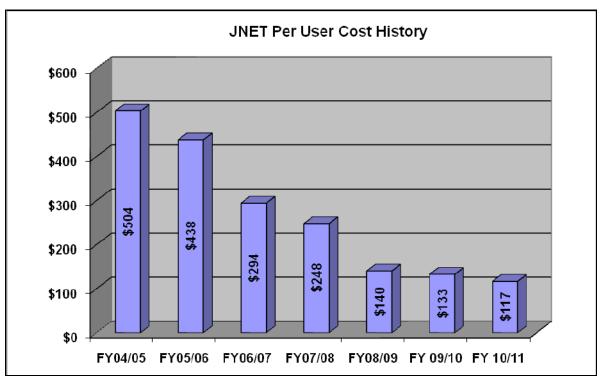
Although JNET's operating budget has experienced a decrease, the number of JNET users over the past year has steadily increased. The JNET User History chart reflects year-to-year user growth. This growth continues to challenge the JNET budget from an operational cost (specifically, software licensing and issuance of digital certificates) and contract support perspective. In order to meet this challenge, JNET continues to streamline its operations by making improvements through innovative ideas and solutions while meeting customer expectations and consistently reducing the cost per user, as shown in the JNET Per User Cost History graph. During fiscal year 2010-2011, JNET reduced the cost per user by

pennsylvania
JUSTICE NETWORK

streamlining hardware, software and processes while providing more service and expanding the customer base.

JNET User History

Number of JNET Users by Fiscal Year:
FY98/99: 100, FY99/00: 364, FY00/01: 1,139, FY01/02: 2,284, FY02/03: 9,884, FY03/04: 15,466, FY04/05: 19,000, FY05/06: 21,000, FY06/07: 31,000, FY07/08: 32,800, FY08/09: 35,100, FY09/10: 36,400, FY10/11: 38,206

JNET Per User Cost History

JNET Per User Cost by Fiscal Year:
FY04/05: $504, FY05/06: $438, FY06/07: $294, FY07/08: $248, FY08/09: $140, FY 09/10: $133, FY 10/11: $117

pennsylvania
JUSTICE NETWORK

Summary of Costs Savings

Savings generated by:	Costs savings FY 2010-2011*	Costs savings realized by:
LMS Stabilization	$24,460	JNET
Federated Address Search	$2,000,000	JNET users (estimated savings in work effort)
Username and Password	$80,000	Reduction in number of VeriSign digital certificates required
maintenance reduction CPIN	$62,500	JNET users
maintenance reduction Livescan	$62,500	JNET users
CPIN cabinet reductions	$7,000	JNET users
Livescan equipment reductions	$14,000	JNET users
CPIN equipment reductions	$70,000	JNET users
JNET Facial Recognition Maintenance	$44,000	JFRS users
Total Savings	**$2,364,460**	

*Federated Address Search savings projected for fiscal year 2011-2012

Highlights Fiscal Year 2010-2011

Enhanced Reporting

During this fiscal year JNET has developed several reports using several executive dashboard monitoring tools to depict various county/agency and user activity as it pertains to the JNET applications environment.

These reports will soon be deployed to the JNET community via the secure portal and will provide information that will be beneficial to the criminal justice practitioners.

42 A listing of JNET's Business Objects reports is as follows:

Report Name	Intended Audience
Monthly Performance Indicators (MPI's) Dashboards	
County Agency Scorecard	all JNET users
County Scorecard with Map	all JNET users
ER County Prison Inmates Reports	
County Prison Daily Inmate Population	all JNET users
County Prison Inmate Population	all JNET users
County Prison Releases	all JNET users
Inmate Demographic Information	all JNET Users
ER County Probation Reports	
County Caseload Information	all JNET users
County Offenders by Charge Class and Gender	all JNET users
County Offenders by Race and Gender	all JNET users
County Probation Active ARD Absconder Caseload	all JNET users
ER Error Reports	
DOC County Prison Electronic Reporting Summary	all JNET users
PBPP County Probation Audit Summary	all JNET users

Several other internal (JNET use only) reports have been created as well. JNET plans to develop additional reports during fiscally year 2011-2012 based on requirements that have been gathered over the past several months.

Awards

JNET was named a Laureate in the 2011 Computerworld Honors Program for the JNET Federated Address Search. Laureates' achievements were recognized publicly at a special ceremony and recipients were presented with a medallion.

pennsylvania
JUSTICE NETWORK

Projects

During fiscal year 2010-2011, a substantial number of projects ranging in size and complexity were initiated and completed. The following section does not list all of them, rather only those considered to be significant in nature.

Federated Address Search

JNET continues to apply technology to improve the business process, safety and performance of justice practitioners that must access a person's address and related information in the discharge of their duties. The address search project focused on applying JNET's enterprise service bus (ESB) to provide address information available from various government agencies within commonwealth systems via a single inquiry.

Prior to the development and implementation of this system, address information resided in multiple databases maintained by different agencies. This forced practitioners to log onto each application and generate separate inquires using essentially the same information to obtain all the available address information.

Now, authorized users enter their search criteria once and the ESB searches the relevant data sources, gathers related responses from each and presents the results in a manner consistent with the role of the user.

This JNET system also incorporates a *secondary search* of information so that, in addition to the federated inquiry, the response from one system may, as appropriate, be used to formulate still another inquiry to other target systems. For example, an inquiry to WebCPIN using the SID will return name and date of birth; the ESB will then formulate an inquiry using this information (name and DOB) to PennDOT and other appropriate systems to obtain location/address information from each.

Using the JNET Federated Address Search, the justice official can make a single inquiry and automatically search the databases from PennDOT and JNET's WebCPIN, DOC, PBPP, JNET's electronic reporting county prisons and county probation and parole offices, PSP, AOPC, DPW, JCJC and other appropriate state, regional and federal systems.

As a result of this effort, stakeholders realize:

- A significant savings in time and resources.
- Assurance that an inquiry via a secondary search will maximize to the fullest extent practical the information supplied by the end user.
- Assurance that a search for all relevant address information is conducted and the results presented in the context of the role of the individual making the inquiry.
- Improvement in the business process and procedures to obtain such information.

JNET Services in Support of the CLEAN Upgrade

During the past year, JNET completed the development, for use by the PSP as a part of the CLEAN Upgrade, web services via the JNET enterprise service bus to commonwealth systems including: DCNR, AOPC, Game Commission, Fish and Boat Commission and PennDOT (including photos). These services provide CLEAN users access to data maintained by these agencies.

Federated Background Check

JNET is developing additional business-process oriented web services to provide criminal

justice and law enforcement agencies with tools to support their missions. The JNET background check project provides three levels of investigation tools for these agencies, in addition to supporting JNET in its mission to provide applications and services.

The first two components of the JNET background search system will be completed by 2011: the employee background check and the JNET criminal background check. A third component, the JNET PSI criminal history background investigation is not in scope. However, the foundation of the PSI investigation will be completed in the first two components.

The JNET employee background check provides services to both criminal justice and law enforcement agencies by answering two questions: does this person have a criminal history that would prevent hiring? And, can this person be permitted to access PSP CLEAN criminal history information? The web service can answer the first question by providing criminal history information on potential applicants for employment. The second question arises when a person who has already obtained employment as a criminal justice or law enforcement official needs to have direct access to PSP CLEAN information. In order to meet the minimum requirements for viewing those records, the person is subject to an initial review of their criminal history and subsequent biennial reviews. The assumption in both cases is that there is no record to be found.

The second component of the JNET background check makes the assumption that there *is* a substantial criminal record on the subject under investigation and that the inquiry needs to expose that record to the reviewer. Utilizing the similar underlying applications, the background check attempts to determine the level of criminal involvement of the subject of the search and check for outstanding warrants and membership in criminal gangs and violent terrorist organizations.

Username and Password Authentication

The major outcome of this project is that JNET users can access JNET resources via a username and password instead of personal digital certificates. This project made access to JNET criminal justice applications easier and access to criminal history applications more secure. Personal digital certificates are still required to in order to gain access to criminal history applications in addition to the username and password pair. By changing the access control method, JNET users can now be more mobile with their logins. Users who do not need access to criminal history data are no longer required to carry their personal digital certificates on a smartcard or to have their certificate installed on multiple machines. Historically, about 73% of JNET's support calls were related to personal digital certificates. This project roughly halves the number of JNET users using personal digital certificates. The result is a system that is easier to use system and lower operating costs through a reduction in the total number of digital certificates.

PaJCMS Centralization

The Pennsylvania Juvenile Case Management System (JCMS) is the primary means through which 64 county juvenile courts comply with 42 Pa. C.S. Sec. 6309 to collect and submit for inclusion in the PSP central repository the disposition of cases of juvenile offenders, including the disposition of those cases resulting in an adjudication of a delinquency. This system was deployed in a standalone mode in each county. This proved to be a major problem from a data management, deployment and maintenance perspective. Web and database servers in each of the 64 counties needed constant updates and maintenance. Application and databases updates would take weeks to deploy.

pennsylvania
JUSTICE NETWORK

This project's ultimate goal is to centralize all county JCMS databases into one centrally located database and provide one central JCMS application for all county users. Significant hardware and software maintenance cost savings will be realized as each of the county installed web and database servers are decommissioned. Software support and maintenance will also gain efficiency as there will be only one database and application installation needed for all 64 counties.

To meet the stated goals and objectives, JNET has spent the past year assisting the Juvenile Court Judges Commission (JCJC) staff to co-locate most of the individual JCMS databases to the Commonwealth Technology Center and to develop and implement reliable methods of moving data to the new consolidated database. JNET also has modified PaJCMS so that it can operate as a single, centralized application running on centralized web servers located at the Commonwealth Technology Center.

National Governors Association Policy Academy on Justice Information Sharing Standardization

In August 2010, the National Governors Association (NGA) Center for Best Practices awarded $25,000 grants to Pennsylvania and four other states to participate in the Policy Academy on Interagency Standardization of Justice Information Sharing. The goal of the project, supported by the U.S. Department of Justice, Bureau of Justice Assistance, is to assist states in developing a standardized justice information sharing system that will allow states agencies to share information, thereby eliminating redundancies and errors and lowering costs associated with sharing justice information. In particular, the policy academy states will use the Justice Reference Architecture (JRA), a framework developed and supported by the U.S. Department of Justice's Global Justice Information Sharing Initiative, which provides a way for states to standardize information sharing at all levels by looking at the components and agencies involved. The policy academy is highly interactive, team-based processes that will help states develop draft interagency agreements to create the governance structure in which to use JRA.

As the state's primary public safety and criminal justice information broker, the Pennsylvania Justice Network (JNET) conducted a project aimed at improving the visibility of messaging and web services it has developed and implemented during the past five years. It also sought to apply JRA as it establishes much needed service oriented architecture (SOA) governance—i.e., web services access and use policies, procedures and security.

Between the project's inception in August 2010 and its closure in June 2011, JNET met all of its project objectives and accomplished the following:
- Developed an inventory of both internal and external JNET services.
- Effectively communicated the availability of JNET services.
- Developed and implemented a process for submitting requests to use JNET services.
- Developed and implemented a process for evaluating requests to use JNET services.
- Established and documented SOA governance policies.
- Updated one of our service specification packages (SSPs) to address all of the policy academy faculty's suggestions for improvement.
- Developed a methodology and plan for measuring the value of our services.
- Labor cost savings from re-use of four services that support the upcoming PSI service:
    - JNET background search
    - JNET address search

- Electronic reporting of inmate information and parole and probation data
- JNET photo search

User Transaction Log Lookup Report Development

JNET monitors user transactions as part of its ordinary business practices in accordance with federal, state and agency information sharing policy and stores these transactions in log files. Frequently, JNET users request access to this historical information. Unfortunately, it takes a lot of time to sift through the log files to locate specific user records. This project resulted in the development and implementation of an application service that allows users to easily search through log files to find their own transactions without JNET staff assistance. Immediately following the release, JNET users requested access to the PennDOT user logs. However, this was not possible because PennDOT log files were outside of the user transaction log database. JNET began a follow up project to move the PennDOT user logs to the user transaction log lookup. That project was completed and now users can look at their records from driver demographics, history, license pickup and vehicle registration applications.

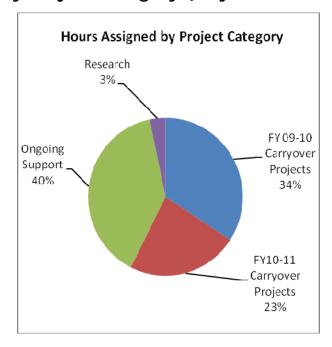## Project Management and Application Support for PEMA

During the past year, JNET continued its support of PEMA by providing both project management and application support for the WebEOC systems used by their Emergency Operations Center and Disaster Planning staff. Both the JNET Project Management Office and its Application Support Team played key roles in the further development and integration of the WebEOC System originally installed as a PEIRS replacement in 2008-2009, as well as the initial implementation of a second WebEOC system to be used as an integral emergency evacuation planning tool in Project PREPARE. Most recently, JNET has assumed responsibility for maintaining over 20 applications developed in-house by the agency.

Resource Planning

Resource planning has proven to be a key factor in JNET's ability to deliver a relatively large number of important project outcomes while maintaining a stable operational environment.

pennsylvania
JUSTICE NETWORK
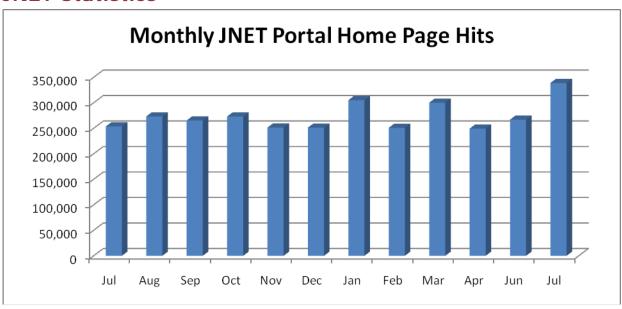
Hours Assigned by Project Category (July 2011 month sample)

Fiscal Year 2009-2010 Carryover Projects	**1351 hrs.**
Projects started in fiscal year 2009-2010 and nearing completion.	
Fiscal Year 2010-2011 Carryover Projects	**916 hrs.**
Projects started in fiscal year 2010-2011 and carried over to the new fiscal year.	
Ongoing Operational Support	**1552 hrs.**
application system maintenance, help desk support, IT infrastructure support, marketing/PR, web portals maintenance	
Research	**130 hrs.**
Research activity conducted as part of a potential new project assessment	

JNET Statistics

Monthly JNET Portal Home Page Hits

JNET Messaging Infrastructure

While JNET's focus has been on web service development, the JNET messaging infrastructure (MI) continues to play a vital role. JNET MI continues to be the primary message broker that allows for the secure transfer of information between agency systems and users. This data exchange and event messaging model provides stakeholders with the ability to maintain ownership and control of their data systems. This has elevated county and state agency data availability, including participation in electronic data exchange and subscription to real-time event messaging services.

In 2010, JNET added AOPC common pleas delinquency and dependency court case event messages. JNET also continued to roll-out new electronic reporting web services for inmate and probation information, and as a result, the number of electronic reporting based on messaging for corrections and probation information decreased.
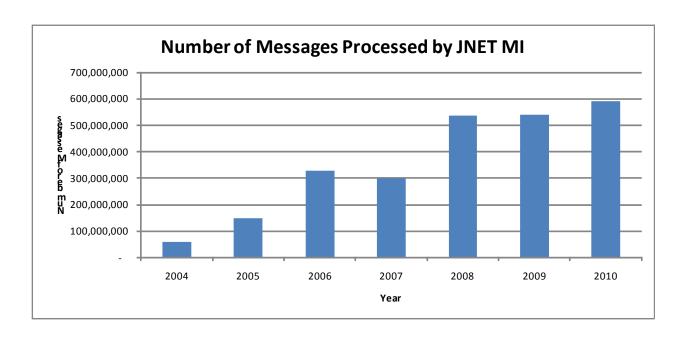
The table below shows the number of messages processed by the JNET messaging infrastructure from 2004 to the end of 2010. Compared to 2009, the number of messages processed in 2010 increased by about 9.84%. While the number of electronic reporting messages going through JNET continued to decline, the number of messages for the court case event messages continued to increase as a result of the additional event messages published by AOPC and also the rollout of several electronic court filing systems to AOPC.

The table and chart below show the number of messages processed since 2004. The compounded annual growth rate of JNET MI messages since 2004 is 54.78%, showing a tremendous annual growth rate per year.

JNET Messages

	2004	2005	2006	2007	2008	2009	2010	CAGR
Number of messages	60,652,116	150,092,461	326,977,089	299,954,529	536,382,826	538,775,946	591,809,392	46.18%

pennsylvania
JUSTICE NETWORK

Number of Messages Processed by JNET MI

Number of Messages

Year	
2004	2005
2006	2007
2008	2009	2010

Y-axis: 700,000,000 / 600,000,000 / 500,000,000 / 400,000,000 / 300,000,000 / 200,000,000 / 100,000,000 / -

Federated Warrant Search
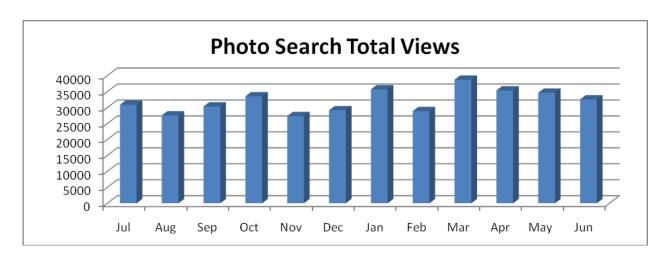
The JNET federated warrant search application provides JNET users with the ability to search three unique warrant repositories through one federated query.

Warrant Search Total Views

Y-axis: 40000 / 30000 / 20000 / 10000 / 0

X-axis: Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun

Federated Photo Search

Using JNET federated photo search, a justice official can make a single inquiry and automatically search for photos in the PennDOT and WebCPIN, databases as well as from HIDTA, DOC, PBPP, county prisons, and county probation offices. Search results include a link to a map depicting the location of the subject's home address and surrounding area.

pennsylvania
JUSTICE NETWORK

Photo Search Total Views

Electronic Reporting

JNET provides the secure reporting infrastructure between county agencies and the Pennsylvania Board of Probation and Parole (PBPP) and the Pennsylvania Department of Corrections (DOC). In order to take greater advantage of the information reported by county agencies, JNET developed the ERII (DOC) and ER2P (PBPP) web services. These services allow county agencies to report information to their respective state agencies in a more reliable and usable format through the adoption of the National Information Exchange Model (NIEM) within the message.

ERII and ER2P allow JNET to provide critical county inmate and offender information through the re-use and republication of JNET web services. Ninety percent of county jails do their reporting through JNET ER and JNET ERII. A total of 52 county jails are participating in JNET ERII and five county jails are utilizing the legacy electronic reporting.

Seventy five percent of county adult probation departments also report through JNET ER and ERII. A total of 48 report through the legacy ER and one department reports using the ER2P.

JNET Notification Service

As the hub of the commonwealth's criminal justice information sharing efforts, JNET is in the unique position of providing notification alerts of critical events within the criminal justice system to interested professionals. Currently, JNET subscribes to:

- Arrest and want (including bench warrants) events from the Pennsylvania State Police
- Case sentencing, case bind over and warrants from the Administrative Office of Pennsylvania Courts
- Change of address from the Pennsylvania Department of Transportation
- Deceased persons from the Pennsylvania Department of Health
- Parole violations from the Pennsylvania Board of Probation and Parole
- Domestic relations warrants from PACSES

By leveraging the JNET ERII and ER2P services, JNET was able to add county jail and county adult probation notifications to the existing JNET notification offerings:
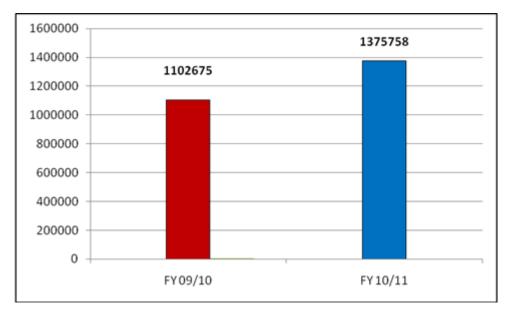
County Jail Notifications:
- County Inmate Admission
- County Inmate Permanent Release
- County Inmate Temporary Release
- County Inmate Escape
- County Inmate Detainer Update
- County Inmate Bond Update

County Adult Probation Notifications:
- County Offender Supervision Effective Date
- County Offender Supervision Closed
- County Absconder Message
- County Offender Change of Address
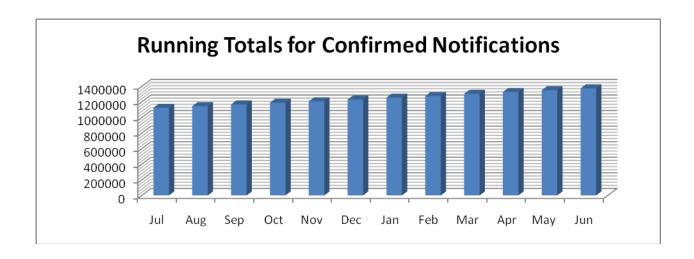
Virtual notifications provide JNET users the same functionality as traditional JNET notification services without the local database requirements. Authorized users can access the JNET virtual notifications application and either manually enter or upload information to populate a watch list. JNET then securely stores that information and compares it against notification event messages. Each watch list can be configured to ensure that messages matching individual persons of interest are sent to specific recipients.

Total JNET Notifications Fiscal Year 2010-2011

Running Totals for Confirmed Notifications

Federal Agencies

Currently there are a total of 30 federal agencies with over 50 fixed locations connected to JNET. During fiscal year 2010-2011, JNET provided access to the following *new* federal agencies located throughout the state:

- Food and Drug Administration – Office of Criminal Investigation
- United States Treasury – Internal Revenue Service
- United States Department of Homeland Security – Federal Protective Services
- United States Air Force

Training

The JNET training team provides JNET users with both instructor-led training (ILT) and web-based training (WBT) through the learning management system (LMS). The following tables outline the number of students trained by these two methods. During fiscal year 2010-2011, three new LMS courses were deployed and several courses were updated or enhanced, including the JNET overview course and registrar training, which were rewritten to reflect changes in the username and password authentication system. The JNET training team also creates and updates quick reference cards for many of the JNET applications.

The JNET training team provides hands-on training for the JNET facial recognition system and classroom training for a variety of other courses. Most JNET training is accomplished by web-based training modules via the learning management system. This allows users to complete training at their worksites, as their schedules permit. This saves agencies travel costs and minimizes down time for employees.

In addition to the trainings listed below, the JNET training team developed training documentation and held state-wide training sessions for over 800 sponsors, registrars and JTACs on the new JNET username and password system of authentication.

pennsylvania
JUSTICE NETWORK

Number of Students Attending Instructor-led Courses

Course	# students
JFRS	29
JNET 101	85
cNET	12
WebCPIN	30
TOTAL	**156**

Number of Students Taking Courses Web-based Courses

Course	# students
Address Search	513
AOPC Applications Overview - Sept 2010	306
Assign Sponsor/Registrar to Agency	67
Automated Warrant Entry	125
cNET Quick Arrest Course	12
cNET Records Management	104
Deactivate User Account	63
DPW Citizenship/Identity Verification	120
Driver Information and Certified Driver History	407
JFRS Watchlist	68
JNET Criminal History - Initial New User Training	1,625
JNET Criminal History Recertification	4,447
JNET Digital Certificates	183
JNET Electronic Statistical Reporting	73
JNET Limited Access Overview	15
JNET Overview	5,432
JNET Photo Search	292
JTAC Recertification	337
Juvenile Tracking System (JTS)	128
Notifications	139
PCS Final Sentencing Guideline Search	115
PennDOT Authorization of Lift	106
PennDOT Certified Vehicle Registration	396
Pre-Sentence Investigations Index	125
Registrar Training - JNET User	221

Course	# students
Provision System	
Sponsor Training - JNET User Provision System	173
Updating User Profile	56
Virtual Notifications	102
Warrant Search	369
WebCPIN/IPIN	457
Total	**16,576**

JNET Outreach

JNET outreach efforts include facilitating and communicating awareness to criminal justice practitioners. Outreach activities include both conducting and attending meetings throughout the state.

In fiscal year 2010-2011, JNET held two integration meetings in State College. Each meeting was attended by approximately 250 individuals from the user community. During the meetings, JNET staff and business partners provided project updates. Break-out sessions were held to cover topics that were more specific to certain groups such as IT professionals, JNET terminal agency coordinators (JTAC's) and registrars.

JNET Marketing Plan

For JNET to continue to be successful, we need to continually communicate and market our product to current and potential municipal, county, state and federal users. Information communicated includes the positive aspects and the potential benefits of JNET, data and information available through JNET, success stories, best demonstrated practices, new applications, project updates, system enhancements and policy.

JNET Communications employs a wide variety of cost effective media to communicate with different audiences such as:

- Joint Application Development sessions or focus groups and user surveys to solicit feedback from a wide range of users; this information can form the basis for on-going program planning

- Targeted emails or electronic bulletins incorporating images and written messages

- Portal announcements on home page including a scrolling banner and *Did You Know* features

- Webcasts or webinars

- Internal online news bulletins (online annual report)

- Internet/portal pages on JNET benefits, information, applications, help desk issues, etc.

- Scorecards – county and agency report cards presented to CJABs and other groups provide input on users and usage and promote JNET applications or available data they may not be aware of

- Quick reference cards that are easy to understand and follow

Conferences

JNET staff members attended and participated in various conferences throughout the fiscal year, as shown in the following list.

- Automated Fingerprint Identification System (AFIS) Internet Conference
- Computer World Honors Conference
- County Chief Probation and Parole Officers
- DSI Conference
- FBI Facial Identification Scientific Working Group (FSWIG)
- Global Advisory Committee (GAC)
- Global Executive Steering Committee (GESC)
- Global Federated Identity and Privilege Management (GFIPM)
- Global Infrastructure and Services Working Group (GISWG)
- Global Justice/Health Charter Group
- Global Outreach Working Group
- Global Security Working Group (GSWG)
- Global Standards Council (GSC)
- InterConnect Conference
- National Association of Justice Information Systems (NAJIS)
- National Governor's Association Conferences
- National Information Exchange Federation (NIEF)
- Pennsylvania Chiefs of Police Association Conference

Service Level Agreements

By using services level agreements (SLA's), JNET can maintain a high level of service and work to increase the quality of service provided to JNET member organizations. The JNET office provides secured networking, applications services and support to JNET member organizations, including Pennsylvania state agencies, counties and other qualified organizations. During this current fiscal year, all SLA's were reviewed and updated in a collaborative manner with all affected agencies. These agreements relate to four basic services provided by the JNET office, plus the performance of JNET applications:

1. **Network Infrastructure Availability (Connectivity) —** between business partners and the JNET office.
2. **JNET Applications and Services** – hosted on the JNET servers, for use by JNET users with proper security authorizations and permissions.
3. **Problem Resolution Services —** timely response to service exceptions (outages) and timely resolution of service problems.
4. **JNET Applications Performance (Response, or Round-Trip Time) —** at levels acceptable to the JNET agencies.

For more information on SLA's, see one of the follow appendixes:

Appendix C, JNET Service Level Agreements, defines the service relationship between the JNET office and JNET member organizations.

Appendix D, JNET Monitoring and Measurement Tools, describes the network and applications availability and performance monitoring and measurement tools used by JNET to ensure the quality of service JNET provides.

Appendix E, Sample JNET Quarterly Service Level Report & Availability Report, shows the annual percentages of uptime and average response times, by application.

pennsylvania
JUSTICE NETWORK

Appendix A – Summary of Unique Users Accessing JNET
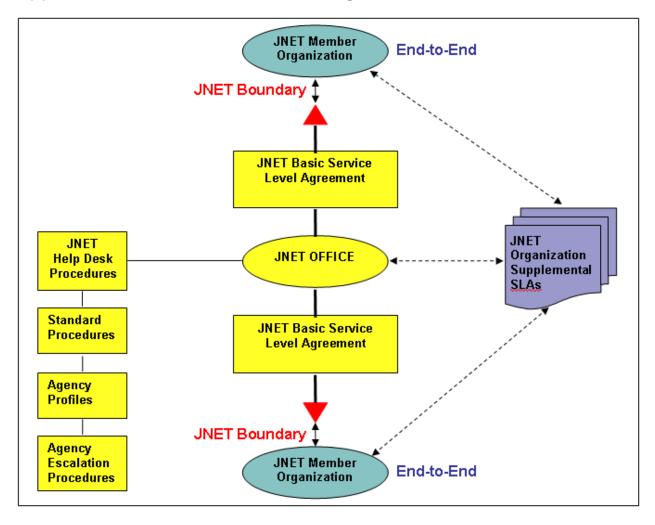
Fiscal Year 2010-2011	
Department	**Unique Users**
County Government	13,598
Federal Government	293
State Agencies	4,920
Business Partner	12
Total:	**18,823**

Appendix B – Applications Accessed

Fiscal Year 2010 -2011	
Application	**Total Hits**
Address Search	9,841
AOPC-Case List	52,260
AOPC-CP Secure Docket Sheets	723,680
AOPC-DOD	283,500
AOPC-MDJ Web Dockets	365,227
AOPC-Warrant Search	192,377
Clean-Canadian Driver Registration (UQ)	538
Clean-Canadian Vehicle Registration (VQ)	130
Clean-CCH Summary Request (QH)	195,507
Clean-Inquiry Wanted - Missing Person (QWA)	127,703
Clean-Master Name Lookup (MN)	624,091
Clean-ORION Inquiry (TQ)	464
Clean-ORI Translation (QO)	1,832
Clean-Out of State Driver History (KQ)	15,569
Clean-PDOT Operator License (DQ)	87,313
Clean-PSP-PA RAP Sheet (RS)	89,341
Clean-PSP-Protection Order (QPO)	19,743
Clean-Query Gang Member (QGM)	4,041
Clean-Query Gang Organization (QGG)	343
Clean-Query Stolen Articles (QA)	875
Clean-Query Stolen Boats (QB)	190
Clean-Query Stolen Guns (QG)	4,415
Clean-Query Stolen Securities (QS)	130
Clean-Query Stolen Vehicle (QV)	1,968
Clean-Rap Sheet Requests (QR)	156,498
Clean-Vehicle Registration Query (RQ)	158,709
CNET via JNET Cert	28,720
COUNTY-Correction	25,206

County-Probation	16,929
DCNR ATV-Snowmobile	1,998
DOC-Inmate Classification	10,436
DOC-Inmate Location	19,494
DOC-Inmate Misconduct	2,242
DOC-Inmate Photos	13,619
DOC-Inmate Sentence	25,126
DOC-Inmate Summary	31,752
DOH Birth Record Inquiry	63,825
Domestic Relations Warrant Search	65,240
DPW Recipient Address Inquire	20,915
ER Statistics	5,198
Find Photos	187,346
Find Warrant	504,998
Flexible Search (JDFS)	65,237
Full Copy Protection Order	1,700
Home Page	31,011
ISOATS-SOAB	10,905
Juvenile Inquiry	37,462
Juvenile Watch list	0
LMS	29,992
Master Charge Code	1,458
Mobile	883
Notifications Web Page	95,923
PBPP 259 Blackberry	628
PBPP-Offender Info	9,636
PCCD Constable Query	3,894
PCCD Deputy Query	1,109
PennDOT-Driver History	442,528
PennDOT-Driver Info	3,510,455
PennDOT-Police Pickup	8,647
PennDOT-Vehicle Registration	475,297
PFAD	7,169
Portal	22
Pre Sentence Investigations	5,913
PSP-CPIN Arrest Mugshots	22,948
SGSWeb	96
SID OTN	1
SID Search	31,473
User Provisioning System	460,999
WebCPIN	196,992
Total	**9,591,707**

Appendix C – JNET Service Level Agreements

Appendix D – JNET Monitoring and Measurement Tools

The Pennsylvania Justice Network uses a set of monitoring and measurement tools to maintain reliability and performance. These tools are used to measure adherence to the service level agreements (SLA's). Each tool is described in this appendix.

SiteScope

Mercury Interactive's SiteScope is used to monitor the availability of JNET applications and application components. It does this by imitating a JNET user; submitting transactions to JNET's applications on regular intervals according to an overall schedule. The transactions use approved production test data. SiteScope then records the results of those interactions. SiteScope sends alerts via email to both JNET Operations and the JNET Help Desk when an application or component of an application has failed. This alert allows JNET to begin taking action before users notice the outage.

The owners of the data determine the minimum interval between test transactions for each application. The testing intervals currently go from two to 30 minutes (for example, JNET Home Page and RAP sheets). Schedules can be set up on a per application basis and used to distinguish between prime time and non-prime time or to allow for regularly scheduled maintenance windows. However all applications are currently monitored via a single 24 hours per day, seven days per week schedule.

An outage is reported when SiteScope receives two consecutive errors in a transaction. Depending on the transaction, SiteScope may be configured to report an error based on conditions such as transactions taking too long to complete or the presence or absence of key words or phrases in the returned page (which would indicate success or failure). Two consecutive errors are used so that SiteScope can ignore transient errors.

SiteScope can also generate "warning" errors based on criteria specified when the monitor for the application was designed.

In addition to monitoring the status of applications, SiteScope also helps JNET Operations to diagnose the problem by pointing to the specific component or area of an application that has failed. This can decrease the time it takes to resolve issues. The design of the application and the components and facilities that it uses determine the degree to which SiteScope can isolate issues.

SiteScope also provides built-in management reports for daily, weekly and monthly availability summaries. Management reports can be viewed online via a secure URL or SiteScope can automatically send them to a list of email addresses. Currently, the reports are being sent daily via email to members of the JNET Operations team.

Report data includes:

- The application/monitor name is the name assigned by JNET to a group of web-based transactions. The transactions typically correlate to an application.

  Uptime percentage is calculated by adding the number of transactions that did not return an error or warning within the report period and dividing by the sum of the period intervals. For example, if there were 70 "good" transactions out of 90 attempted, then:

  Uptime% = Good Count/Report Period = 70/90 = 77.778%

Because transactions are run at intervals, short outages can be missed. For example, if the interval between which the owners of the data permit transactions is 30 minutes, any outage shorter than than could be missed.

WhatsUp Gold

IPSwitch's WhatsUp Gold is used by JNET Operations and the help desk to monitor the availability of JNET's communications network.

It provides a real-time, high-level network map that indicates the overall health of the network. Color-coding the health of any component or segment in green, yellow or red indicates the status. The WhatsUp Gold network map is typically running in both the help desk office and in the network team's office.

WhatsUp Gold also provides the ability to drill down within the network to look at the current status of a location. The details provided at this level include, among other things, the current status, the last time the location was checked and uptime for the connection. WhatsUp Gold cannot determine the root cause of the error, such as whether connectivity was lost because of a hardware failure, power failure or due to routine maintenance.

In addition to providing the current network status, WhatsUp Gold also provides historical reports on the availability of the network link to various locations. The locations being monitored include the counties and agencies that connect to JNET. The availability reports can be either detailed or summary and can be generated for any combination of starting and ending dates. Historical data exists back to at least January 1, 2003. The reports include the locations identified by the names entered into WhatsUp Gold for each site.

An outage occurs when the equipment being monitored at the remote location has not responded four consecutive times. Each time is 15 seconds apart. This one-minute check is designed to allow for transient errors to be ignored. This means that an outage of less than one minute may be missed. Typically, network traffic can ride through outages of 30 seconds or less with no loss of connectivity. In a network of any size and complexity, some number of transient errors is normal and the quality of data communications in the remote location has an impact on the definition of a normal quantity of errors.

The total downtime listed on the reports is the sum of all outages. An outage could be caused by a failure in the equipment at the location (for example, a router), by a problem in the telecommunications link (for example, at TelCove) or a problem with something in between (for example, a business partner firewall, router or switch).

Graphical versions of these reports are also available; however, JNET does not currently produce or use them.

WhatsUp Gold can also use schedules to determine when to monitor equipment and each schedule is set on a per equipment (location) basis. Currently, all equipment is being monitored 24 hours per day, seven days per week.

Finally, WhatsUp Gold is currently being used to provide alerts when remote locations go up or down. It currently sends emails for counties or agencies. It also monitors two other sites on the Internet as a way of determining the availability of the commonwealth's (and therefore JNET's) link to the Internet.

Appendix E – JNET Annual Service Level Report & Availability Report

Application name	Percent uptime (excluding scheduled maintenance windows)	Average response time in seconds
AOPC UJS Portal	99.89%	2.49
AOPC – MDJ Web or Docket Sheets	99.63%	2.29
AOPC - Officer Lookup	99.48%	4.60
AOPC - PACSES Warrants Inquiry	99.50%	2.65
AOPC - Warrant information system search	99.61%	2.22
AOPC – Cast List	99.67%	5.91
BOP	99.89%	5.44
Certificate Enrollment	99.97%	0.22
CNET Home Page (proxied)	99.52%	2.22
CNET Generated Reports - Results	98.01%	17.87
CNET – Person Search (General Name)	98.42%	9.18
CNET – Person Search (General Name) – Fill in Search	98.82%	3.91
CNET – Person Search (General Name) – Go to Search	98.82%	0.83
Constable Query	99.70%	3.07
Court Documents – PCS Guidelines	99.96%	1.98
Deputy Sheriff's Query	99.69%	2.61
DOC – Inmate Classification	99.54%	4.50
DOC – Inmate Location	99.54%	4.47
DOC – Inmate Photos	99.13	7.96
DOC – Inmate Sentence	99.53%	4.46
DOC – Inmate Summary	99.52	4.44
DOH Birth Inquiry (long)	92.10%	3.97
DCNR Search ATV Snow Mobile	94.17%	2.76
JDFS – Case List	99.70%	4.50
JDFS – Correction Docs Search	99.14%	6.11
JDFS – Court Documents Search	98.80%	5.21
JDFS – DPW Recipient Address	96.50%	3.28
JDFS – EPFA	99.71%	4.58
JDFS – General Name Search	99.63%	10.88
JDFS –Inmate Classification	99.55%	4.39

Application name	Percent uptime (excluding scheduled maintenance windows)	Average response time in seconds
JDFS – Inmate Locations	99.87%	4.47
JDFS – Inmate Photos	99.16%	2.51
JDFS – Inmate Sentence	99.48%	4.40
JDFS – Inmate Summary	99.49%	4.45
JDFS – Offender Info	99.81%	4.57
JDFS – Parolee Photos	99.43%	2.13
JDFS – Police Documents Search	99.19%	4.70
JDFS – WebCPIN Arrest Mug Shots	98.74	6.80
JFRS	98.99%	0.47
JNET Home Page	99.90%	8.80
JNET Portal	99.89%	0.80
JTAC	99.37%	2.57
Juvenile Inquiry	97.70%	8.72
Juvenile Inquiry – Juvenile Watch List Inquiry	99.95%	1.88
Learning Management System	99.75%	2.91
Metro Home Page/Initial Menu	99.90%	5.60
Metro – Rap Sheets (RS/MN)	98.31%	18.60
Notifications Report	99.53%	7.34
Notifications – OA Notifications	99.46%	0.06
PBPP	99.60%	2.82
PBPP - Offender Info	99.85%	3.40
PBPP - Parolee Photos	99.86%	1.63
PCCD	97.89%	10.23
PCS	99.91%	0.58
PennDOT	99.80%	1.96
PennDOT Driver's History	99.31%	3.69
PennDOT Photos	98.29%	6.25
PennDOT Photo Search	95.12%	5.70
PennDOT – Vehicle Registration	95.90%	3.70
PennDOT – Inquiry Volume Report	99.07%	2.38
PennDOT – User Inquiry Report	99.74%	2.39
Police Documents Search	96.57%	4.43
PSP	97.89%	10.23
PSP – Search by SID – Case List	99.67%	5.91
PSP – Offender Information	99.18%	4.53
PSP - Rap Sheet (RS/MN)	98.38%	18.70

Application name	Percent uptime (excluding scheduled maintenance windows)	Average response time in seconds
Registrar Gateway	99.91%	9.89
SGS Web – Digital Dashboard	98.43%	16.96
SGS Web – PCS Guidelines Offender Search	98.96%	3.16
SGS Web Advanced Search	93.36%	12.90
SID/OTN Lookup	99.70%	2.34