

INDIANA STATE POLICE LABORATORY DIVISION



2019 ANNUAL REPORT

"The Indiana State Police Laboratory Division's vision is to provide factual, nonbiased information in a transparent, responsible, and professional manner; to provide client agencies with their requested services within 45 days or less; and to be recognized and respected as one of the nation's premier full-service crime laboratory systems."

– Major Steven D. Holland, Laboratory Division Commander

Laboratory Division

Since its inception in 1936, the mission of the Laboratory Division is “to provide client agencies accurate, reliable, and timely crime laboratory services within the resources provided, and to manage the evidence security system of the Indiana State Police Department.” Toward these ends, in 2019 the Laboratory Division processed 1,263 crime scenes, issued reports for 25,180 laboratory cases completed, conducted 770 polygraph examinations, and secured over 350,000 items of evidence.

The Laboratory Division is organized into five sections: Biology, Chemistry, Comparative Science, Crime Scene and Field Support, and Management and Administration. The Biology Section consists of Serology, DNA, and CODIS (Combined DNA Index System).

INDIANA STATE POLICE LABORATORY DIVISION

MISSION STATEMENT

To provide client agencies accurate, reliable and timely crime laboratory services within the resources provided and to manage the evidence security system of the Indiana State Police Department.

Megan S. D. Helms

Division Commander

May 1, 2015

Date



CERTIFICATE OF ACCREDITATION

ANSI National Accreditation Board
2000 Regency Parkway, Suite 430, Cary, NC 27518

This is to certify that

Indiana State Police Laboratory Division

has been assessed by ANAB
and meets the requirements of

ISO/IEC 17025:2017

ANAB 17025:2017 Forensic Science Testing and Calibration Laboratories
Accreditation Requirements:2018

FBI Quality Assurance Standards for Forensic Testing Laboratories:2011

FBI Quality Assurance Standards for DNA Databasing Laboratories:2011

while demonstrating technical competence in the field of

FORENSIC TESTING

Refer to the accompanying Scope of Accreditation for information
regarding the types of tests to which this accreditation applies

Certificate Number: FT-0132

Valid to: 06/30/2021

Pamela L. Sale

Pamela L. Sale
Vice President, Forensics

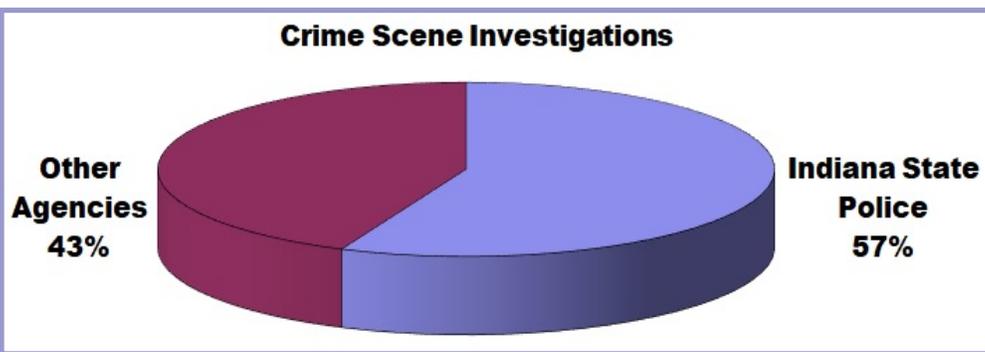
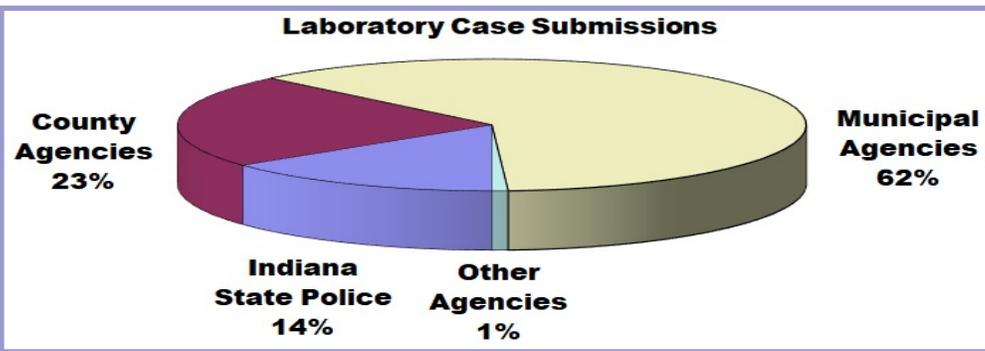
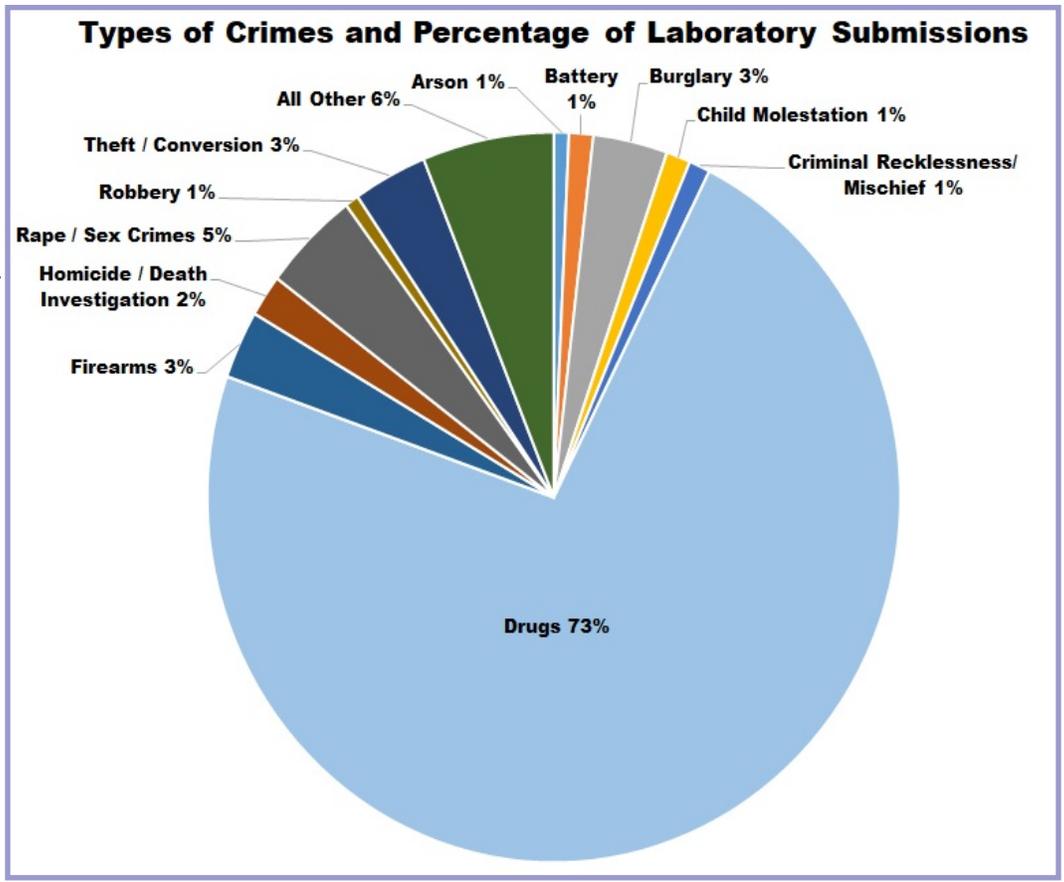


The Chemistry Section consists of the Drug Unit and the Microanalysis Unit. The Comparative Science Section consists of the Firearms Unit (including Integrated Ballistics Identification System or IBIS), the Latent Print Unit (including Automated Fingerprint Identification System or AFIS), and the Document Unit. Field Support consists of the Polygraph Examiners, the Crime Scene Investigators, and the District Evidence Clerks. Management consists of administrative and support personnel, the Laboratory Managers, the Regional Laboratory Evidence Clerks, the Photography Unit, and the Laboratory Information Management System/Information Technology (LIMS/IT) Unit. The last two pages of this report provides the Division’s organizational structure and contact information.

The Laboratory Division accepts evidence associated with active criminal investigations for analysis at four Regional Laboratory locations - Evansville, Fort Wayne, Indianapolis, and Lowell. The four Regional Laboratories have been accredited since 1991. In 2019, crime scene investigation services and the eleven Indiana State Police District evidence storage facilities without a Regional Laboratory were accredited for the first time. The Laboratory Division is accredited by American National Standards Institute (ANSI) National Accreditation Board (ANAB).

Types of Crimes and Requesting Agencies

The four Regional Laboratories provide forensic services at no charge to federal, state, county, and local agencies throughout Indiana. These services include tests for forensic biology/DNA and maintenance of the state's DNA database, identification of controlled substances, firearms and toolmarks, latent prints, questioned documents, and trace evidence examinations. The Division also provides polygraph examinations and crime scene investigations upon request. The Laboratory Division received 24,517 new cases for analysis in 2019, the most ever in a single year. Crime Scene Investigators

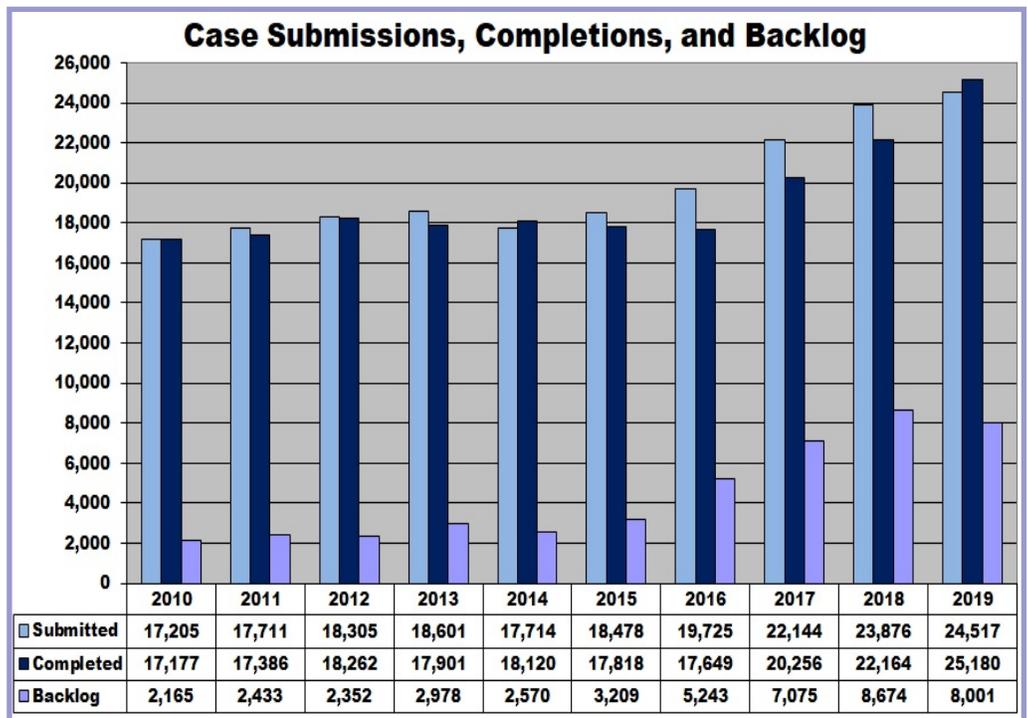


responded to and worked 933 investigations involving 1,263 different crime scenes, and the Polygraph Unit conducted 192 polygraph tests in criminal cases during 2019. The graph above shows the types of crimes and percentages submitted to the Laboratory in 2019.

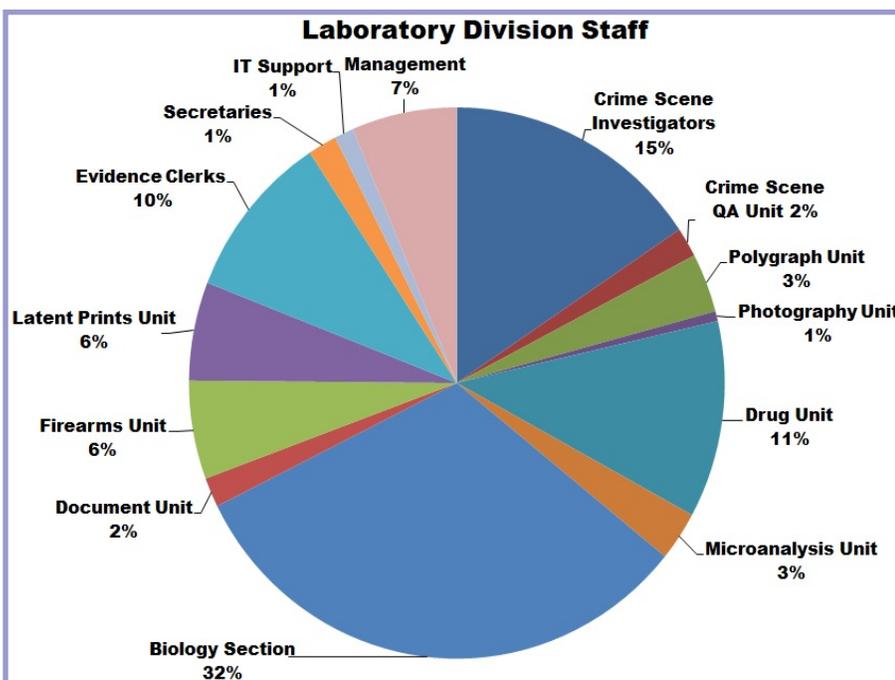
As shown in the "Laboratory Case Submissions" chart, the majority of cases for analysis were submitted by municipal agencies. The "Crime Scene Investigations" chart shows that over half of the crime scene investigations were completed for the Indiana State Police.

Case Submissions, Completions, & Backlog

As shown in the “Case Submissions, Completions, and Backlog” graph to the right, the Laboratory Division received 24,517 cases and completed 25,180 cases in 2019. The Laboratory Division’s goal is to have 90% of backlog cases analyzed in 45 days or less from the date of submission. The backlog is defined as any case submitted that has not been completed. The average turnaround time at the end of 2019 for completing a case was 127 days, which is up from 121 days in 2018. The aging laboratory conditions at Evansville, Fort Wayne, and Lowell, as



well as the continued increase in drug submissions received for analysis, continued to negatively affect the turnaround times of the laboratory system. In 2017, the Indiana State Police was allocated funding to be used for capital improvement projects at Evansville, Fort Wayne, and Lowell Regional Laboratories. Architectural designs and plans are being developed and it is anticipated that construction will commence in the summer of 2020 initially at the Fort Wayne and Lowell locations.



At the end of 2019, the Laboratory Division employed a staff of 173 individuals providing analytical and support services. The chart to the left details the distribution of the staff. Approximately 90% of the Laboratory Division personnel are directly involved in collecting, maintaining, and/or analyzing evidence. The Division’s personnel are active in the forensic community with multiple individuals holding office or working on committees of numerous forensic organizations. Approximately 68% of the Forensic Scientists are certified by a forensic organization and all the Crime Scene Investigators are certified by the Indiana Law Enforcement Training Board.

Regional Laboratories

All of the Regional Laboratories provide analysis in Biology, Drugs, Firearms, and Latent Prints. Micro-analysis (Trace) and Document examinations are only performed at the Indianapolis Regional Laboratory. The 2019 case submissions, completions, and backlog at the four Regional Laboratories are shown in the three tables below. For operational efficiency, cases are routinely transferred between Regional Laboratories.

Submissions

	<i>Evansville</i>	<i>Fort Wayne</i>	<i>Indianapolis</i>	<i>Lowell</i>	<i>Totals</i>
Biology	311	261	3,104	502	4,178
Documents	0	0	33	0	33
Drugs	2,214	3,625	8,471	2,187	16,497
Firearms	379	1,058	980	264	2,681
Latent Prints	300	199	214	159	872
Trace	0	0	256	0	256
Totals	3,204	5,143	13,058	3,112	24,517

Completions

	<i>Evansville</i>	<i>Fort Wayne</i>	<i>Indianapolis</i>	<i>Lowell</i>	<i>Totals</i>
Biology	275	266	3,600	544	4,685
Documents	0	0	40	0	40
Drugs	2,237	3,730	8,726	2,182	16,875*
Firearms	375	864	960	272	2,471
Latent Prints	286	182	228	171	867
Trace	0	0	242	0	242
Totals	3,173	5,042	13,796	3,169	25,180

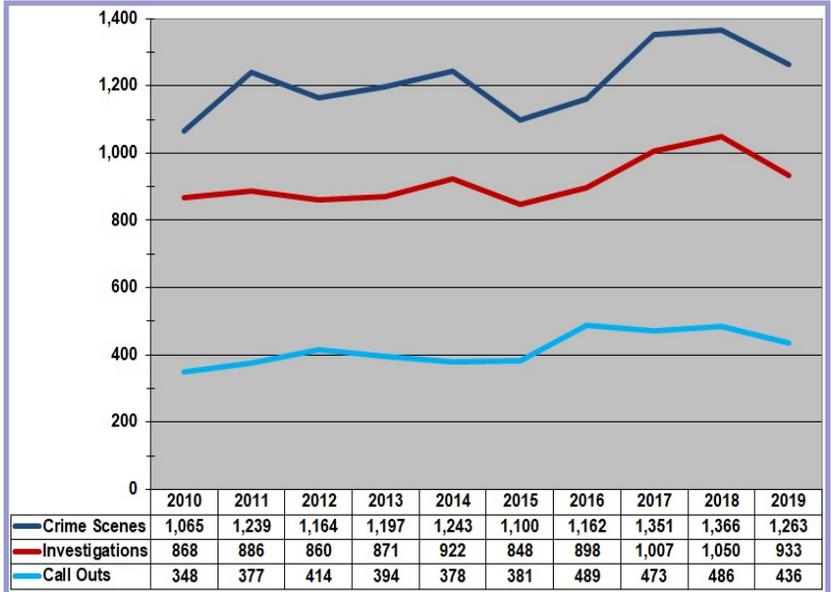
* Completed cases include administratively withdrawn cases. Drug cases tested in 2019 was 12,344.

Backlog

	<i>Evansville</i>	<i>Fort Wayne</i>	<i>Indianapolis</i>	<i>Lowell</i>	<i>Totals</i>
Biology	57	55	578	84	774
Documents	0	0	15	0	15
Drugs	517	971	3,958	1,055	6,501
Firearms	39	307	127	58	531
Latent Prints	25	50	51	18	144
Trace	0	0	36	0	36
Totals	638	1,383	4,765	1,215	8,001

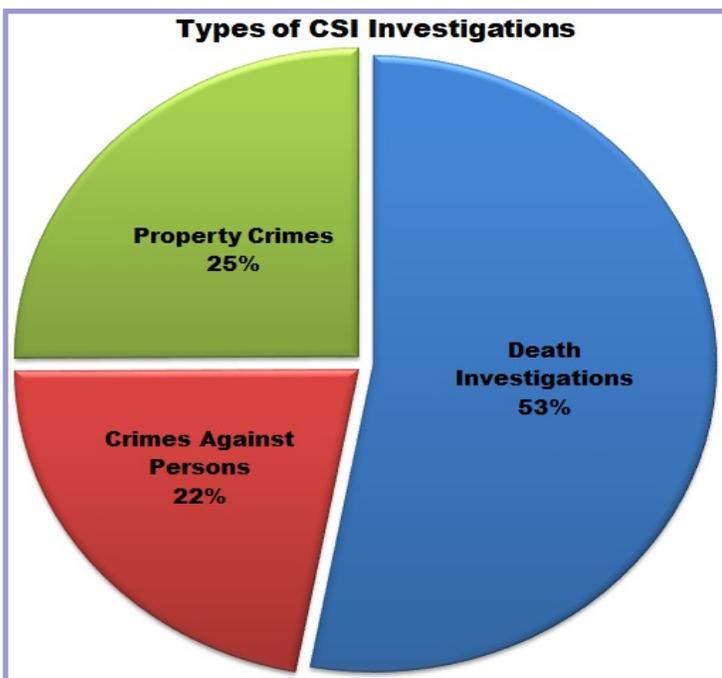
Crime Scene Investigation

Crime Scene Investigators (27 staff), when requested by local, state, and federal law enforcement agencies, respond to scenes, 24 hours a day, seven days a week anywhere in Indiana. Services provided include documenting the crime scene, identification, collection, and packaging potential evidence, reconstructing the events of the crime, bloodstain pattern analysis, and three-dimensional (3D) laser scanning. In 2019, the CSIs worked 933 investigations involving 1,263 crime scenes, and were called out 436 times outside of normal business hours. Sixty-five crime or crash scenes and nine high risk public buildings, such as government offices and schools, were documented using a 3D scanner. As shown in the chart below, over half of the scenes worked during 2019 were death investigations. In 2019, the CSIs investigated 183 shooting incident scenes that included 47 officer involved shootings.



The Unit is active in the forensic community by participating in the Association for Crime Scene Reconstruction (ACSR) and the Indiana Division of the International Association for Identification (IN IAI).

During 2019, the Laboratory Division became accredited in crime scene investigation services and District evidence management. Accreditation assures the criminal justice system and the general public that the ISP CSIs and ISP evidence storage system comply with internationally recognized standards, are technically competent to perform the services provided, and follow good quality management practices.

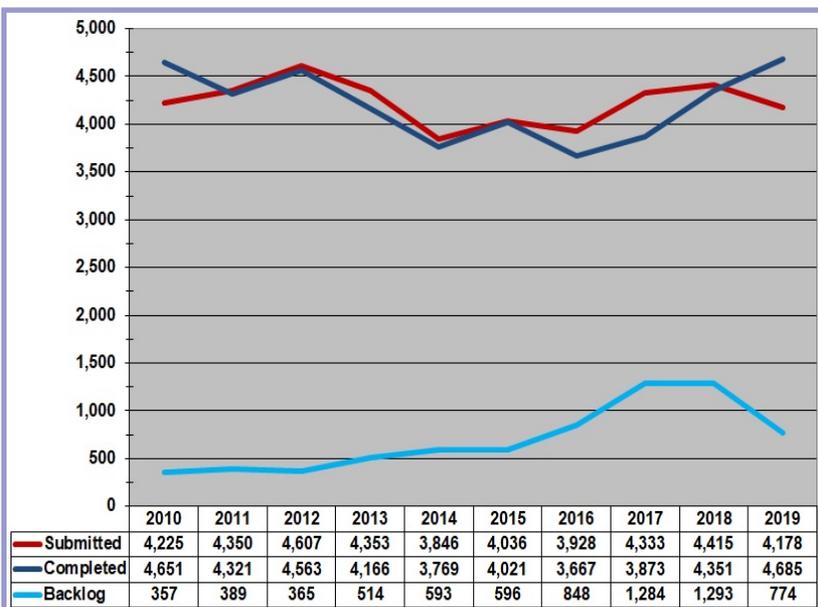


In 2019, CSIs attended a metal detector training class that included hands-on proficiency test exercise (see photo below). During 2019, handheld LED Alternate Light Source (ALS) units were purchased with grant funds, which contain five wavelengths of light where previously multiple ALS units were needed.



Biology Section

The Biology Section (57 staff) is organized into four casework units, plus the Combined DNA Index System (CODIS) Unit. The Section conducts analysis of biological samples including identification of body fluids (serology), nuclear and Y-STR DNA analysis, forensic relationship tests, bloodstain pattern analysis, DNA analysis of offender samples, and searches of the offender database for matching profiles. In 2019, the Section completed 4,685 cases and 4,178 cases were submitted. The backlog was 774 at the end of 2019.



In 2019, the four Indiana State Police Regional Laboratories plus the Indianapolis Marion County Forensic Services Agency entered over 1,500 crime scene profiles into CODIS, more than ever before. As a result of these efforts, a total

<i>CODIS Hit Type</i>	<i>Hits</i>
National Forensic	8
National Offender	221
State Forensic	20
State Offender	709
2019 Total	958

of 896 separate criminal investigations were aided via CODIS during 2019 with type of hits shown in the chart to the left. To date 8,095 investigations have been aided by the Indiana CODIS program. During 2019, more than 30,000 samples from previously untested offenders were submitted to the Laboratory Division. These samples were analyzed and entered into the database with an average turnaround time of 15 days from receipt to database entry (see photo below of the CODIS sample storage area).

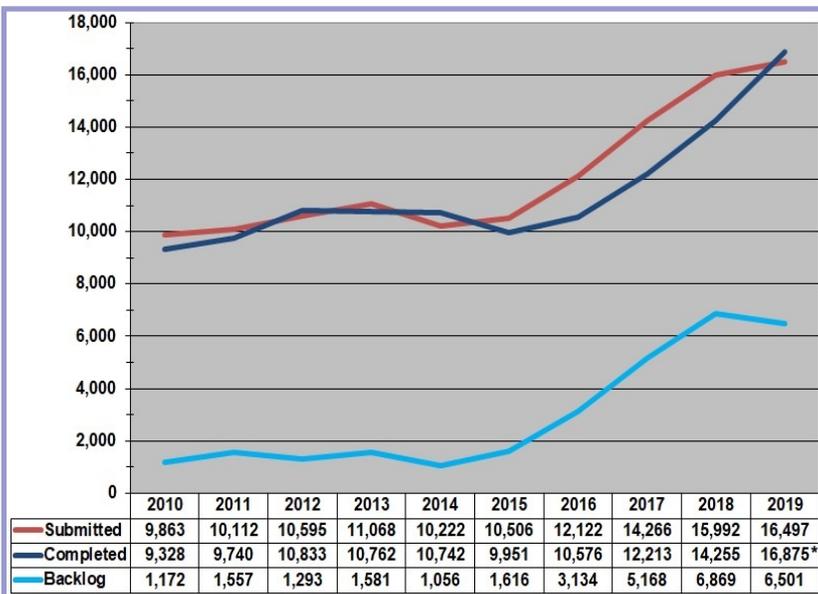
Many cases, including most sexual assaults, result in multiple items or samples being collected. Submission policies and analytical procedure changes allowed the Biology Section to focus on the items most likely to produce a usable DNA profile. The Biology Section began using new DNA testing kits with additional markers as well as a software program to efficiently aid in interpretation of complex mixed DNA profiles that were labor intensive or previously uninterpretable. The use of robots has automated some DNA processes. An analysis approach where the presence or absence of male DNA is used to screen items in a sexual assault kit, referred to as a direct to DNA approach, eliminated the time intensive tasks of conventional serology analysis. These modifications had a positive impact on the overall Biology backlog with a 40% decrease from 2018. These changes also allowed the Biology Section to meet the recommendations for laboratories in the National Best Practices for Sexual Assault Kits published by the National Institute for Justice (NIJ).

In 2019, two new Forensic Technician positions were created to assist with pre-DNA analysis sample processing and preparation of samples for automated DNA analysis. This team approach will allow DNA analysts to focus on data interpretation and reporting. The work of the technicians, along with the efficiencies noted above, make the Biology Section more responsive to the Laboratory Division's contributors.



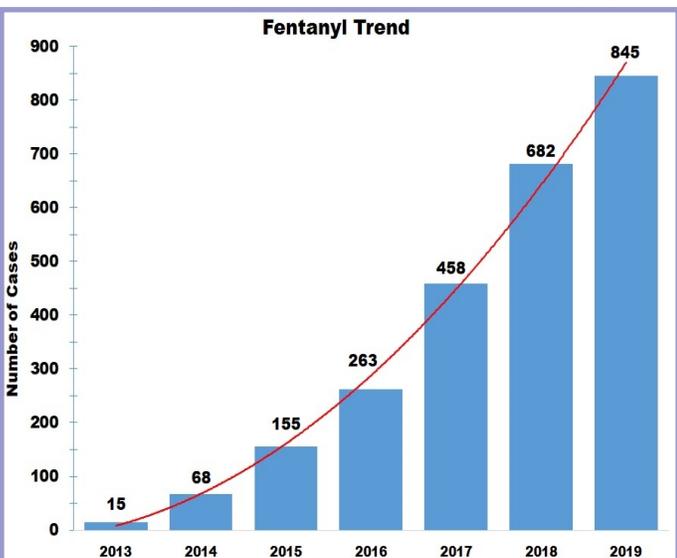
Drug Unit

The Drug Unit (20 staff) identifies controlled substances, non-controlled drugs of abuse, clandestine laboratory samples, and diluent materials found in drug preparations. During 2019, the Unit completed analysis of 12,344 cases. An additional 4,531 cases were administratively withdrawn because those cases were adjudicated prior to testing, which increased the total number of cases with a completion designation within the laboratory to 16,875 cases. In 2019, the Unit received 16,497 cases, which is 67% of the total cases submitted to the Laboratory Division. Over the last five years drug case submissions have increased 157% from 10,506 in 2015 to 16,497 in 2019 (see “Drug Case Submissions” chart on page 9). Increase of submissions, changes in the drug statutes, in particular the added weight thresholds beginning in 2014, as well as the increased complexities of analysis, have resulted in a significant drug backlog; although the backlog did decrease slightly in 2019 due to the increase of administrative withdrawals of adjudicated cases from 2,622 in 2018 to 4,531 in 2019. While the goal of the Laboratory Division is to complete 90% of the case submissions in 45 days, the drug backlog situation has caused an increase in turnaround time to an average of nearly 7 months. The number of rush cases to meet court deadline also increased for the Drug Unit due to the increasing backlog. In response, the Laboratory Division implemented a multi-faceted approach to strategically reduce the backlog and to ensure the increasing turnaround times for completions do not hinder the criminal justice system. First, the Indiana State Police (ISP) is moving forward with the design and construction of three new laboratory facilities in Evansville, Fort Wayne, and Lowell as previously noted on page 4. These new facilities will allow for the hiring of additional forensic scientists. The current buildings lack adequate space to support additional staff and necessary instrumentation, which significantly limits case production capabilities. Second, beginning in January 2020, as a stop-gap measure until such time as the new laboratory facilities are completed, the Indiana State Police has contracted with the Miami Valley Regional Crime Laboratory in Dayton, Ohio, to outsource a portion of the backlogged drug cases for analysis. This outsourcing project is a short term measure and will be utilized, as funding allows, until such time as the new laboratories are constructed and operational to support the additional staff needed to meet the Laboratory Division’s submission demands.



* Completed cases include administratively withdrawn cases. Drug cases tested in 2019 was 12,344.

While the goal of the Laboratory Division is to complete 90% of the case submissions in 45 days, the drug backlog situation has caused an increase in turnaround time to an average of nearly 7 months. The number of rush cases to meet court deadline also increased for the Drug Unit due to the increasing backlog. In response, the Laboratory Division implemented a multi-faceted approach to strategically reduce the backlog and to ensure the increasing turnaround times for completions do not hinder the criminal justice system. First, the Indiana State Police (ISP) is moving forward with the design and construction of three new laboratory facilities in Evansville, Fort Wayne, and Lowell as previously noted on page 4. These new facilities will allow for the hiring of additional forensic scientists. The current buildings lack adequate space to support additional staff and necessary instrumentation, which significantly limits case production capabilities. Second, beginning in January 2020, as a stop-gap measure until such time as the new laboratory facilities are completed, the Indiana State Police has contracted with the Miami Valley Regional Crime Laboratory in Dayton, Ohio, to outsource a portion of the backlogged drug cases for analysis. This outsourcing project is a short term measure and will be utilized, as funding allows, until such time as the new laboratories are constructed and operational to support the additional staff needed to meet the Laboratory Division’s submission demands.



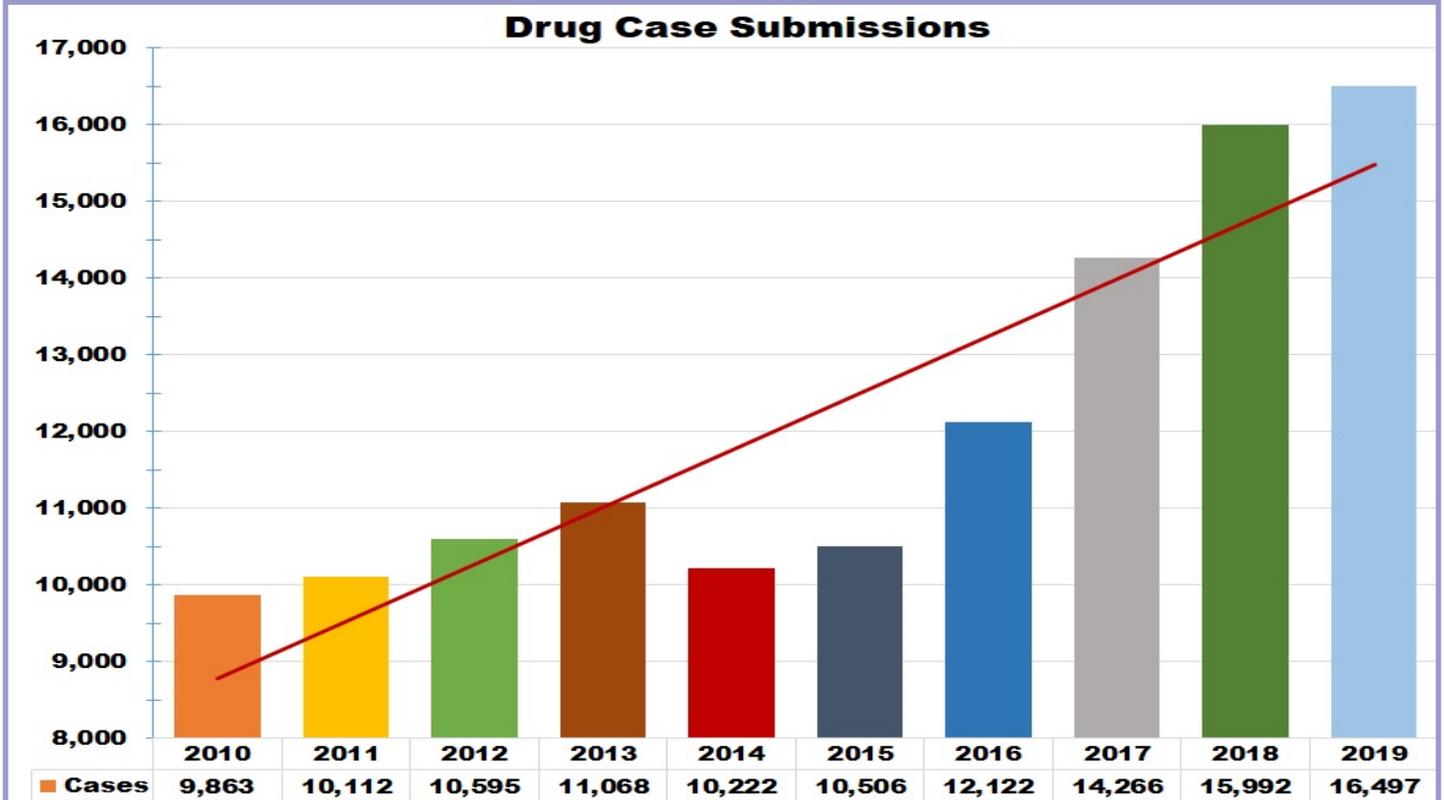
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The top four drugs identified in 2019 were Methamphetamine, Marijuana, Heroin, and Cocaine, as shown in the “2019 Top 10 Drugs Identified” chart on page 9.

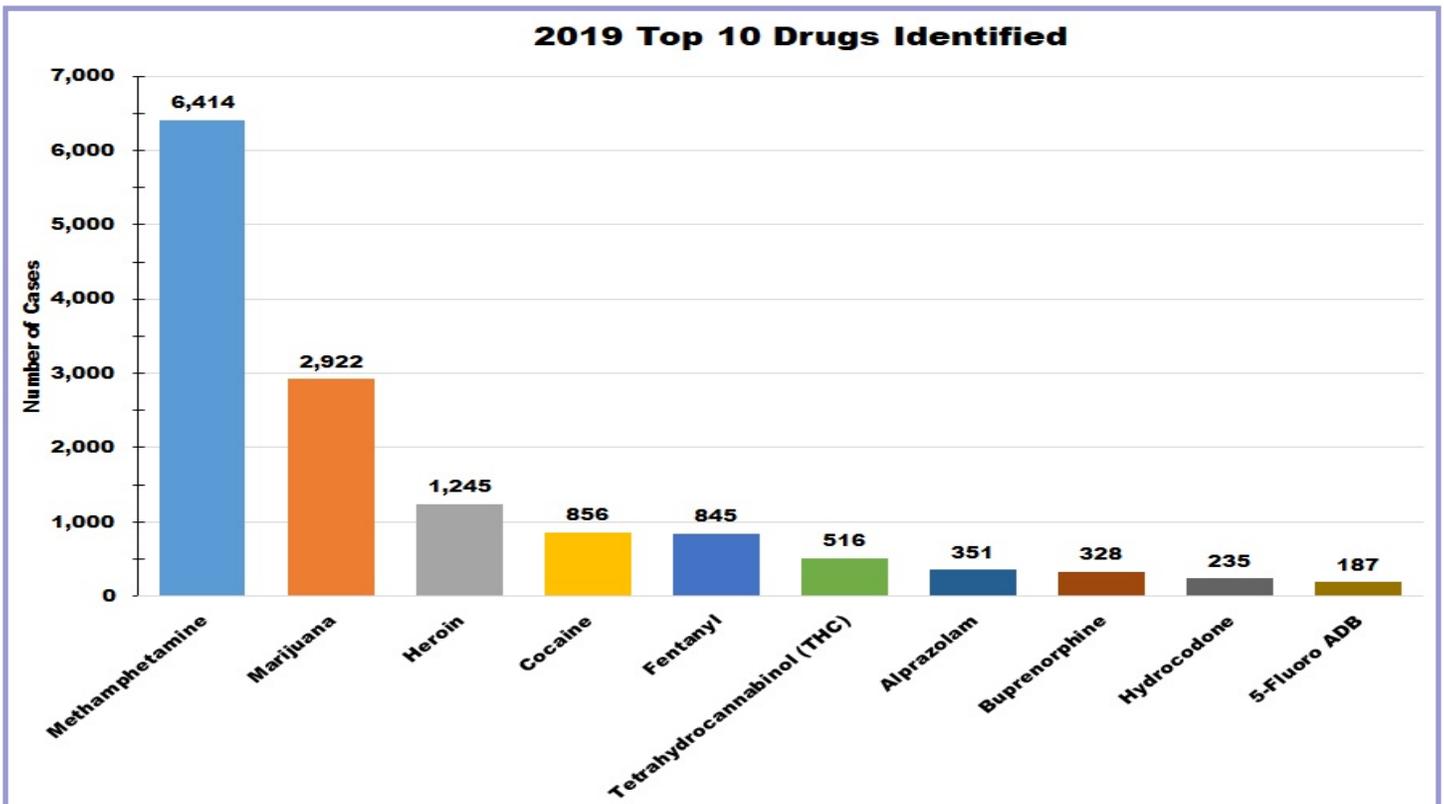
The number of Fentanyl related compounds submitted has increased from 15 in 2013 to 845 cases during 2019 (as shown in chart to the left), which also negatively impacts case completion due to the additional safety precautions required to analyze these types of cases.

Drug Unit

Drug Case Submissions

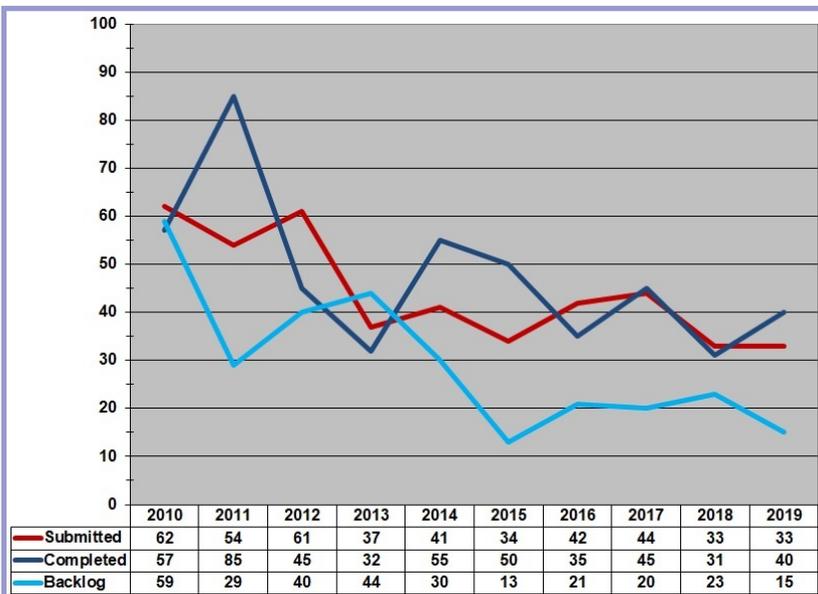


2019 Top 10 Drugs Identified



Document Unit

The Document Unit (3 staff) performs a range of examinations in order to answer questions about the authorship, authenticity, and background of documents. Examinations include: the comparison of handwriting, hand printing, and signatures to known writing in order to identify or eliminate a subject as the writer; the development and decipherment of indented writing impressions; physical match examinations of torn, cut, or shredded documents; the classification and comparison of inks and writing instruments; the examination of printing processes to determine source or authenticity; detection of alterations, additions, deletions, or substitutions; decipherments of altered, erased, obliterated, charred,



or water soaked documents; and the determination of the sequence of events in the creation of a document. The Unit also maintains a Robbery Note Reference Collection to search for similarities to other robbery notes.

The Unit completed 40 cases in 2019 and received 33 cases, that included eight electronic submissions. At the end of 2019 the backlog was 15. Members of the Unit are active in the forensic community by participating in the American Board of Forensic Document Examiners (ABFDE), American Society of Questioned Document Examiners (ASQDE), and the Midwestern Association of Forensic Scientists (MAFS).



Photo: Charred document training sample.

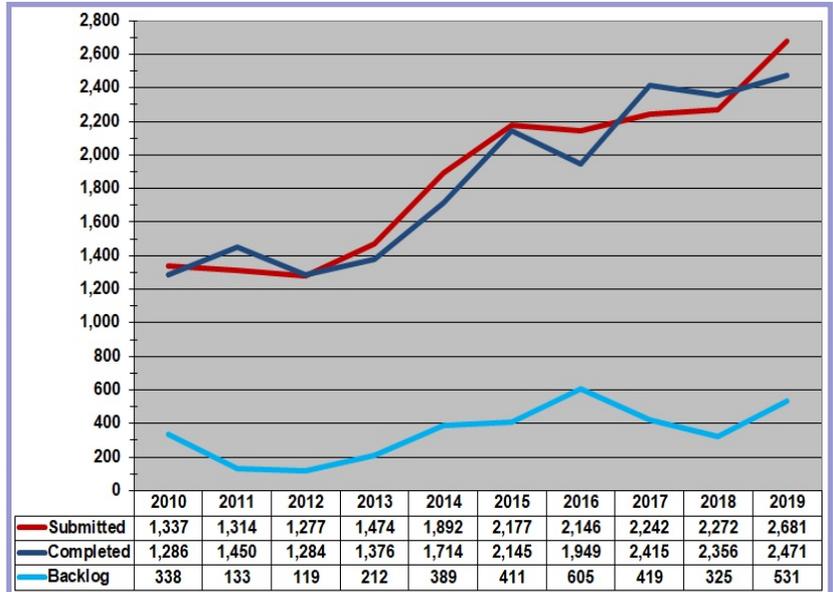
The Document Unit provided multiple training classes during 2019. Lectures were provided to the Lake County Prosecutors; Indiana School Safety Specialist Academy (ISSSA) Conference attendees; Indiana State Police Youth Camp cadets; high school and university students; and customers at the Laboratory Division's quarterly Forensic 101 presentations. These trainings were interactive and included multifaceted hands-on exercises. The presentation at the ISSSA Conference focused on procedures for the collection and analysis of written school threats.

Since 2018, the Unit maintains the ASQDE National Library (<http://www.asqde.org/resources/library.html>), which is one of the largest forensic document repositories in the world. A retired Document Unit Supervisor serves as the curator. During 2019, the Unit worked with the curator to host two interns to work on organizing and categorizing this library. These were the first interns in the Unit in over 20 years.

The photo to the left is a charred document training sample that was encapsulated in polyester film to prevent further degradation of the document.

Firearms Unit

The Firearms Unit (10 staff) conducts comparison and identification of fired bullets and cartridge cases. The Unit also performs characterization of recovered ammunition components, function testing of firearms, examination and comparison of toolmark evidence, Integrated Ballistics Identification System (IBIS) database entry and inquiry for unsolved firearms related cases, muzzle to target distance determination, and serial number restoration. Members of the Unit also participate on the Superintendent's Advisory Committee on Firearms and Ammunition Selection by evaluating new firearms and ammunition for future procurement by the Indiana State Police Department.



In 2019, the Firearms Unit worked 2,471 cases while receiving 2,681 cases, an 18% increase from 2018, and had a backlog of 531 at the end of the year. The Firearms Unit assisted law enforcement agencies by linking firearms related cases with 191 IBIS hits, as shown in the chart below, a 77% increase from the previous year. Only the Fort Wayne and Indianapolis Regional Laboratories perform IBIS examinations. Cases received at Evansville and Lowell requiring IBIS entry are transferred to Fort Wayne or Indianapolis. During 2019, the Indianapolis Regional Laboratory began conducting IBIS shooting sessions with law enforcement agencies in the area. During these shoots, firearms in the agency's custody were test fired and the cartridge casings were collected for entry into the IBIS system. This new initiative streamlined the laboratory process of collecting test fires in order to provide more timely investigative leads to the agency.

Laboratory	Hits
Fort Wayne	112
Indianapolis	79
2019 Total	191

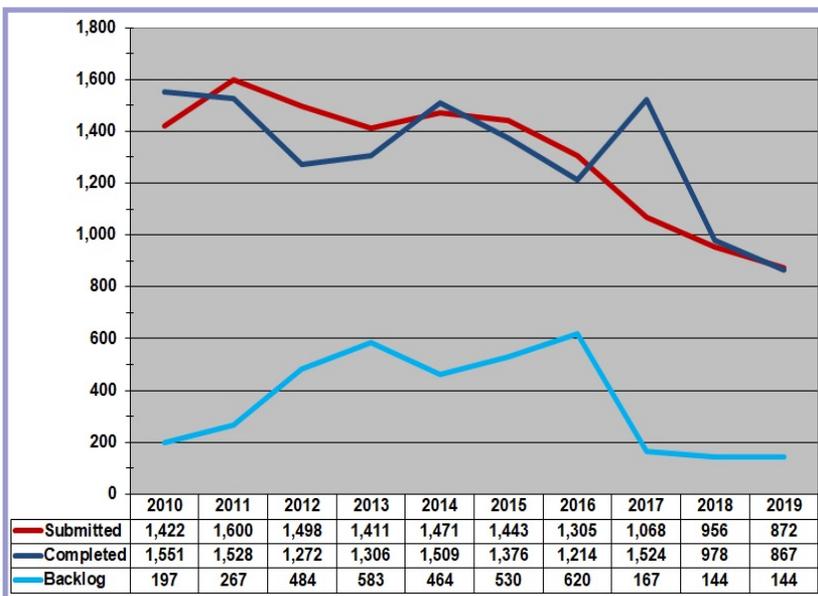
The Unit is active in the forensic firearms community with members serving as board members or on committees for the Association of Firearm and Toolmark Examiners (AFTE) including Past President and Treasurer, the Forensic Science Standards Board (FSSB) that oversees the Organization of Scientific Area Committees (OSAC), including the Vice Chair, and the National Integrated Ballistic Information Network (NIBIN) Users Conference.



In the Fall of 2019, the members of the Firearms Unit hosted the 2nd Annual Midwest Firearms Examiner Training Seminar with over 50 attendees from seven states. The seminar included a presentation on the St. Valentine's Day Massacre and the subsequent seizure in St. Joseph, Michigan of Thompson submachine guns, known as Tommy Guns (shown in the photo to left). The identification of the cartridge cases found at the scene of the massacre to these Tommy Guns is considered the beginning of modern firearms identification.

Latent Print Unit

The Latent Print Unit (10 staff) examines and compares unknown to known dermal friction ridge detail, which is found on fingers, palms, and soles of feet. Processing techniques include physical, chemical, and fluorescent development of latent print evidence. When a case is submitted without a suspect, the unknown fingerprints are entered into the state's Automated Fingerprint Identification System (AFIS) and the Federal Bureau of Investigation's Next Generation Identification (NGI) databases. Potential candidates are generated by the system, but the comparison, identification, and verification processes are performed by forensic scientists. The Latent Print Unit can access all friction ridge archive files from AFIS/NGI for comparison purposes. This access streamlines the process and allows the examiners to acquire the exact exemplar needed for comparison.



During 2019, the Unit received 872 cases for analysis that included 66 electronic submissions, worked 867 cases, and entered 427 prints into AFIS and NGI with the number of hits shown in the table to the left. The backlog was 144 cases at the end of the year. The Unit also assisted with 427 print identifications to confirm Combined DNA Index System (CODIS) hits. The Latent Print Unit is active in the forensic community participating in the International Association for Identification (IAI) and the Indiana Division of IAI including the Board Chair, the Secretary/Treasurer, and a Board Member.

2019	Hits
AFIS	48
NGI	45
Total	93

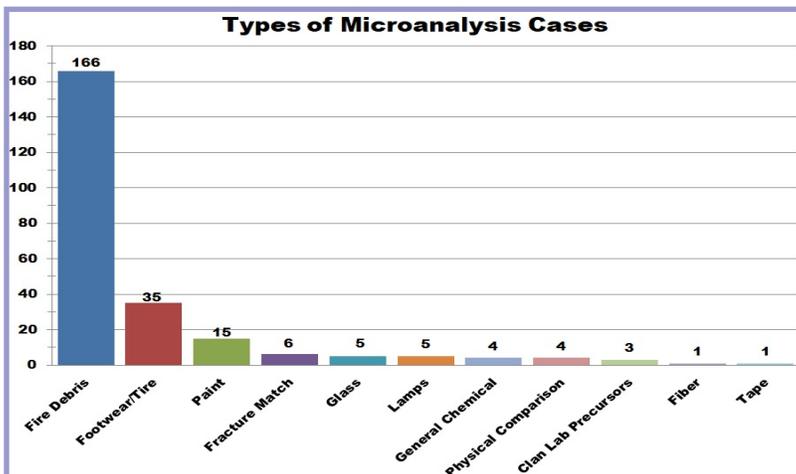
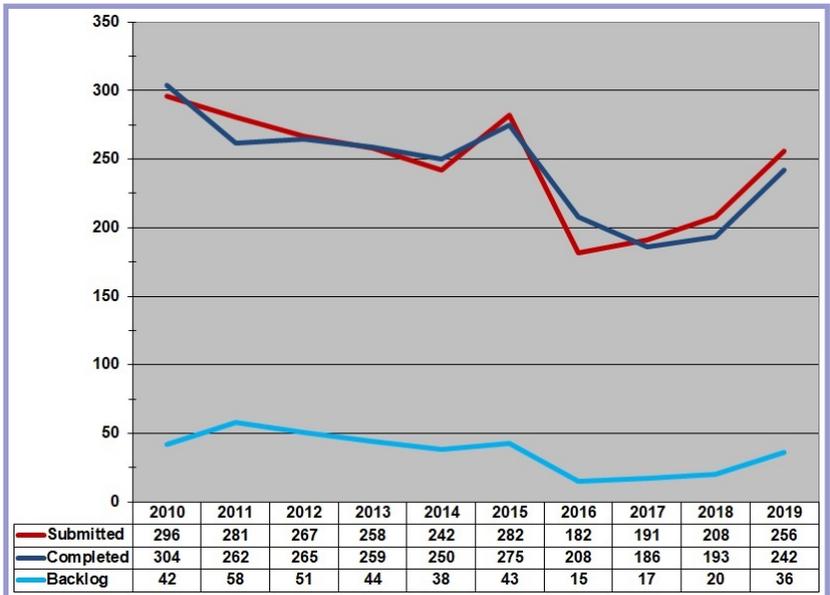
In 2019, the Laboratory continued accepting electronic evidence submissions of digital images for latent print or document examination with 74 total submissions. Electronic evidence images for examination can be submitted at esubmission@isp.in.gov with a completed Request for Laboratory Examination Form, and for files too large to be emailed, a secure file sharing website can be set up by the Laboratory Division. It is anticipated that electronic case submissions will continue to rise as awareness increases. Over 60% of all latent print submissions are lifts or photographs, which could be submitted electronically.

For more than 4 years, the Unit collected data from each case worked including what type of item was examined, whether latent prints of value were found, and whether any identifications or exclusions were made. This data was organized by the type of items: non-porous, firearms/tools, tech, tape, drug related, porous, and lifts/photos. The items that were most successful was determined as shown in the chart to the right. There are many reasons why a print might not have been identified such as deferrals, lack of exemplars, low quality, etc. This information was presented at the IN IAI Annual Educational Conference. The goal of the presentation was to share this information with investigators as well as to discuss when to process at the scene versus submitting to the laboratory.



Microanalysis Unit

The Microanalysis (Trace) Unit (5 staff) performs analysis, comparison, and identification of automotive lamps, clandestine laboratory reagents, fibers, fire debris, glass, paints, plastics, safe insulation, tapes, and unknown materials. During 2019, the Microanalysis Unit took over examinations of footwear and tire impressions from the Latent Print Unit, and completed 35 of these examinations during the year. The Unit uses many different types of microscopes as well as analytical instrumentation to conduct examinations and comparisons in an effort to provide associative evidence. The Unit uses the SoleMate Footwear Print Identification System Footwear Print Expert (FPX). This system stores shoeprint sole patterns for reference. Footwear impressions recovered from crime scenes can be searched in FPX database to potentially identify a manufacturer of a shoe.



In 2019, the Unit completed 242 cases, a 25% increase from 2018, and received 256 submissions. The backlog was 36 cases at the end of the year. The majority of cases worked during the year by the Unit were fire debris cases as shown in the chart to the left.

The Microanalysis Unit participates in the American Board of Criminalistics (ABC), American Society of Trace Evidence Examiners (ASTEE), and Midwestern Association of Forensic Scientists (MAFS).

During 2019, an agency investigating alleged

property damage submitted a piece of gray painted plastic residential siding with faint red color across the surface of it (as shown in photo 1 below). Upon examination, the red color did not appear to be on top of the gray painted siding but rather it appeared to be underneath the gray paint of the plastic siding. An area where only gray paint was visible and no red material present was examined. As the gray paint was removed from the surface with a scalpel it was revealed that a red material was present underneath the gray paint (as shown in photo 2 to the right). The red material thought to be a paint transfer was actually a red primer coating on the plastic siding. The analyst concluded that no transfer of red paint and no property damage had occurred.



Photo 1: Paint as submitted.

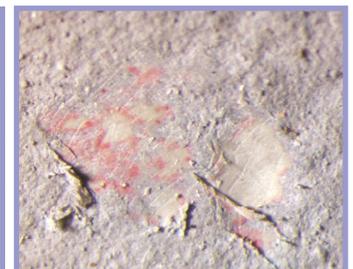


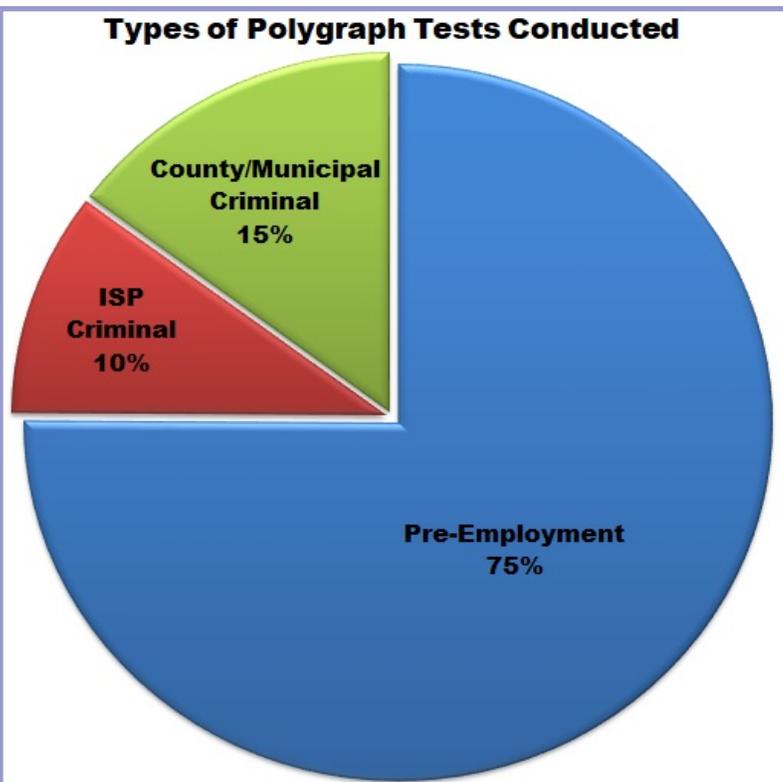
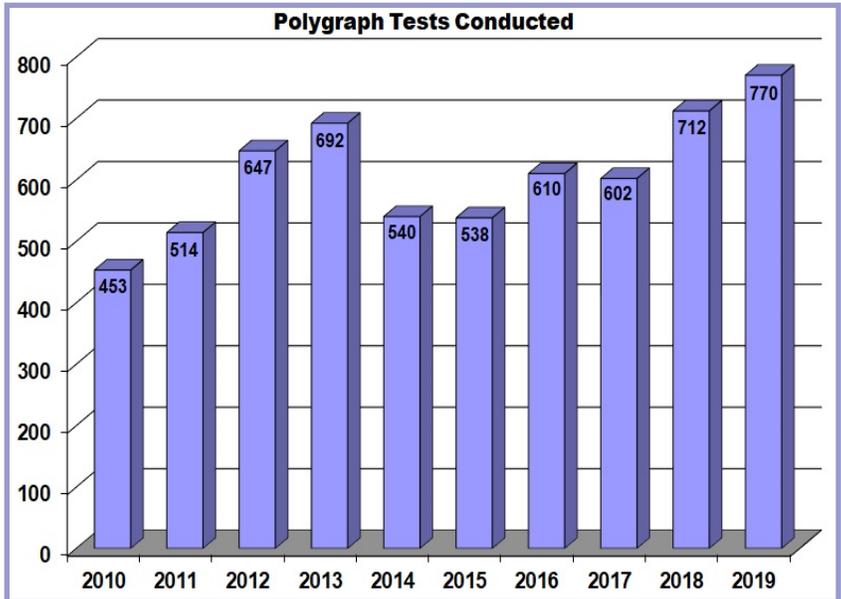
Photo 2: Paint after exam.

Polygraph Unit

The Polygraph Unit (6 staff) provides polygraph examinations in criminal investigations to the Indiana State Police (ISP) and other state, county, and local law enforcement agencies. The Unit also conducts pre-employment testing for Indiana State Police positions including Capitol Police, Evidence Clerk, Fusion Center employees, Motor Carrier Inspector, and Trooper. In addition to these tests, the Polygraph Unit also performs pre-employment polygraph examinations for Indiana Department of Natural Resources Law Enforcement Division and the Indiana State Excise Police.

The term polygraph literally means many writings. The name refers to the manner in which selected physiological activities are simultaneously measured and recorded by computerized instruments. A polygraph examiner interprets the charts of the physiological changes to determine deception and non-deception.

In 2019, the Polygraph Unit conducted 192 polygraph tests in criminal cases that resulted in 18 cleared cases, 15 additional leads developed, 26 confessions obtained, and 21 significant admissions received.



The Unit conducted 578 pre-employment polygraphs, a 28% increase from 2018. The proportions of the tests conducted for pre-employment applicants, ISP criminal, and county/municipal agencies criminal are shown in the chart to the left.

The Unit is active in the forensic community by participating in the American Association of Police Polygraphists (AAPP), American Polygraph Association (APA), and Indiana Polygraph Association (IPA).

The Polygraph Unit worked behind the scenes in many investigations and helped conclude several unique, as well as high profile cases. A polygraph examiner obtained a pre-test confession from a high school coach who had sexual contact 100 plus times with a female student athlete. This confession resulted in an arrest. The Polygraph Unit also cleared several individuals who were suspected/accused of crimes.

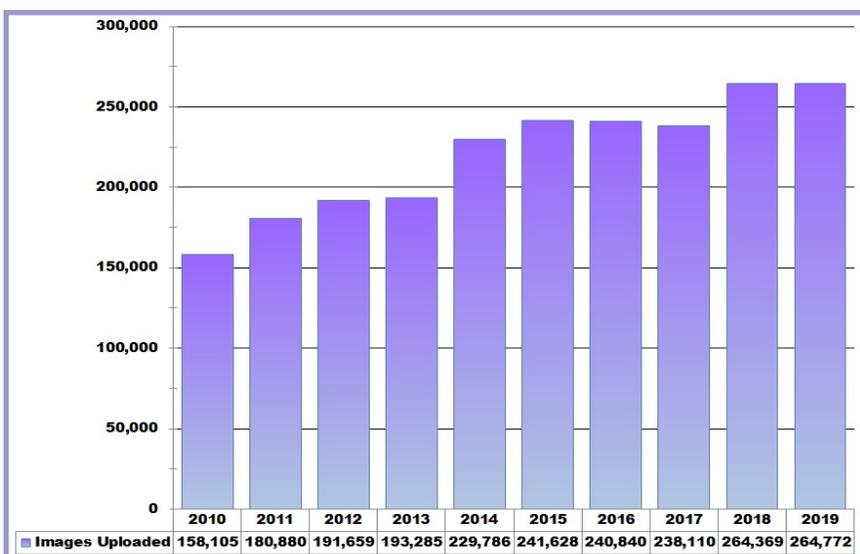
Evidence Management

Evidence Clerks (17 staff) are responsible for tracking the chain-of-custody of evidence upon receipt into the Laboratory Division's possession, organizing storage of the evidence so it can be retrieved when needed, and the release or destruction of evidence as necessary. The Evidence Clerks securely maintain evidence at the 14 Indiana State Police (ISP) Districts and the Indianapolis Regional Laboratory. The three Districts located at Evansville, Fort Wayne, and Lowell also have a Regional Laboratory. The Evidence Clerks receive evidence at the Regional Laboratories from law enforcement agencies for forensic analysis and return it when testing is complete. The Unit is active in the forensic community by participating in the Illinois Association of Property and Evidence Managers (IAPEM).

Evidence Clerks handled thousands of items of evidence throughout the year that included accepting 40,357 items from contributors at the Regional Laboratories for analysis. The Evidence Clerks received 26,925 additional items from ISP personnel for storage. In 2019, the Evidence Clerks were responsible for the storage of over 350,000 individual items of evidence and upon receiving disposition orders destroyed 16,181 items and released 4,206 items. During 2019, Evidence Clerks at the ISP District facilities assisted in the accomplishment of accreditation of the field services and evidence storage system as noted on page 6.

The Laboratory Division utilizes an electronic Request for Laboratory Examination Form. This form is dynamic with additional fields and/or pages appearing depending upon the information entered. The form is tailored to obtain only the information needed by each Unit, which reduces unnecessary, potentially contextually biasing information. The flexibility of the form allows each Unit to receive only the information needed. The Request for Laboratory Examination Form and an instructional PowerPoint® are available on the Laboratory Division's website (<http://www.in.gov/isp/labs/2332.htm>). The form is updated annually and includes an expiration date. Once expired, the form will lock to prevent the use of an obsolete version, and contributors are directed to the website to download the current version.

Photography Unit



The Photography Unit (1 staff) provides photography services for ISP investigation personnel and the ISP Public Information Office. The Unit also maintains a digital asset management system, Axon Commander®, for all Department criminal investigation and crash photos. Digital images are uploaded, cataloged, and archived for future reference from the 14 ISP Districts. In 2019, 264,772 digital images were entered into the database, and more than 2.2 million images have been added since the inception of the photo database in 2008. The Photography Unit printed 715 investigative color prints and provided 542 CDs to investigators and insurance companies during 2019.

Quality Assurance & LIMS/IT Support

The **Field Quality Assurance Unit** (4 staff) administers training in crime scene investigation to local law enforcement agencies as well as Indiana State Police (ISP) Crime Scene Investigators (CSI). The Unit assists the Indiana Law Enforcement Academy (ILEA) in certification of CSIs from departments throughout Indiana. The Crime Scene and Field Support Section Commander is a member of the ILEA CSI Certification Board. The Unit also provides specialized training to other agencies upon request. Members of the Unit regularly provide instruction at both the ISP Recruit Academy and the ILEA Basic Courses.

The ISP Evidence Management System Quality Assurance Program annually audits each of the 14 ISP Districts, as well as the Indianapolis Regional Laboratory. The three Districts located at Evansville, Fort Wayne, and Lowell also have a Regional Laboratory. A complete inventory/audit is conducted every two years at each of the Laboratory Division's evidence storage facilities. These audits are a comprehensive review to account for every item stored at the facilities. The Unit is also occasionally requested to audit a local law enforcement agency's evidence system. These audits are completed only when there is a criminal investigation involving internal issues with the physical evidence stored at the location.

Additionally, the Unit semi-annually assesses the work of all ISP CSIs. As part of the quality assurance program to ensure competency and properly functioning equipment, each CSI is also given a proficiency test annually under the supervision of the Unit. In 2019, the Field Quality Assurance Unit made significant contributions in achieving crime scene accreditation including reviewing and updating procedures, creating and implementing new forms and logs, and monitoring implementation to ensure compliance.

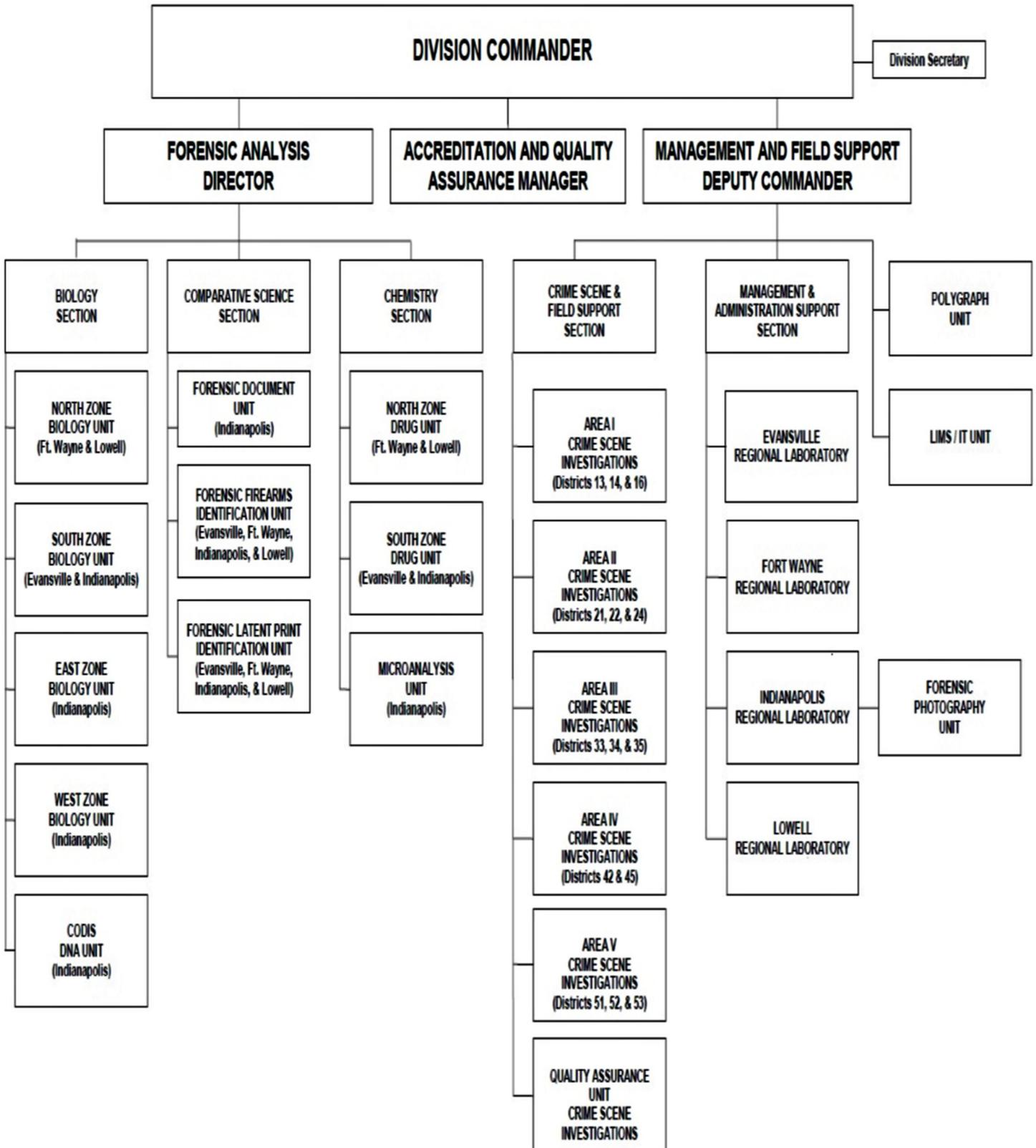
The **Laboratory Quality Assurance Unit** (1 staff) ensures compliance to laboratory and accreditation quality assurance standards. The Unit maintains updated and secure quality assurance documentation, oversees the implementation and continued corrective action compliance, ensures laboratory adherence to proficiency testing and witness critique requirements, and develops and conducts quality assurance related training for laboratory staff. The Unit also assisted the Field Quality Assurance Unit with accomplishing accreditation of crime scene services and the District evidence storage facilities as previously noted on page 6.

The Laboratory Division is accredited by the American National Standards Institute (ANSI) National Accreditation Board (ANAB). Accreditation is a voluntary program in which a crime laboratory that participates must demonstrate that its management, personnel, operational and technical procedures, equipment, and physical facilities meet established international quality requirements. This Unit participates in the American Society for Testing and Materials-International (ASTM-I), the Association of Forensic Quality Assurance Managers (AFQAM) as a Past President, and the Organization of Scientific Area Committees - Quality Infrastructure Committee (OSAC-QIC) as the Vice Chair.

The **Laboratory LIMS/IT Unit** (2 staff) has the primary duty of maintaining and administering the Laboratory Information Management System (LIMS). The LIMS Unit tracks all evidence currently held by the ISP Laboratory Division and stores analytical results, records, and reports. This system is integrated with the web based reporting system iResults, which provides the Certificates of Analysis (reports) to law enforcement agencies and county prosecutors.

The LIMS/IT Unit supports Laboratory Division personnel at the four Regional Laboratories and 14 District locations. The Unit provides assistance with maintaining and troubleshooting other systems used by Laboratory Division personnel, that include Combined DNA Index System (CODIS), Integrated Ballistics Identification System (IBIS), analytical instrumentation, camera surveillance, door access/security, and phone systems. The Unit also maintains and supports a digital workflow system (Mideo[®]) utilized by the Document, Latent Print, and Microanalysis Units, and the digital asset management system (Axon Commander[®]) employed by the Photo Unit.

Organizational Chart



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**Visit the Laboratory Division's website
for Evidence Protocols and Forms,
Test Methods, CODIS and Drug Stats,
Training Opportunities, and many more
resources.**

<http://www.in.gov/isp/labs/>