

# Pennsylvania Justice Network



Annual Report

2015-2016

## Director's Message

The 2015-2016 fiscal year was one of significant transition and change for JNET. After realizing success with our mobile-friendly responsive design (HTML5) project, migration to the internet and the deployment of applications such as Traffic Stop, JNET was just a step away from fully embracing the mobile workspace. To capitalize on prior investments, and to truly realize the benefits of the mobile work environment, JNET needed to retire and replace digital certificates with a mobile-friendly, device agnostic, CJIS compliant solution.

In August of 2016, JNET introduced the one-time password (OTP) solution to replace digital certificates for criminal history applications. By delivering authentication via an emailed code, JNET criminal-history users can now easily and securely access critical information from the field on any authorized mobile device.

FY 15/16 also saw several internal changes at JNET; including the adoption of new service management practices and the reorganization of our Technical Services unit into a Continuous Service Improvement (CSI) function. Tasked with using metrics to measure and validate our performance, CSI concepts are proving their worth through dramatically increased service level performance and customer satisfaction.

JNET completed the first phase of our High Availability (HA) initiative. Designed to ensure that all services and applications maintain optimum availability, HA has provided the architectural groundwork to allow JNET to pursue increased service reliability and business continuity.

JNET remains committed to providing critical information services to the business partners and criminal justice professionals that depend on us each and every day. The work we've completed this year positions us to support the mobile workforce, increase service performance through metric based analysis (CSI) and to ensure that information is available each and every time it's needed.

Thank you for reviewing the FY 15/16 JNET annual report.

**Eric Webb**  
Executive Director  
PA Justice Network

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## JNET Overview

### Fiscal Year 2015/2016 Highlights

The Pennsylvania Justice Network (JNET) is the Commonwealth's primary public safety and criminal justice information broker. JNET's integrated justice portal provides a common online environment for authorized users to access public safety and criminal justice information. This critical information comes from various contributing municipal, county, state and Federal agencies.

JNET completes numerous projects and work efforts each year; some have user and business partner impact and others are to improve efficiency and performance behind the scenes. The most impactful project completed this past fiscal year was the transition from digital certificates to a one-time passcode for access to protected data. Since the inception of JNET, access to criminal history information had been protected by a user name and password (authentication factor #1) and a digital certificate (authentication factor #2). Digital certificates had grown to be problematic, cumbersome and costly and in 2015 JNET completed a research and recommendation project to transition to a new 2<sup>nd</sup> factor authentication solution.

As part of that effort, JNET had to be certain the recommended solution met policy guidelines of both the Pennsylvania State Police and the Federal Bureau of Investigation's Criminal Justice Information Services Division, both of whom have oversight responsibilities for criminal history data. Based on the research and recommendation project, JNET selected One-Time Passcode (OTP) as its new 2<sup>nd</sup> factor authentication to be deployed by the end of FY 15/16.

From a technology perspective, JNET was able to develop OTP using current JNET resources and then integrated the OTP solution into JNET's access manager software. That allowed JNET to complete the project on time and under budget. It is by far JNET's greatest success in the past year.

Also in FY 15/16, JNET began adopting more Information Technology Infrastructure Library (ITIL) practices to align itself with enterprise IT efforts and to formalize some functions and processes previously performed but not thoroughly documented. JNET has made strides in many ITIL service arenas including Service Design, Service Transition and Service Operations as well as a dedicated effort around Continual Service Improvement.

Among the completed technology projects from FY 15/16 were upgrades to our enterprise service bus, servers, identity manager and our messaging middleware. JNET also transitioned its Notification Services from dedicated circuits to the internet and completed a new Offender Inquiry Service that added Pennsylvania Board of Probation and Parole data to what previously offered just county data.

FY 15/16 was the first full year that JNET's Traffic Stop was in production. This mobile-friendly web application which utilizes information from multiple data sources and packages them into a single, user-friendly interface was used by law enforcement over 44,000 times each month during FY 15/16.

### Strategic Planning

JNET's current strategic planning effort aligns with the enterprise IT strategic planning approach. JNET has a rolling three-year plan that is reviewed and updated annually. As demonstrated

through the vision, mission, goals and objectives, JNET continues to strive to be the national leader among criminal justice and public safety information providers while also aligning itself with the overall enterprise IT direction of the commonwealth.

### **Vision**

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

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

### **Mission**

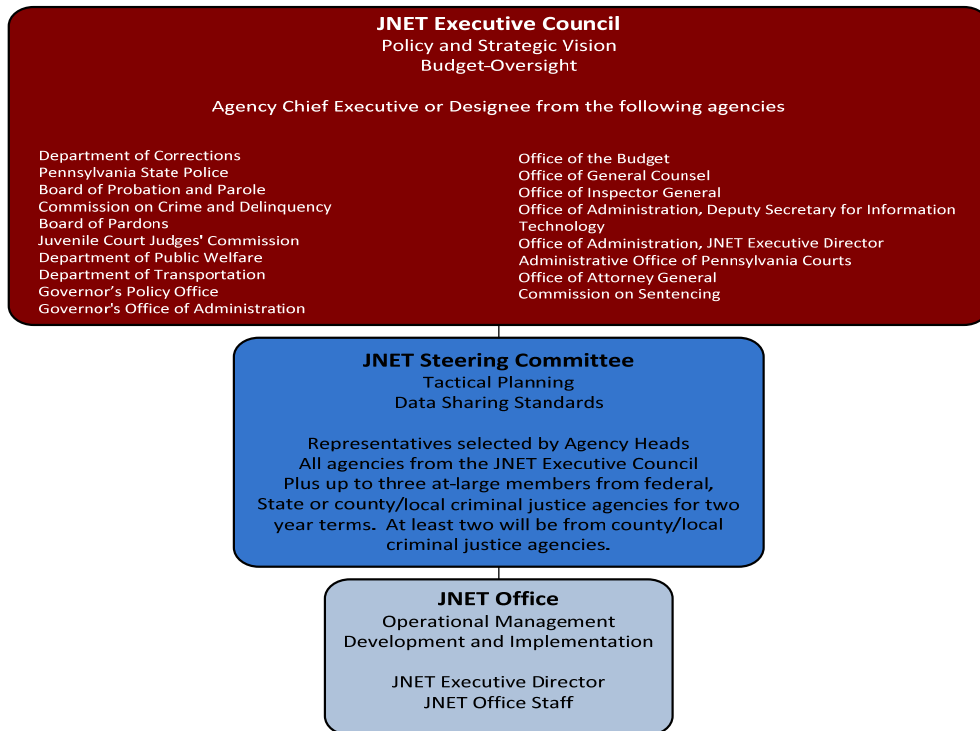
JNET will provide integration leadership throughout the Pennsylvania criminal justice and public safety communities. JNET will continue to be a national leader in timely, accurate and secure information access and exchange.

### **Governance Structure**

The purpose of the JNET governance structure is to establish a strategic direction for the investment in information solutions across the commonwealth's technology enterprise and to direct implementation of a comprehensive integrated justice information system.

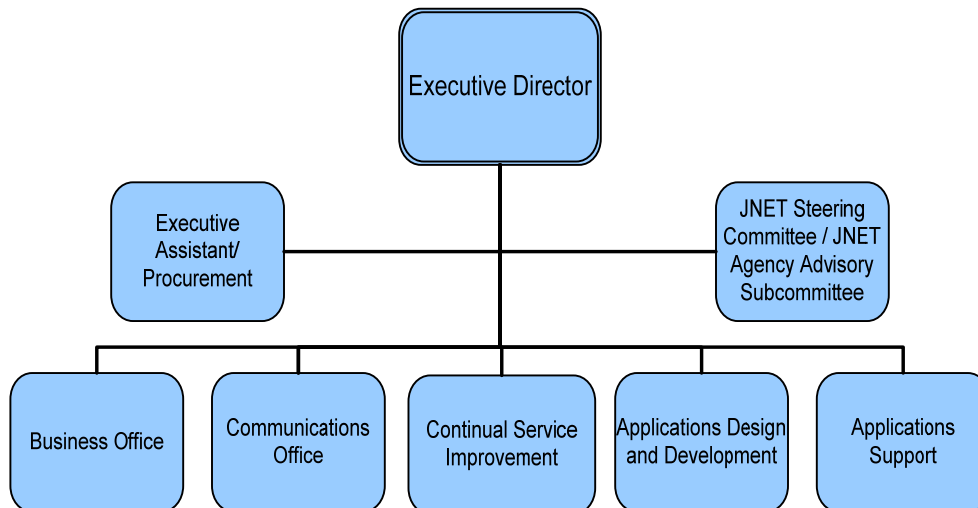
The JNET governance structure consists of an executive council, steering committee and the JNET Office. Each entity is responsible for fulfilling specific activities necessary to support JNET.

Supporting the JNET governance structure is [Executive Order 2014-02](#) and [Management Directive 245.16](#) which can be found on the [Office of Administration's website](#).



**Organizational Structure**

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.



**Business Office**

The JNET business office is responsible for oversight and support of the JNET project life cycle and works with JNET stakeholders in order to elicit, analyze, communicate and validate requirements for changes to business processes, policies and information systems. The office

understands business problems and opportunities in the context of the requirements and recommends solutions that enable JNET to achieve its goals.

### **Communications Office**

The JNET communications office is primarily responsible for business relationship processes with municipal, county, state and federal agencies within the state to promote JNET. The communications team works with the user community and provides solutions to all issues and inquiries through the JNET service desk and other user touch points. They maintain a repository that provides statistical data used for reporting and process improvement modeling purposes and also oversee JNET's training efforts.

### **Applications Development**

The JNET applications development team is responsible for developing products and services defined by our customers and JNET governance. 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. The application development team also conducts technical assessments and makes recommendations to the JNET management team concerning existing and potential software, upgrades and platforms.

### **Applications Support**

The JNET applications support team is responsible for maintenance and support of the applications within JNET. The application environment consists of the following 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, web services, support and testing.

### **Continual Service Improvement (CSI)**

The CSI Manager is responsible for regular review, monitoring and measuring of services to ensure that service levels are being met and/or exceeded. CSI also explore opportunities to increase service efficiency through refined processes and methods.

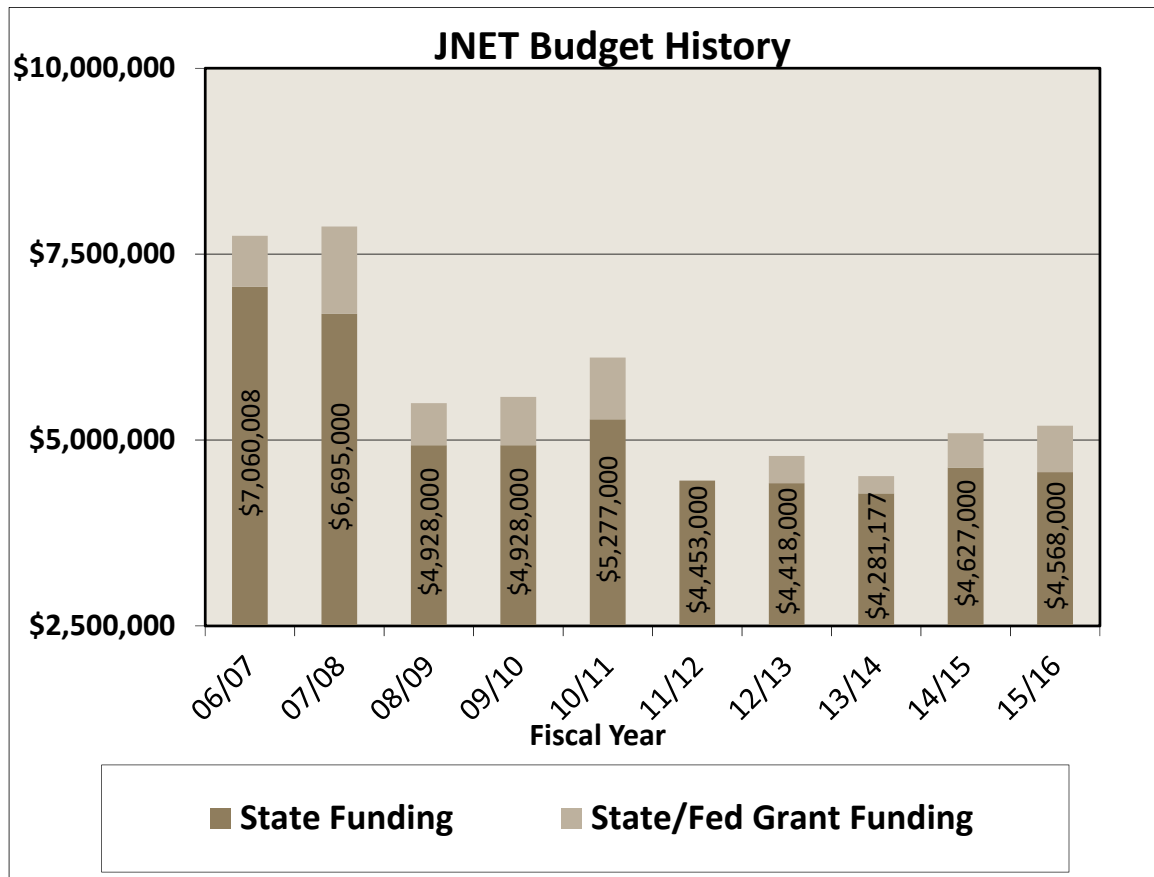
### **Budget**

JNET's total operating budget for FY 15/16 was \$4,568,000. These funds support JNET's reliable and secure infrastructure, ongoing application development and support, procurement of contracted resources and deployment of JNET's architectural upgrade. As depicted in the JNET budget history graph, the budget has remained relatively level for the past eight years. Additionally, JNET received state and federal grant money, \$290,000 and \$334,000 respectively, for specific projects as detailed below.

| <b>Grant Type</b> | <b>Project</b>                            | <b>Amount</b> |
|-------------------|---|---------------|
| State             | Inter County Probation Transfer           | \$101,000     |
| State             | Electronic Reporting Improvement          | \$150,000     |
| State             | Mid Atlantic Regional Information Sharing | \$39,000      |
| Federal           | Evidence Tracking                         | \$188,000     |
| Federal           | Mid Atlantic Regional Information Sharing | \$146,000     |

**JNET Budget History**

The graph below provides a historical look at JNET’s budget over the past 10 fiscal years.





## JNET Customers

JNET serves law enforcement and public safety officials at the federal, state and local level. Typical users are police, probation officers, courts, 911 and booking centers, district attorneys and domestic relations. JNET has over 26,000 active user accounts among the JNET user community broken down below:

- 37** state organizations
- 44** federal agencies
- 8** Business Partners
- 67** counties connected to JNET
- 1,187** municipal police departments

## Customer Success Stories

**Allegheny County District Attorney's Office** used JNET to aid in the arrest of co-conspirators from a statewide counterfeit check ring. The check cashing scheme involved recruiting individuals in the Pittsburgh and Philadelphia area to cash counterfeit checks. The individuals obtained legitimate routing and account numbers from business bank accounts through another co-conspirator with a connection at a check cashing business. The organization made over \$100,000 from known counterfeit checks.



Detectives used bank surveillance video and drivers' license numbers to look-up and identify check cashers in PennDOT driver photos in JNET. Several individuals hired to cash the checks were arrested and agreed to cooperate. One defendant had a photo on her phone of one of the co-conspirators. The image was run in JNET facial recognition which resulted in a possible candidate. The second conspirator was identified by his cell phone number. Both candidates were included in two separate photo line-ups created in JNET WebCPIN. The defendant who provided the photo and phone number confirmed both co-conspirators in the photo lineups.

The **Office of Inspector General** used JNET's PA Department of Labor & Industry (L&I) Employment Query to complete a field investigation based on a tip from the public. A search in the JNET L&I application provided information on a case that helped place a client's unreported husband in the household and indicated he was employed full-time. This information resulted in the household being ineligible for the Supplemental Nutrition Assistance Program and medical benefits. The monthly cost savings is over \$2000.00 for this case alone.

A **Northampton Township Detective** in Bucks County helped a neighboring police department confirm the identity of an individual involved in a bank robbery. The suspect's picture from the bank was cropped and entered in JNET's facial recognition system. The search results included a candidate very similar to the picture from the bank. This information was shared with the neighboring police department and confirmed the identity of the suspect.

The **Sexual Offenders Assessment Board (SOAB)** partners with JNET to host the Integrated Sex Offender Assessment Tracking System (ISOATS). In 2016 JNET integrated the request and approval process for users requesting access to ISOATS into its identity management system, essentially automating what was a completely manual process. This effort reduced the time it took a user to request and gain access to ISOATS.

## JNET Services

The Pennsylvania Justice Network (JNET) is the Commonwealth's primary public safety and criminal justice information broker. JNET's integrated justice portal provides a common online environment for authorized users to access public safety and criminal justice information. This critical information comes from various contributing municipal, county, state and federal agencies. One-time data entry has improved the effectiveness of participating agencies and has significantly improved data accuracy throughout the Commonwealth's criminal justice system. Information entered into a records management system at the onset of an investigation can now follow the offender throughout their criminal justice tract. As offenders pass through the gateway of justice all the way to post-sentencing supervision, offender information flows in concert with the offender's progression.

JNET's services can be categorized into two main areas; the JNET portal and messaging, which includes notifications. The following section provides a description of each.

### The JNET Portal

The JNET portal is a secure mobile friendly internet website that provides authorized users access to criminal justice data through 40 inquiry-based applications. In addition to the website itself, 35 of the 40 applications are mobile friendly. Additionally, the website is used as a communication channel to provide updates about any information that impacts users. A complete list of all applications, including a description and the data provider, can be found in **Appendix A**.

While many of the applications are built to pass through data from a data provider to an end user, JNET has built applications that combine data from multiple data providers and return that data to the end user using a single interface.

To the right are some of the most commonly used applications available on the JNET portal and their usage volumes in FY 15/16.

| All totals below are for FY 15/16 |                                  |   |
|-----------------------------------|----------------------------------|---|
| JNET Warrant Search<br>1,331,249  | JNET Traffic Stop<br>533,864     | Department of Labor & Industry Employment Information<br>86,882 |
| JNET Address Search<br>234,184    | JNET Federated Search<br>534,402 | Domestic Relations Warrant Search<br>62,538                     |
| JNET Photo Search<br>1,804,618    | JNET Background Check<br>158,303 | Department of Human Services Recipient Address Search<br>50,783 |

## Messaging

Messaging consists of JNET’s ability to build system to system interfaces to produce data exchanges, event services and notifications. This allows computerized records’ systems within criminal justice agencies to interface with JNET to access data related to records specific to that agency. It provides interfaces that publish events such as court case events and allows JNET users to subscribe to a notification that is sent as related to those events.

### Event Messaging and Data Exchanges

JNET Messaging Infrastructure (MI) is the 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. While the MI is a retired service, it still is the vehicle used to deliver over 50% of all JNET messages and data exchanges.

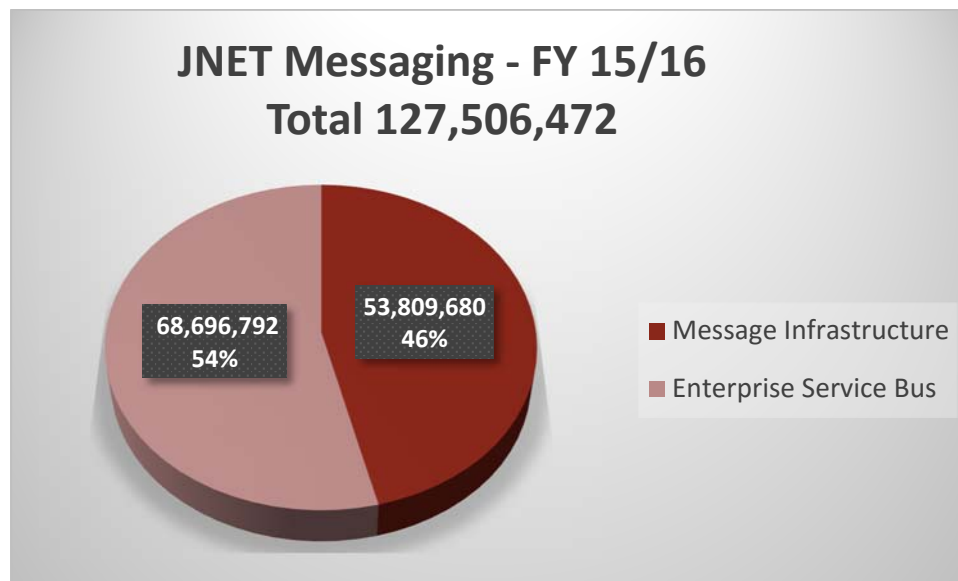
JNET continues to focus new data exchange efforts through web services via JNET’s Enterprise Service Bus (ESB) instead of relying on JNET’s MI. This strategy includes maintaining existing JNET MI connections to support legacy data exchanges between JNET and our business partners. However, when appropriate and feasible, JNET converts MI exchanges to web-services through the ESB.



Even with JNET focused on migrating messages to JNET ESB, the number of messages processed through JNET MI continues to increase annually. Business partners continue to publish messages through the JNET MI environment and JNET ESB also integrates with JNET MI to publish and receive messages. A complete list of all available messaging services can be found in **Appendix B**.

The transition from MI to ESB is providing JNET the opportunity to re-baselining statistical information to achieve a more reliable, repeatable method of reporting.

The graphic below shows the total messages through both messaging channels for FY 15/16.

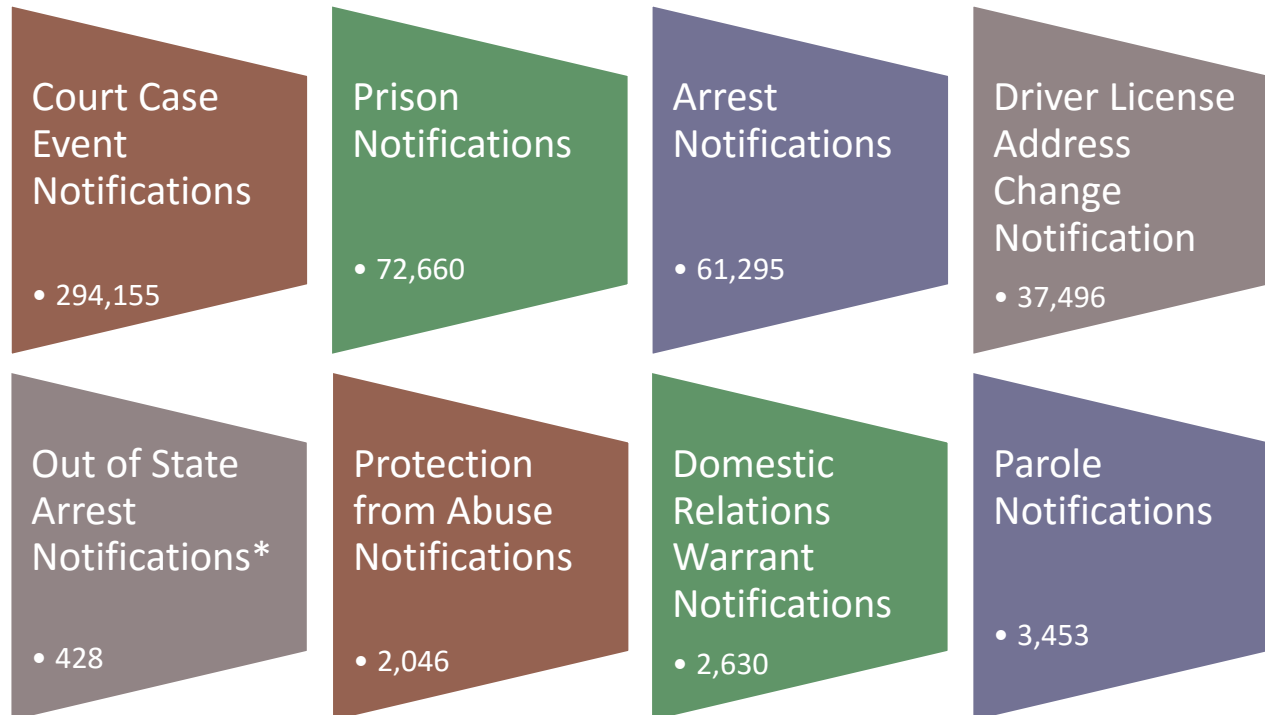


## Notifications

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. A prime example of notifications is a probation officer subscribed to arrest notifications for their supervised offenders. Should one of their supervised offenders be arrested, that would trigger an email to the probation officer with minimal details. From there, the probation officer can login to their JNET notification for a complete description.

Virtual notifications provide JNET users with 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. A complete list of available notifications can be found in **Appendix C**.

The graphic below displays JNET notifications generated by events of JNET business partners.



\*For Maryland only. This demonstrates new initiative to provide data to and from other states. Five additional states to be added in FY 16/17.

**Total Notifications Delivered and Confirmed in  
FY 15/16**

**482,772**