A MESSAGE FROM DIRECTOR MORTENSON

It is my honor to present the 2017 Annual Report of the Illinois Fire Service Institute at the University of Illinois at Urbana-Champaign. I have always looked forward to writing this message and sharing the many successes that we encounter in each fiscal year. This year is no exception.

In FY2017, the Illinois Fire Service Institute (IFSI) served first responders with top-quality training and education opportunities. Each IFSI program and course represents the best the nation has to offer. In March 2017, IFSI received initial accreditation from the International Fire Service Accreditation Congress (IFSAC). This achievement recognizes that our accredited programs of study meet and exceed national standards. We now hold accreditation with two national fire service accreditation agencies.

Our successes continue with our program delivery. This year, we delivered 54 more courses, over 500 more hours of class instruction, and engaged students in over 28,500 more hours of study. These increases contributed to our outreach to 70 more Illinois fire departments than in the past year. Undoubtedly, this success is a result of the hard work and dedication of the IFSI team of staff and field staff instructors. I would be remiss if I did not also acknowledge that our success would be inhibited without the support of our key partners.

In May 2017, our research team launched the IFSI PPE Cleaning Study. This project, supported by our partners UL Firefighters Safety Research Institute, the National Institute for Occupational Safety and Health, and Skidmore College, has drawn national attention. Our efforts continue to focus on applied research studies that aim to improve education on firefighter life safety and fireground risks. We look forward to sharing the study results in the upcoming year.

I anticipate we will continue to share many successes and areas of growth in the next year as we better direct our marketing efforts. Our team set strategic goals to streamline our print media publications and further enhance our electronic media platforms. I encourage you to stay connected with the weekly training highlights and event activity postings that we share on the IFSI social media channels and the IFSI website. They are further evidence of the successes we encounter each day serving first responders throughout the state, country and world.

Thank you for your support of the Illinois Fire Service Institute. It is my pleasure to support our mission of Helping Firefighters Do Their Work Through Training, Education, Information, and Research.

Royal P. Mortenson
Director
ENROLLMENT BY PROGRAM

54.15% Firefighting Programs
26.65% Hazardous Materials
3.40% Industry
3.22% Technical Rescue Training
3.14% Officer
9.44% Other:
1.93% Vehicle Extrication
1.83% Online
1.70% Fire Prevention & Investigation
1.40% Agriculture
1.30% EMS
0.80% NIMS/ICS
0.35% LDDM
0.13% Wildland

Enrollment By Career Type

Student Registrations by Location

IFSIO ADMINISTRATION

Royal Mortenson
Director
(217) 300-0229
rpmort@illinois.edu

John (Mac) McCastland
Associate Director
(708) 906-6927
jmccastl@illinois.edu

Sean Burke
Associate Director
(217) 244-8720
swburke@illinois.edu

Sheri Ellenberger
Associate Director of Budget, Planning and Development
(217) 300-5831
ellenber@illinois.edu

Jim Keiken
Deputy Director
(217) 300-4275
jkeiken@illinois.edu

Brian Brauer
Associate Director
(217) 333-9027
brbrauer@illinois.edu

Gavin Horn
Director of Research
(217) 265-6563
ghorn@illinois.edu

Jodi Beccue
Director of Class Support
Executive Administrative Assistant
(217) 244-6674
jbeccue@illinois.edu

11,321 Students Completed Courses at the Main IFSI - Champaign Campus Location
51,057 Students Completed Courses at Regional Training Centers and Local Departments

69% All Volunteer
12% Paid-Call
11% Paid Departments
8% Combined Departments

18% 11,321 Students Completed Courses at the Main IFSI - Champaign Campus Location
82% 51,057 Students Completed Courses at Regional Training Centers and Local Departments

Firefighting Programs
Hazardous Materials
Industry
Technical Rescue Training
Officer
Vehicle Extrication
Online
Fire Prevention & Investigation
Agriculture
EMS
NIMS/ICS
LDDM
Wildland

Retention By Program

Retention By Career Type

Retention By Location

82%
11,321
18%
51,057

0
69%
12%
9%
0

0
100
0
100
0
100
0
100
CORNERSTONE PROGRAM

The Cornerstone Program delivers fundamental and 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 the Fire Prevention Fund. Classes are available at no cost to students or fire departments.

CORNERSTONE DELIVERY

<table>
<thead>
<tr>
<th>Delivery by Region</th>
<th>Classes Delivered</th>
<th>Departments Served</th>
<th>Students Reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Region</td>
<td>63 Classes</td>
<td>1,137 Students</td>
<td>8,508 Class Hours</td>
</tr>
<tr>
<td>Chicago Metro</td>
<td>65 Classes</td>
<td>1,820 Students</td>
<td>13,578 Class Hours</td>
</tr>
<tr>
<td>East Central</td>
<td>86 Classes</td>
<td>1,776 Students</td>
<td>10,524 Class Hours</td>
</tr>
<tr>
<td>Northwest</td>
<td>56 Classes</td>
<td>1,226 Students</td>
<td>8,282 Class Hours</td>
</tr>
<tr>
<td>South Region</td>
<td>42 Classes</td>
<td>880 Students</td>
<td>4,702 Class Hours</td>
</tr>
<tr>
<td>Southwest Region</td>
<td>86 Classes</td>
<td>1,695 Students</td>
<td>8,262 Class Hours</td>
</tr>
<tr>
<td>Northeast Region</td>
<td>40 Classes</td>
<td>904 Students</td>
<td>5,523 Class Hours</td>
</tr>
<tr>
<td></td>
<td>438</td>
<td>9,438</td>
<td>59,379</td>
</tr>
</tbody>
</table>

CURRICULUM

The Illinois Fire Service Institute maintained accreditation with the National Board on Fire Service Professional Qualifications (Pro Board). In FY17, IFSI held 27 Pro Board Approved Levels. This included five reaccredited or new levels.

IFSI was also pleased to receive initial accreditation from the International Fire Service Accreditation Congress (IFSAC) in FY17. IFSI was approved for three levels, Fire Fighter I (NFPA 1001 - 2013 Ed.), Hazardous Material Awareness (NFPA 472 - 2013 Ed.), and Hazardous Material Operations (NFPA 472 - 2013 Ed.).

IFSI Testing Staff administered 6,749 end of course exams.

- 6,275 Initial administrations
- 332 Online administrations
- 142 Retests

IFSI had 45 courses approved for certification by the Office of the Illinois State Fire Marshal

5,242 students passed IFSI courses that led to certification through the Office of the Illinois State Fire Marshal.
The IFSI Firefighting Program offers realistic, hands-on training opportunities for first responders. Courses provide students with an immersive learning experience. The IFSI Firefighting Program support includes:

**Illinois Petroleum Resource Board (Oil and Gas)**
- 2 Classes
- 11 Departments
- 38 Students

**Illinois Propane Education and Research Council (IPERC)**
- 49 Classes
- 257 Departments
- 1,412 Students

**Illinois Department of Natural Resources (Wildland Training)**
- 14 Classes
- 64 Departments
- 386 Students

### Students Served in Firefighting Programs

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquired Structure Burns</td>
<td>269 Students</td>
<td>2%</td>
</tr>
<tr>
<td>Agriculture Fire/Rescue</td>
<td>381 Students</td>
<td>3%</td>
</tr>
<tr>
<td>Courage to Be Safe</td>
<td>370 Students</td>
<td>3%</td>
</tr>
<tr>
<td>Apparatus Engineer/Traffic Incident Management/Driver/Operator</td>
<td>2,294 Students</td>
<td>18%</td>
</tr>
<tr>
<td>Firefighting*</td>
<td>3,825 Students</td>
<td>30%</td>
</tr>
<tr>
<td>Fire Officer Programs</td>
<td>1,237 Students</td>
<td>10%</td>
</tr>
<tr>
<td>Liquefied Petroleum Gas</td>
<td>1,487 Students</td>
<td>12%</td>
</tr>
<tr>
<td>Responder Intervention</td>
<td>396 Students</td>
<td>3%</td>
</tr>
<tr>
<td>Team Rescue</td>
<td>1,164 Students</td>
<td>9%</td>
</tr>
<tr>
<td>Fire Prevention, Investigation, Inspector</td>
<td>920 Students</td>
<td>7%</td>
</tr>
<tr>
<td>Wildland Fires</td>
<td>386 Students</td>
<td>3%</td>
</tr>
<tr>
<td>Vehicle and Machinery Rescue</td>
<td>1,164 Students</td>
<td>9%</td>
</tr>
</tbody>
</table>

Total: 12,729 Students 100%

*Firefighting includes Truck Company Operations, Engine Company Operations, Advanced Breathing Apparatus Specialist, Academy, Light and Fight, Fire Attack and Suppression Techniques

### Students Enrolled in SOTP Courses

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous Materials</td>
<td>16,498 Students</td>
<td>93.18%</td>
</tr>
<tr>
<td>Confined Space</td>
<td>453 Students</td>
<td>2.56%</td>
</tr>
<tr>
<td>Rope</td>
<td>442 Students</td>
<td>2.50%</td>
</tr>
<tr>
<td>Structural Collapse</td>
<td>152 Students</td>
<td>0.86%</td>
</tr>
<tr>
<td>Trench</td>
<td>160 Students</td>
<td>0.90%</td>
</tr>
</tbody>
</table>

Total: 17,705 Students 100%

### Special Events

**IFSI offers affordable, hands-on training experiences throughout the year. In FY17, special event programs reached over 1,200 students.**

- **The 93rd Annual Fire College**, America’s oldest continuous fire school, brought 415 firefighters to Champaign for hands-on training. Over the course of the four day training event, IFSI social media channels reached over 101,000 video views of program training highlights.

- **The 22nd Annual Winter Fire School** attendance increased from previous years as IFSI welcomed 374 students to the training grounds.

- **The 15th Annual Explorer Cadet Hands-On Training Fire School** offered students ages 15 to 20 from throughout the country a preview of a potential fire service career. During the four-day program, 287 students trained in basic and advanced firefighting skills and rope rescue operations.

- **The 126th Annual Illinois Firefighter’s Association Down and Dirty Training Weekend** was hosted by IFSI in October. The statewide event brought 82 students to the Champaign training grounds.

### Special Operations Training Program (SOTP)

The Illinois Fire Service Institute Special Operations Training Program (SOTP) delivers technical rescue and hazardous material training to first responders. Courses offer immersive training experiences that challenge even the most experienced students. IFSI SOTP is at the forefront of nationwide technical rescue and hazardous material training programs. SOTP courses are FEMA approved and several levels hold ProBoard and IFSAC National Accreditation.

### National Incident Management System (NIMS)

In FY17, the NIMS/ICS Programs delivered 32 classes to 538 students in 23 training locations.
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.

FY2017 Highlights:

- Named for the third consecutive year as a finalist for the Institute of Museums and Library Services’ National Medal of Honor for Museum and Library Services.
- IFSI Library Reference and Public Services Department answered 4,500 reference requests, added 554 items to the collection, loaded 2437 items, received 6915 views for library created online subject “LibGuides”, and filtered 154 items of IFSI Library materials to the Peoria Fire Academy.
- Library staff conducted 50 user training workshops, training 633 users.
- IFSI Library Technical, Archives and Metadata Department managed 71765 titles in the library holding including prints, nonprints, periodicals, E-resources, devices, IFLODD, IDEALS and articles.


- 554 new items to the collection
- 880 IFLODD firefighter records
- 703 firefighters with incident summaries
- 450 images and 14 total oral history interviews
- 81,377 IFLODD database hits since 5/2007

RESEARCH

- Completed data collection on the Protection from Chemical, Thermal, and Cardiovascular Risks: Impact of PPE Laundering and Hood Design study with partners at UL FSRI, NIOSH and NC State. Participants included individuals from California, Florida, Illinois, Indiana, Massachusetts, Missouri, New Jersey, New York, Ohio, Oklahoma, South Dakota, Texas, Utah, Virginia and Wisconsin.

- Published research findings in academic peer reviewed journals including: Journal of Occupational and Environmental Hygiene, Ergonomics (3 papers), Fire Technology (3 papers), Extreme Mechanics Letters, Experimental Mechanics, Stress and Health

- Conducted a NIST research project to study the effects of repeated thermal exposures on SCBA facepieces to study off-gassing from SCBA facepieces and potential improvements in masks built to updated NFPA standards

- Conducted broad outreach to the fire service including:
  - Published Firehouse Magazine Supplement titled 10 Considerations Related Cardiovascular and Chemical Exposure Risks
  - Conducted Fire Engineering and Envisage webinars with national exposure
  - Presented research at national conferences and meetings

INTERNATIONAL PROGRAMS

- Six officers from the Hong Kong Fire Services Department attended an IFSI Hazardous Materials Technician Training Program in May 2017. Since 2009, more than 50 Hong Kong officers have attended the program.

- In December 2016, IFSI delivered the third Hazardous Materials Awareness and Operations Training Program in Huizhou, China. IFSI trained 34 participants during the course.

- In December 2016, IFSI visited the Hong Kong Fire and Ambulance Services Academy, the Shenzhen S&HE Safety Solution Co. Ltd. and the Kunming Fire Command School. IFSI presented at the National Hazardous Chemicals Emergency Rescue Huizhou Base Hazardous Chemical Emergency & Rescue International Workshop.


- A Chinese People’s Armed Police Force Academy delegation of five visited IFSI in June 2017.

- During FY2017, IFSI welcomed 14 visiting scholars to IFSI. Since 2008, IFSI has sponsored and received 68 Chinese visiting scholars from 46 institutions in China.

- IFSI hosted the Chinese Librarians Scholarly Exchange Program for the 13th consecutive year. In FY2017, 37 librarians joined the program. The program has trained 349 librarians from 122 organizations in China since 2005.
IFSI’s many strategic partnerships allow us to share knowledge and resources with leading educators, researchers, corporations, professional associations and other organizations.

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

**Dennis Spice**
Senior Advisor for Corporate Relations & Development
(217) 898-6507
dspice@illinois.edu
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.


ILLINOIS FIRE SERVICE INSTITUTE
11 Gerty Drive
Champaign, IL 61820
(217) 333-3800
www.fsi.illinois.edu

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