

# ON OUR WATCH

ANNUAL REPORT JULY 1, 2018 - JUNE 30, 2019

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ILLINOIS FIRE SERVICE INSTITUTE UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

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#### A MESSAGE FROM DIRECTOR MORTENSON

It is my honor to present the 2019 Annual Report of the Illinois Fire Service Institute at the University of Illinois at Urbana-Champaign. It is always my privilege to write this message as it is my opportunity to reflect on the many successes that we encountered in the past fiscal year.

In FY2019, the Illinois Fire Service Institute (IFSI) delivered quality training and education to students from across the state, country, and world. Every IFSI program and course is at the forefront of national training standards. While our focus is broad, and our mission supports first responders from across the globe, our attention remains focused on serving members of the Illinois fire service. This fiscal year, IFSI rolled out the Basic Operations Firefighter/NFPA Firefighter I Blended program. This is a pioneering opportunity for Illinois firefighters seeking state and national certification who are unable to complete a traditional resident academy program. With the financial support from the Office of the Illinois State Fire Marshal, IFSI now offers this blended training at no cost to students or departments. This program allows volunteer firefighters the opportunity to become trained and certified to the exact same standard as our 7-week resident academy. If it continues to be funded by the state, 200-300 volunteer firefighters per year will be trained and certified at the Basic Operations Firefighter/NFPA I level. Imagine what this will do for mission accomplishment, firefighter safety, and mutual aid. I believe this is a game changer for the Illinois fire service and I look forward to watching the impact that it will have on community emergency preparedness and responder safety for years to come.

This fiscal year brought slight changes to our report numbers. The slight drop in total students engaged from 2018 to 2019 is the result of IDOT and IEMA no longer reporting their self-paced on-line hazmat awareness students. Our overall registered students remained solid and consistent from 2018 to 2019 and our overall outreach increased. Our connections with students and course delivery have increased and progressed in a multitude of areas. In FY19, the National Incident Management Systems (NIMS) reported a 31% increase in the number of courses offered across the state. The IFSI Cornerstone Program delivered 13% more courses than in the previous fiscal year. IFSI added five new levels of accreditation with the International Fire Service Accreditation Congress (IFSAC) and three new levels with the National Board on Fire Service Professional Qualifications (PROBOARD). As Director, I remain committed to ensuring our mission as it relates to training and education continues to lead the nation regardless of the program.

Our special event programs continue to be premier training opportunities for first responders. In FY19, IFSI saw a 24% enrollment increase for special events. This increase can be attributed to the quality of our training and the accessibility of funded housing accommodations. Once again, financial support from our partner, Office of the State Fire Marshal, allowed us to defray the student costs for these weekend events ultimately increasing the accessibility to IFSI training and education. It brings me great pride to carry on over 95 years of tradition by offering special event programs. And, I am honored to lead a team of professionals that continue to develop these opportunities to meet the needs of today's fire service.

Every year that I prepare this message I struggle to select specific items to highlight. Not because our accomplishments are limited or our successes rare. Rather, as an organization we make a daily positive impact on those we serve. Our accomplishments have become so consistent and are a direct result of the hard work and dedication of the professionals who make up the team of IFSI staff and instructors. In FY19, we continued with our marketing campaign, WE ARE IFSI, to recognize these individuals who work passionately to support our mission. The campaign has been incredibly positive and feedback from our stakeholders has driven our team to establish WE ARE IFSI as a brand. I urge you to stay connected with our social media platforms as we continue our commitment to showcasing our staff, programs, students and the further development of this brand.

Our programs are unparalleled. Our team and partnerships remain strong. I look forward to the opportunities and challenges that we will embrace in the next year. Thank you for your support of the Illinois Fire Service Institute. As always, it is my privilege to support our mission of *Helping Firefighters Do Their Work Through Training, Education, Information, and Research*.

#### **ILLINOIS FIRE SERVICE INSTITUTE**

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

The Illinois Fire Service Institute (IFSI) is the statutory State Fire Academy for Illinois. It serves as the oldest continuous fire training institution in the United States. Since 1925, first responders from across the state and world have relied on IFSI to deliver hands-on, innovative, and top-quality training, education, and research.

OUR MISSION: HELPING FIREFIGHTERS DO THEIR WORK THROUGH TRAINING, EDUCATION, INFORMATION, AND RESEARCH.

#### FY2019 WAS A SUCCESSFUL YEAR:

61,455 STUDENTS REACHED

1,976 COURSES OFFERED

15,675 CLASS HOURS

911 FIRE DEPARTMENTS SERVED

153 OTHER RESPONSE ORGANIZATIONS TRAINED

443,506 STUDENT HOURS

101/102 ILLINOIS COUNTIES SERVED

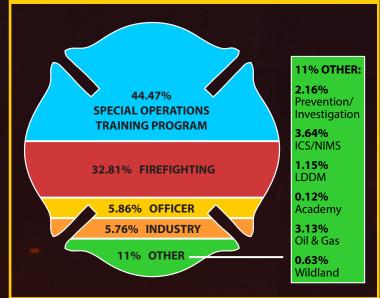
317 UNIQUE DELIVERY LOCATIONS IN ILLINOIS

1,111 STUDENTS IN OFFICER TRAINING

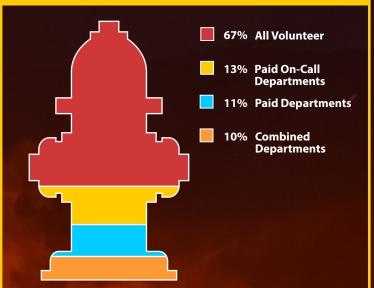
**Royal P. Mortenson** Director, Illinois Fire Service Institute



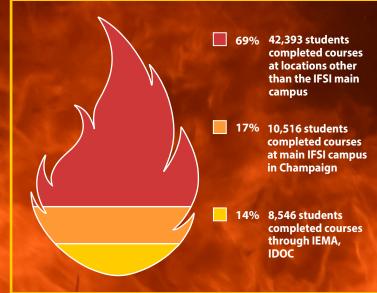
#### **ENROLLMENT BY PROGRAM**



#### **ENROLLMENT BY CAREER TYPE**



#### STUDENT REGISTRATIONS BY LOCATION



#### PUBLIC ENGAGEMENT

The IFSI Senior Leadership Team remained actively involved in the fire service profession across the state and world in FY19.

#### A few fiscal year highlights:

- IFSI Director, Royal Mortenson, continued his service as Vice President of the North American Fire Training Directors (NAFTD). Director Mortenson also delivered leadership seminars at multiple local and national conferences.
- Deputy Director, Jim Keiken, continued his involvement with state fire service organizations, national fire service accreditation agencies and NFPA standards committees.
- Associate Director, Brian Brauer, presented his research studies on climate and culture in the firehouse at multiple professional conferences and seminars across the country. This involvement at the national level allowed IFSI to have a direct impact on implementing necessary, and sometimes difficult, changes within the industry.
- Assistant Director, James Moore, delivered Leadership Development and Decision Making and First Responder Resiliency Project presentations at multiple national and state conferences and seminars.

#### SOCIAL MEDIA ENGAGEMENT

**Facebook** – Increased the number of Facebook followers to nearly 18,000 in FY19. With the debut of live video feeds in January 2019, videos posted on our Facebook page generated 289,100 minutes viewed. This was a 367% increase from the previous year.

**Twitter** – Received over 154,000 impressions. Averaged 450 impressions per day across the fiscal year. Average 2 link clicks per day on fire service related postings.

**Instagram** – Averaged 3 postings per week highlighting course and program activities delivered across the state. Grew account nearly 2,000 followers.

**LinkedIn** – Relaunched the use of the IFSI LinkedIn account. Within the first five months of usage, saw an 84% growth rate among unique viewers.

#### SPECIAL EVENTS

IFSI offers affordable, hands-on training experiences throughout the year. In FY19, special event programs reached over 1,000 students.

#### 95th Annual Fire College

America's oldest continuous fire school, brought 360 firefighters to Champaign for hands-on training. Over the course of the fourday training event, IFSI reached 255 unique agencies.

#### 24th Annual Winter Fire School

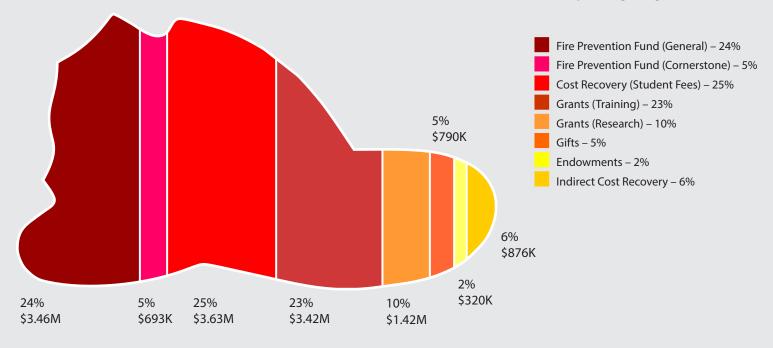
We continued to support our effort to offer training throughout the calendar year through Winter Fire School. The two-day event in January 2019 served 403 first responders.

#### 17th Annual Explorer Cadet Fire School

This significant training event offers students ages 15 to 20 from throughout the country a preview of a potential fire service career. During the four-day program, 261 students trained in basic, intermediate and advanced firefighting skills.

#### **IFSI FUNDING SOURCES**

#### Total Annual Operating Budget – \$14,604,000



#### **AFFILIATE SUPPORT**

Our many strategic affiliations allow us to share knowledge and resources with leading educators, researchers, corporations, professional associations, and other organizations. In addition to those listed, we are grateful for the support received through fire service vendors and suppliers who contribute to fulfilling our mission.

#### **IFSI AFFILIATES:**

- Office of the Illinois State Fire Marshal
- Illinois Fire Chiefs Association
- Illinois Firefighters Association
- Illinois Association of Fire Protection Districts
- Chicago Fire Department
- Illinois Propane Education and Research Council (IPERC)
- Illinois Petroleum Resources Board
- Illinois Department of Natural Resources
- Illinois Fire Services Association
- State of Illinois Fire Caucus
- Underwriters Laboratories
- National Institute for Occupational Safety and Health





#### CURRICULUM



The Illinois Fire Service Institute continues to offer the highest quality in training and education. Evaluation methods were audited and reviewed once again this year through a third-party process. IFSI has maintained accreditation with the National Board on Fire Service Professional Qualifications (Pro Board) and International Fire Service Accreditation Congress (IFSAC) and increased the national certification opportunities for our students.

In FY2019, IFSI issued **3,333** Pro Board certifications and **1,024** IFSAC certifications. IFSI increased to **32** Pro Board approved levels and **8** IFSAC approved levels. The IFSI Curriculum and Testing staff scored **6,690** total IFSI exams and administered **96** OSFM state exams. The team has supported the update of **12** IFSI courses and the development of **10** new courses. Test validity and relevancy is critical to our programs. As a result, the testing office validated **6** test banks last year, ensuring we are testing the knowledge that the job requires.

#### **FIREFIGHTING PROGRAMS**

The IFSI Firefighting Program offers hands-on training opportunities for first responders. Courses provide students with a realistic learning experience.

#### **FIREFIGHTING PROGRAM SUPPORT**

Illinois Petroleum Resource Board (Oil & Gas)				
1 COURSE	27 STUDENTS	108 HOURS		
Illinois Propane Education & Research Council (IPERC)				
42 COURSES	1,150 STUDENTS	4,212 HOURS		
Illinois Department of Natural Resources (Wildland Training)				
20 COURSES	246 STUDENTS	3,955 HOURS		

#### STUDENTS SERVED IN FIREFIGHTING PROGRAMS

Course		# Students	# Hours
Course		# Students 98	# Hours 692
Acquired Structure (House) Burn		161	
Advanced Apparatus Breathing Specialist (Smoke Divers)			1,728
Agriculture		1,002	5,448
Courage to be Safe		298	1,192
Driver/Operator	2,791	15,881	
Engine Company Operatio	204	2,108	
Firefighting (general cours	7,302	67,791	
Fire Attack and Suppressio	30	1,200	
Fire Prevention	323	8,960	
Instructor		785	20,232
Investigation		477	9,048
Light and Fight		652	4,796
Liquefied Petroleum Gas (Propane) Firefighting		1,161	4,272
National Fallen Fire Fighters		423	1,748
Officer		1,388	30,994
Responder Intervention Team (RIT)		431	7,410
Traffic Incident Management Awareness, Online		143	81
Traffic Incident Management Operations		441	1,848
Truck Company Operations		171	2,004
Vehicular Rescue		1,441	23,507
Wildland Firefighting		227	3,879
TOTALS		19,949	214,819
INDUSTRY			
24 COURSES 2,135 STUDENTS 7,105 HOURS			URS
2/13/3/00/13			

#### SPECIAL OPERATIONS TRAINING PROGRAM

The Illinois Fire Service Institute Special Operations Training Program (SOTP) delivers technical rescue training to first responders. Courses offer immersive training experiences that challenge even the most experienced students. IFSI SOTP is at the forefront of technical rescue training programs.

#### STUDENTS SERVED IN SOTP PROGRAMS Course # Students # Hours Confined Space 431 7,663 Hazardous Materials (includes IEMA) 4,032 82,633 Hazardous Materials (IDOC) 8,546 38,368 **Rope Rescue** 513 15,320 Structural Collapse 170 7,156 Technical Rescue 387 2,673

126

14,205

3.952

157.765

#### NATIONAL INCIDENT MANAGEMENT SYSTEM

**Trench Rescue** 

TOTALS

In FY19, the NIMS/ICS Program delivered 51 classes to 1,351 students in 17 training locations. This was a 31% increase in number of courses delivered compared to the previous fiscal year. **The program offered 30,961 hours of training through 15 unique courses.** 

#### LEADERSHIP DEVELOPMENT & DECISION MAKING

The Leadership Development and Decision Making (LDDM) Program is a premier development/decision-making training and education continuum that has consistent themes, priorities, and lines of education in order to institutionalize the highest-quality leadership in the fire service. In FY2019, the LDDM program impacted 428 students with 4,862 class hours and 32 different course offerings.

#### **RESILIENCY TRAINING FOR FIRST RESPONDERS**

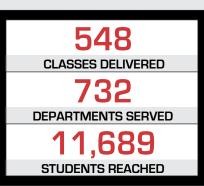
Resiliency training provides first responders with the necessary tools to remain resilient to the stressors that come with the job as well as stress from off the job. The First Responder Resiliency and Mental Health Awareness Project is infused in the curriculum of 34 IFSI courses. This training seeks to remove the stigma surrounding the discussion of mental health, trauma, and suicide. **Resiliency training reached approximately 3,800 students in FY2019.** 

#### **CORNERSTONE PROGRAM**

The Cornerstone Program supports the delivery of essential skills training to local fire departments, MABAS Divisions and Mutual Aid Associations throughout the state.

Training is coordinated through seven IFSI Regional Representatives. Courses are funded through the Office of the Illinois State Fire Marshal and available at no cost to students or fire departments. **Of the 911 Illinois fire departments served in 2019, 733 of those departments received grant funded Cornerstone training.** 





#### **DELIVERY BY REGION**

Region	Classes	Students	Class Hours
Northeast	57	1,288	7,331
Chicago Metro	52	1,336	7,781
Northwest	68	1,438	9,232
Central	90	2,353	11,474
East Central	83	1,829	7,711
Southwest	104	2,305	10,500
Southern	94	1,140	6,785
TOTAL	548	11,689	62,744



## RESEARCH

- IFSI Research co-authored the three most downloaded articles from the Journal for Occupational and Environmental Hygiene (JOEH) website between April 2018 and April 2019.
- Our article titled "Contamination of Firefighter PPE, Skin, and the Effectiveness of Decontamination Procedures" is now the most read paper on the JOEH website history even though it has been published online for less than two years.
- The research conducted at IFSI and the publications that followed have led to actionable changes that fire departments are implementing to lower the risk of contamination and cross contamination in the United States and abroad.
- IFSI research articles have significantly higher Altmetric scores (data tracking).

## In FY2019, new collaborations were initiated and proposals generated with partners in:

- Nuclear Engineering and Kinesiology at the University of Illinois at Urbana-Champaign
- Colorado State University
- National Institute for Occupational Safety and Health
- National Personal Protective Technology Laboratory (NIOSH NPPTL)
- University of Cincinnati
- Oregon State University
- National Development Research institute (NDRI)
- Los Angeles Fire Department
- Rice University
- NASA, Minerva Work Solutions
- National Fire Protection Research Foundation (NFPR)
- Chez Center for Wounded Veterans
- Patient-Center Outcomes Research Institute (PCORI)
- Rush Hospital, Chicago, IL
- San Diego Veterans Hospital
- VA Illiana Healthcare System, Danville, IL

#### Completed data collection in the following studies:

- Underwriters Laboratory (UL) Coordinated Fire Attack project
- North Carolina State University project focusing on hood impacted range of motion and hearing
- Skidmore College project on core temperature prediction
- NDRI Collaboration: National focus groups in Bullying, Harassment, and Resiliency study

#### **Ongoing Data Collection:**

- IFSI Fire Academy
- IFSI Driver Readiness Interactive Vehicle Experience (DRIVE) Program
- NDRI national study on Bullying, Harassment, and Resiliency
- IFSI Personal Protective Equipment (PPE) Interface project in collaboration with NIOSH, Fire Service Research Institute (FSIR), and UL)
- UL FSRI study of Fire Service Residential Home size-up and Search and Rescue Operations



#### LIBRARY

The IFSI Library is the only library in the state dedicated to fire and emergency services. It is also the third largest fire and emergency services library in the United States. The library holdings included **72,707** titles as of June 2019.

#### **FY2019 REFERENCE REQUESTS:**

The IFSI Library Team answered **4,176** reference requests in total, including **312** in-depth, long-term reference requests

- **998** reference requests dedicated to IFSI staff and instructors
- **170** reference requests dedicated to the Illinois Firefighters Life Safety Research Center
- 174 reference requests related to the IFSI Curriculum Department
- **274** reference requests dedicated to international partners' research

#### FY2019 HIGHLIGHTS:

- The Library added 544 items to the collection
- Received **1,020** general donations
- Added **34** borrowers
- Loaned 1,122 items
- Received 23,516 views of library created online subject guides
   (LibGuides)
- Filtered **72** items of IFSI Library materials to the Peoria Fire Academy
- Implemented 79 user training workshops training 634 patrons
- Provided **65** articles to IFSI program directors and managers, instructors, and staff as a result of the current awareness service

The IFSI Library maintains the Illinois Firefighter Medal of Honor and Medal of Valor Database and the Illinois Firefighter Line of Duty Death Database (IFLODD). The staff also supports continued exhibitions in the IFSI Firefighter Memorial Hall. **In FY2019, 6 former instructors** were added to the memorial exhibit.

- 108,300 IFLODD database hits (since 5/2007)
- 900 IFLODD firefighter records
- 806 firefighters with incident summaries
- 1512 images and 14 total oral history interviews

The IFSI Library was able to greatly expand the number and scope of IFSI materials available in the Illinois Digital Environment for Access to Learning and Scholarship (IDEALS), which is the institutional repository for the University of Illinois. **103** new items were added on topics ranging from IFSI research to publicity materials. The additions represent a **174** percent increase in IFSI items in IDEALS. IFSI documents in IDEALS have been downloaded **161,730** times since 2006.

The Library staff continued to develop Illinois Firefighter Medal of Honor and Medal of Valor Database (**291** recipients of the Medal of Honor or Valor since 1994, including **266** IFSI students and **21** IFSI instructors and **113** incident summaries).

Additionally, the IFSI Library Team presented at 18 national and international library conferences.

#### **INTERNATIONAL PROGRAMS**

IFSI hosted the Librarians Scholarly Exchange Program for the **15th** consecutive year. In FY2019, **41** librarians attended the program. Since 2005, the program has trained **423** librarians from **142** organizations.

- Chinese Professional Archives Internship Program (July/August 2018): Collaborating with the Department of Archives, Beijing Union University, the IFSI International Programs developed and hosted 15 Chinese undergraduate students for the first Chinese Professional Archives and Library Internship Program in summer 2018.
- China Hazardous Materials Operations Training Program (November/December 2018): 34 Chinese firefighters and first responders participated in hazardous materials training at the National Hazardous Chemicals Emergency Rescue Huizhou Base. This is the fifth IFSI hazardous materials operations training and the second Pro Board certificate training conducted at Huizhou Training Base. As of December 2018, a total of 170 Chinese first responders have been trained by IFSI in Huizhou.
- IFSI Hazardous Materials Technician Training Program (September 2018): 2 fire officers from the Hong Kong Fire Services Department and 2 staff
  members from the S&H Safety Solutions Company in Shenzhen joined the training program. Since 2008, a total of 58 Hong Kong fire officers have
  been trained at IFSI.
- IFSI Firefighting Academy (October 2018): A firefighting program professor from the People's Police University in Langfang observed and participated in Fire Academy.

In September 2018, IFSI traveled abroad and visited the Hong Kong Fire Services Department, the S&H Safety Solutions Company in Shenzhen and Yueyang, and a Darley China Representative in Shanghai.



**Our Mission:** Helping Firefighters Do Their Work Through Training, Education, Information, and Research.



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