

A year of leadership, service and growth

### **OUR MISSION**

To help firefighters do their work through training, education, information and research.



### From the Director

I am pleased to present the 2006 Annual Report of the Illinois Fire Service Institute at the University of Illinois.

It was an eventful year at IFSI, with ambitious new programs, new strategic partnerships and near record enrollments in our training courses. IFSI offered more than 1300 courses attended by more than 48,000 first responders at 375 locations in 100 counties throughout the state. Attendance at the 82nd annual Fire College – included more than 1000 participants from more than 75 Illinois counties.

We're particularly proud of our expanded offerings of Department of Homeland Security Grants and Training classes. At end of FY2006, we had 13 nationally approved classes, and five more are slated for approval in 2007.

The devastation caused by Hurricane Katrina reminded us all of the critical need for rapid deployment of trained rescue workers. One of our firsts this past year was hosting the National Fire Academy All-Hazards Incident Management Team, a weeklong training course for the State's Incident Management Assistance Teams. Fifteen of the attendees deployed in support of Hurricane Katrina relief efforts in September and October of 2005.

Our redesigned web site is now more robust than ever, with searchable course information, news and comprehensive resources for students and instructors. A new site feature this year is an RSS Feed to deliver up-to-the-minute news on upcoming courses.

Our accomplishments of the past year are impressive, but our focus is always on the future. We're making constant progress in meeting the goals of our Vision 2010, which is developing new partnerships and technologies to enhance the safety of Illinois citizens.

We've been blessed with strong support from the University of Illinois, Illinois firefighters, our partner organizations and the public. For the coming year, we'll continue earning your support by delivering the nation's most innovative and comprehensive training, education and research programs.

RICHARD JAEHNE

DIRECTOR

## From the Chancellor

UNIVERSITY OF ILLINOIS, URBANA-CHAMPAIGN

We live in an era of heightened concern for public safety. Firefighters, other first responders and community officials across Illinois confront new and profoundly challenging demands for public safety activities.

As the state's flagship campus, with its distinguished heritage as a land-grant university committed to improving the common good, the University of Illinois at Urbana-Champaign assists full-time, part-time and volunteer responders, as well as community leaders, in addressing these challenges through training, education, research, and outreach.

For more than 82 years, the Illinois Fire Service Institute (IFSI) has been a national leader in providing comprehensive hands-on training to firefighters. Today, as the Statutory State Fire Academy in Illinois and as a member of the Illinois Terrorism Task Force, IFSI focuses on both the traditional missions and the new challenges that the fire service faces in preparing other first responders and community leaders to protect the public against increasingly diverse threats to safety.

IFSI is a unique entity, an extraordinary asset for both the University and for communities across Illinois. Through its many outreach programs, the Institute plays a pivotal role in extending the knowledge gained through scholarship and research to enhance the safety of Illinois's citizens.

Our campus takes great pride in providing the Illinois Fire Service Institute as an invaluable resource for our state and nation.

RICHARD HERMAN, CHANCELLOR



# New in FY2006



### New courses

In the past year, IFSI developed 13 nationally approved Department of Homeland Security classes in HazMat, incident command and technical rescue. Five more new courses are slated for approval in 2007.

**Basic Fire Fighting Practical Academy** is a four-week, hands-on course for firefighters who are already state-certified by the Office of the State Fire Marshal. This intensive training uses live-fire evolutions and other realistic scenarios to teach basic skills and proper use of equipment. Students are also introduced to size-up, rescue and search techniques. The Certified Firefighter II course is also available both on campus and on-line through IFSI.

### New training tools

Released in January 2006, the Rural Water and Tender Operations CD offers basic, hands-on skill training and standardized techniques that can enhance cooperation between departments. It's the third in a series of software training tools developed by IFSI and funded by the Illinois Firefighter's Association. The CD was delivered to every fire department in Illinois, and has been adopted by the State of Florida.

"We try to build convenience into our course formats. New offerings like our Basic Fire Fighting Practical Academy and our online courses are making it possible for more firefighters to access the training they need."

BRIAN BRAUER
IFSI ASSISTANT
DIRECTOR



### New partnerships

In partnership with the Chicago Fire Department, IFSI has begun a relationship with Underwriter's Laboratory for cooperative research, field trials and other projects of mutual interest.

IFSI has also partnered with the Illinois Department of Natural Resources to deliver wildland fire and controlled burn training to Illinois firefighters.

### New equipment

A customized "**Baby Bin**" training prop was presented to IFSI by the GSI Group, Inc., the world's largest manufacturer of galvanized steel storage bins. The scaled-down grain bin has a specially designed roof and replaceable side panels that allow the creation of realistic rescue scenarios. The portable prop will be traveling the state as IFSI expands its training programs for on-farm rescue.

A **1500-GPM pumper** from the Wheaton Fire Department expands IFSI's fleet of training engines, making it possible to conduct multiple classes simultaneously.

A **110-foot rear-mount aerial ladder** was donated to IFSI by the Deerfield-Bannockburn Fire Department. This new equipment offers another tool for aerial use and truck company operations.





## **IFSI Training Courses**

### **A Growing Curriculum**

#### Areas of study

- Fire fighting basic and advanced
- HazMat
- Rescue (collapse, rope, trench, vehicle/machinery, confined space)
- Investigation and prevention
- Homeland Security (NIMS)

- Emergency Medical Service
- Agricultural incidents
- Industry
- National Fire Academy
- Officer training



The IFSI web site (**www.fsi.uiuc.edu**) offers complete course descriptions and online registration. Visitors can browse the catalog and calendar, or use the online database to search for courses by date, location and content.

#### **Online Courses**

IFSI has been an innovator in the design and delivery of online courses. Our offerings are growing every year. Our near-term goal is to develop an online version of every Awareness-level course.

Our popular curriculum now includes:

- Certified Firefighter II (since 2000)
- Hazardous Materials Awareness (since 2001)
- Emergency Response to Terrorism: Basic Concepts (since 2004)
- Technical Rescue Awareness (since 2006)
- **New in 2006:** Fire Service Vehicle Operator

The Virtual Campus on the IFSI web site (**www.fsi.uiuc.edu**) is a central portal for accessing online course information, dynamic media, discussion boards and other interactive services.

"At IFSI, we want our students to get as much for their time and efforts as possible and make sure that, when possible, they can get college credit."

DAVID F. CLARK

IFSI DEPUTY DIRECTOR

#### **Accreditation and Certification**

IFSI now offers 19 courses that qualify for college credit as recommended by the American Council on Education (ACE).

IFSI has built a strong relationship with the National Fire Academy (NFA) and works to give Illinois firefighters greater access to NFA classes.

## Cornerstone Program

This outreach program offers practical, hands-on training in fundamental skills, delivered at no cost to firefighters. Classes funded through the Cornerstone program are presented throughout the state in fire departments' local facilities and in Regional Training Centers and fire schools. Grants from the Office of the State Fire Marshal, Illinois Propane Education and Research Council (IPERC), Illinois Petroleum Resources Board and the Illinois Department of Natural Resources (IDNR) make these programs possible.

IFSI designated six regional representatives to connect with every corner of the state and to help firefighters get training at a local level. The mission of the regional representatives is to visit every department in the state.

### **Cornerstone Delivery**

336 classes 176 locations in 96 counties 778 departments 9,743 students

#### **IPERC Classes**

75 classes 350 departments 2530 students

#### **IDNR Wildlands Classes**

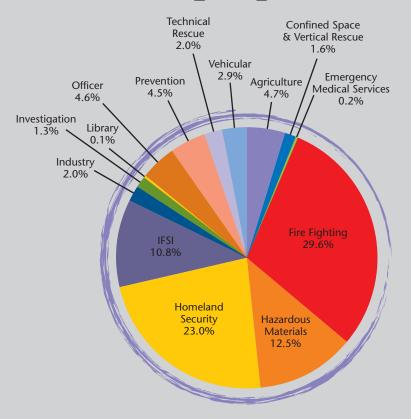
9 classes 60 departments 238 students



## **IFSI Training Courses**

### **Record-Setting Enrollments**

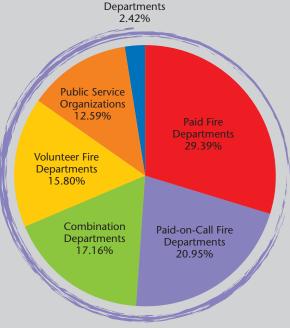
#### **Enrollment by Program Area**



#### **Enrollment** by **Career-Type**

Training delivered across a number of careers

> Police 2.42%



In FY2006, IFSI delivered **565,011** student hours of instruction. That included:

- 1,313 different courses.
- **48,042** student registrations from 1,031 fire departments and 229 other organizations.
- Classes were offered in **375** locations in 100 Illinois counties.



#### **Student Enrollments Per County** 0 – 50 students 51 – 200 students 201 – 500 students 501 – 1000 students 1001+ students

## **Special Events**

IFSI's flagship event – the 82nd **Annual Fire College** –brought more than 1000 firefighters to Champaign IL in May for the four-day event, which is America's oldest continuous fire school. More than 35 different classes offered hands-on experience with the newest fire fighting equipment, technologies and techniques. This year's theme was "Training for Routine to Catastrophic Incident Response".

The 11th annual **Winter Fire School** offered a weekend of training on February 4-5 in Urbana IL. 238 firefighters enrolled in short courses and NFA classes.

Our **Women in the Fire Service** program hosted two two-day events this year – at IFSI's Champaign campus in October and at Frankfort, IL in February. More than 125 women firefighters and officers participated in the hands-on training sessions.



The 3rd **Annual Fire Explorer** and **Cadet Jamboree** hosted more than 200 young adults and chaperones for a three-day school in July. The participants, ages 15 to 21, worked live evolutions that taught a wide range of skills, including structural fire fighting at IFSI's live-burn facilities.

IFSI continued its work as co-chair of the **Illinois Terrorism Task Force (ITTF) Training Committee**.

In that role, we provide leadership in the development and delivery of interdisciplinary training for the state and nation. One of the special training sessions was the **Third Statewide Deployable Technical Rescue Team Validation**, hosted by IFSI in June 2006. The exercise, which tested participants' response skills for a 33-hour period without external support, validated ten additional teams for statewide disaster response.





## A Commitment to Research

IFSI participates heavily in research to protect firefighters and advance the techniques and technologies available to them. Our efforts focus on:

- **Health and wellness** studies on heat stress, physical fitness, injury prevention and treatment, psychology, environmental issues and other factors that affect the safety of first responders.
- **Incident management technology** projects to develop and evaluate new technologies for crisis situations.
- **Tools and equipment** testing and development of tools, equipment and technologies for use in fire and rescue scenarios.

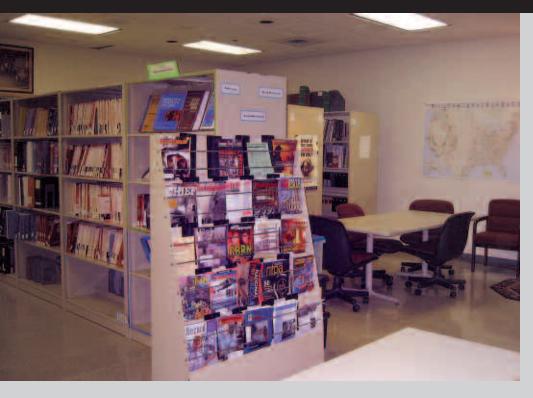


The Institute carries out this research through strategic partnerships with other organizations, institutions and businesses. Our research partners include:

- University of Illinois
- Motorola, Inc.
- Skidmore College, New York
- Carle Foundation Hospital, Urbana IL
- Chicago Fire Department
- Underwriter's Laboratory

**Cross-campus initiatives:** IFSI enjoys tremendous benefits from our affiliation with one of the premier research universities in the nation. Institute staff members collaborate with University of Illinois professors and researchers from dozens of campus departments to carry out interdisciplinary studies.

## Information Services



The **IFSI Library** offers extensive resources to Institute staff, Illinois fire departments and firefighters, and other emergency responders. It is the only library in the state dedicated to fire-service literature and research, and it's one of the top three fire-service libraries in the U.S.

Through our **Library Outreach Program**, every firefighter in Illinois has access to free literature and information services. The entire library catalog is searchable on the Institute web site (**www.fsi.uiuc.edu**). A popular site feature is the Virtual Bookshelf, a constantly updated database of the most recent publications and research on more than fifty different topics.



## **Partnerships**

IFSI's many strategic partnerships allow us to share resources and expertise with leading educators, researchers, corporations, professional associations and other organizations. Some current partners and their contributions include:



**Illinois Firefighter's Association** – funding and delivery of CD training software for use by local fire departments

**Illinois Association of Fire Protection Districts** – participation in trustee programs to promote training opportunities and availability



**Illinois Propane Education and Research Council (IPERC)** – delivery of no-cost training in fighting propane fires

**Illinois Petroleum Resources Board** — funding for training to extinguish oil well fires in southern Illinois



**University of Illinois at Urbana-Champaign** — cross-campus initiatives to fund interdisciplinary research and academic programs



**Illinois Department of Natural Resources** – funding for wildland and controlled burn training





**Office of the State Fire Marshal** – funding for the Cornerstone program and certification of firefighters

State of Illinois Fire Caucus – working together on strategic public policy issues



**Chicago Fire Department** – IFSI has expanded its relationship with the Chicago Fire Department (CFD) in four key areas: training, education, research, and translating "science to the street"

The Chicago Fire Department is utilizing IFSI's burn buildings for live fire training of its candidate firefighters. IFSI instructors are delivering officer certification courses to all newly promoted CFD officers and Unified Command classes to ranking CFD officers and personnel from other Chicago agencies. IFSI also annually delivers basic fire fighting in-service training to all Chicago fire companies. The Institute is working closely with the CFD to train its Technical Rescue Teams, and is working with Local 2 and the International Association of Fire Fighters (IAFF) to provide HazMat Technician training to all Chicago firefighters.



IFSI has developed a working partnership with Underwriter's Laboratory to jointly conduct fire-related research and product field trials. In some cases the Chicago Fire Department will cooperate in these activities.



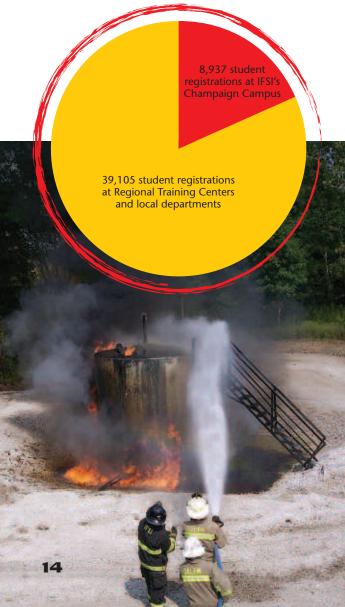
## Regional Training Centers

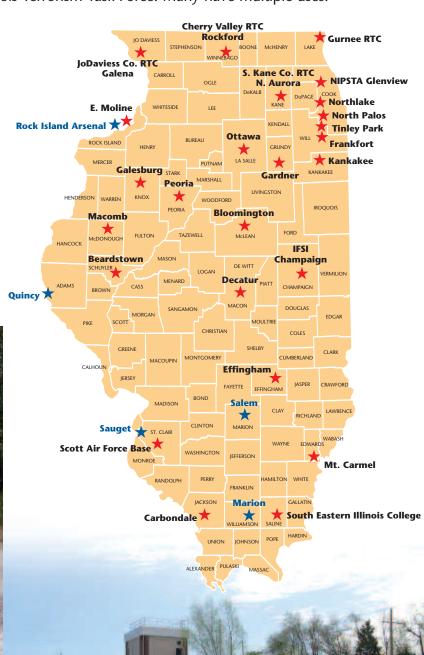


Our network of Regional Training Centers is designed to reach as many firefighters as possible, and enable them to train more often and close to home. In FY2006, we added locations in Sauget, Quincy, Marion, Salem and at the Rock Island Arsenal. Facilities at the RTCs range from burn structures to rescue and HazMat props for training that is funded through the Illinois Terrorism Task Force. Many have multiple uses.

#### **Student Registrations**

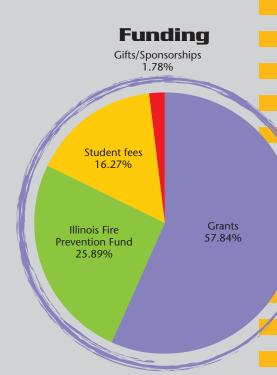
More than 80% of IFSI's training is delivered at Regional Training Centers and local departments





# Funding Sources

Hands-on training is the signature of IFSI, and it is a commitment that requires extensive resources. Our ability to respond to new fire fighting challenges depends on the continuing support of Illinois fire departments, state agencies and private donors.





# Looking Ahead

The year ahead offers many opportunities to build on our work from 2006. IFSI will continue to provide **basic fire fighting** training to Illinois firefighters as we have since 1925. This helps prepare them to handle fires and the wide variety of other incidents to which they respond. IFSI's leadership in the Illinois Terrorism Task Force and homeland **security** training and preparation will continue to be an important role that the Institute plays. IFSI will secure Department of Homeland Security "institutionalization" of more of our courses that can be used nationally. IFSI will host the National Fire/Emergency Services Exploring **Conference** in June 2007. The conference will showcase IFSI's extensive hands-on training facilities and our dedication to teaching aspiring firefighters. Fire Ground Support & Aerial Operations will be the next training package in the **Down & Dirty Firefighting Skills** series. This new offering will be in a DVD format. Origin and Cause Awareness is a new online class now in development. It will be available and open for registrations in mid FY2007.

"Our goal is to be the best hands-on Fire Academy. We'll measure ourselves by how we help firefighters do their work."

> RICHARD JAEHNE DIRECTOR

## Administration

#### **Richard Jaehne**

Director (217) 333-8926 jaehne@fsi.uiuc.edu

#### **David F. Clark**

Deputy Director
(217) 244-9674
dfclark@fsi.uiuc.edu

#### John (Mac) McCastland

Associate Director (815) 834-9201 jmccastl@fsi.uiuc.edu

#### **Brian Brauer**

Assistant Director
(217) 333-9027
brbrauer@fsi.uiuc.edu

#### **Marcia Miller**

Director of Budget & Resource Planning (217) 333-9013 miller11@fsi.uiuc.edu



