



100 YEAR HISTORY

OF THE
ILLINOIS FIRE SERVICE INSTITUTE
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN



**A CENTURY
OF TRAINING & TRADITION**



ILLINOIS FIRE SERVICE INSTITUTE



ILLINOIS **FIRE** SERVICE INSTITUTE

OUR MISSION

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

On January 11, 1922, Illinois State Fire Marshal John G. Gamber called for a formal fire training program for the state during a speech entitled "The Fireman of Today and Tomorrow" at the 34th Annual Convention of the Illinois Firemen's Association in Rockford. In 1923, the University of Illinois took note and President David Kinley appointed a committee to begin planning for fire training at the University. The committee was chaired by Professor Loring H. Provine, who was the head of the department of architecture, and included a number of engineering professors, as well as Roy Alsip of the Champaign Fire Department, who represented the Illinois Firemen's Association.

After two years of planning and coordination with the Illinois Firemen's Association and the Illinois Office of the State Fire Marshal, the University of Illinois opened a Short Course in Fire Prevention, Control, and Extinguishment on June 16, 1925, with more than two hundred students from across the United States in attendance. The program consisted entirely of lectures and demonstrations by engineering professors and industry representatives, but did not feature any instruction from actual firefighters. This changed the following year, when the Short Course became an annual training event that included lectures and demonstrations from working firefighters.

In addition to having firefighters involved in the instruction at the Short Course, the planning committee also wanted to make practical, hands-on training a key component of the event. For the 1926 Short Course, the planning committee collected donations from local businesses and individuals throughout Urbana-Champaign to build a temporary wooden fire training tower. Another temporary tower was constructed the following year for the Short Course, and in 1928 the University of Illinois provided land for the construction of a permanent training tower. Paid for with funds appropriated from the Illinois General Assembly, the five-story, steel and brick training tower was built at the intersection of Healey and Sixth Streets in Champaign to be used during the annual training event on campus.



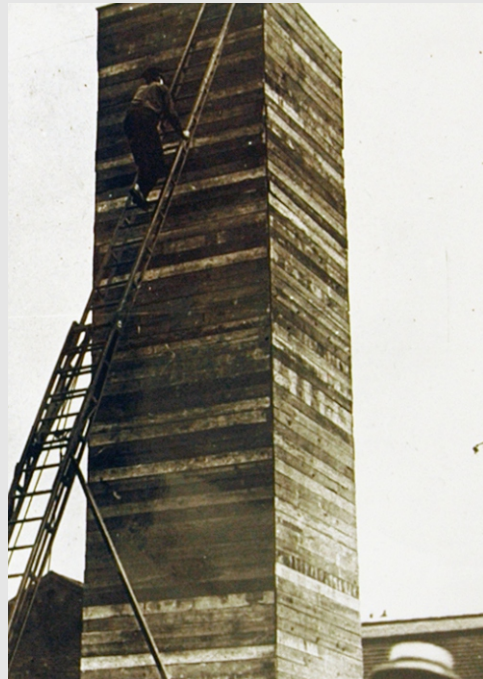
In a speech to the Illinois Firemen's Association in 1922, Illinois State Fire Marshal John G. Gamber discussed the need for increased fire training in Illinois and proposed a training program "similar to the short courses in agriculture, which are given each year in this and other states by the state universities."



The first Short Course in Fire Prevention, Control, and Extinguishment was held on the University of Illinois campus from June 16 to June 19, 1925. The four-day training program was attended by 219 students from around the United States and was held in Engineering Hall.



Engineering Professor Cyrus E. Palmer served as director and chairman for the six Short Courses in Fire Prevention, Control, and Extinguishment held between 1925 and 1930. Palmer was also the structural engineer for the fire training tower built on campus in 1928.



The University of Illinois constructed temporary, forty-foot fire training towers for the 1926 and 1927 Short Courses in Fire Prevention, Control, and Extinguishment. The towers were erected on Illinois Field and were used for demonstrations involving ladders, sprinklers, ventilation, and life safety nets.



In 1928, the University of Illinois built a permanent steel and brick fire training tower on campus using funds appropriated from the Illinois General Assembly by the Illinois Firemen's Association. The first story was enclosed on all sides and contained a combustion chamber featuring a variety of different ventilation systems and a small sprinkler system. The chamber windows were made of fire resistive glass so that interior demonstrations could be viewed from the outside. The tower was used for training over the next three decades and was demolished in 1958. During the 4th Short Course on Fire Prevention, Control, and Extinguishment, Chief Edward F. McGurn and firefighters from the Chicago Fire Department presented a series of training and equipment demonstrations at the new fire training tower.

In addition to the focus on hands-on training, organizers also understood the value of having veteran firefighters share firsthand experiences from fighting actual fires. Aside from officers and training instructors, very few firefighters were comfortable speaking to a large group. Not only were lectures and speeches from working firefighters difficult to arrange, but most firefighters were also hesitant to speak up and share their experiences and opinions during open forums and discussion sections. A solution was eventually devised when a nighttime open forum for the Short Course was held in Champaign's West Side Park. Anonymous in the darkness, firefighters were less self-conscious and many would share their experiences and opinions freely. Dubbed the "Blackout," the nighttime session was repeated each year for several decades until firefighters became more confident about sharing their personal experiences and thoughts and the outdoor discussion sessions were moved inside.

The "Short Course in Fire Prevention, Control, and Extinguishment" was renamed the Illinois Fire College for the 7th annual program in 1931. Defying national trends in which enrollment in colleges and universities declined throughout the United States during the Great Depression, attendance at the Illinois Fire College nearly doubled during the 1930s with 542 firefighters enrolled for the 15th Illinois Fire College in 1939. Despite the high attendance rate, the University could not afford to purchase all of the fire equipment needed for the Illinois Fire College so many fire departments from around the state loaned the necessary equipment to the University for the event. In 1936, Fire College Instructor Elmer Dicke of the Downers Grove Fire Department even brought a ladder with him on the train from Chicago to Champaign.



Professor Loring H. Provine chaired the planning committee for the six Short Courses in Fire Prevention, Control, and Extinguishment, before stepping in as director and chairman of the Illinois Fire College from 1931 to 1950. Provine was also the architect for the fire training tower built on campus in 1928.



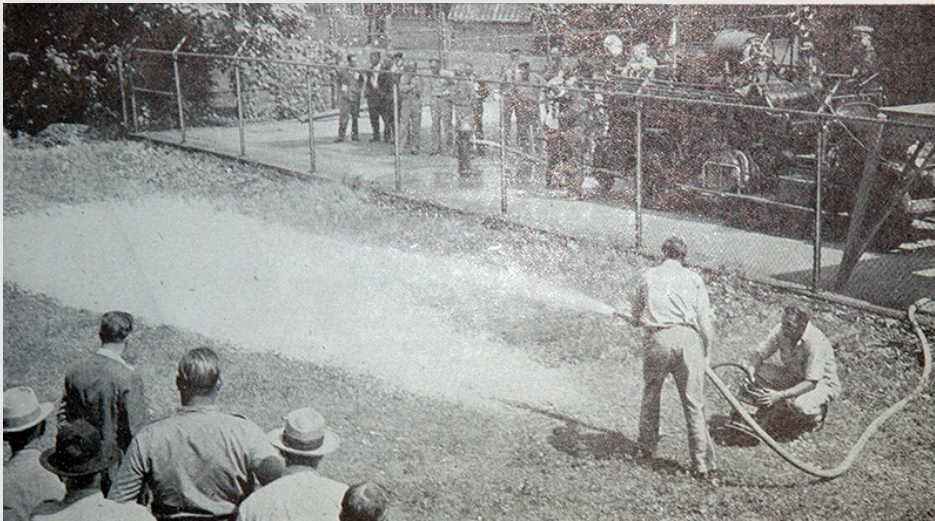
The 8th Illinois Fire College introduced gas mask training, prompting the University of Illinois to construct a smoke building for gas mask training during the 1930s. Like the first permanent training tower, the smoke building was demolished in 1958.



The full smoke building with an exhaust fan mounted on the roof is visible behind the ladder training exercise. Like the first permanent training tower, the smoke building was demolished in 1958.

While firefighters who attended the Illinois Fire College traveled to Urbana-Champaign to learn, they also found time for recreation. Firefighters at the 7th Illinois Fire College were excited by the "Talking Motion Pictures" presentation at Champaign's Virginia Theater in 1931. A few years later, Fire College Director Loring H. Provine assured the University that the "Vaudeville Show by Firemen" held at Champaign's Orpheum Theater in 1937 and 1938 consisted only of "clean, wholesome fun". During the 1930s and 1940s, the Illinois Fire College frequently included a baseball tournament.

Firefighters from the Galena Fire Department presented a foam firefighting demonstration during the 20th Illinois Fire College in 1944. Other demonstrations that year included ladder carries, salvage work, and artificial respiration. Participants also traveled to Chanute Air Field in Rantoul for a demonstration of rescue and firefighting techniques for airplane crashes.



A theme was chosen for the 18th Annual Illinois Fire College in June 1942. The theme was "A Mobilized Fire Service for Victory" and was the first event held following the entry of the United States into World War II. The course offerings during the subsequent years were greatly influenced by the war effort, featuring such classes as *Air Raid Alarms*, *War Gas Protection*, *Bombs*, and *War Time Electrical Safety and Static Electricity*. That year the University of Illinois also established a fire defense course for male and female students who were trained in basic firefighting tactics and rescue practices so that they could serve as auxiliary firefighters in the case of an emergency attack.

The 20th Illinois Fire College opened on June 6, 1944: D-Day. News of the Allied Invasion of Normandy was first reported in newspapers that morning and the Fire College Opening Ceremony paid tribute to the fighting men of the Allied Nations pouring into Europe by the hundreds of thousands. The Fire College discussion forum that had been scheduled for that evening was cancelled so that participants could instead gather and listen to radio reports about the invasion.

In 1945, the U.S. Office of Defense Transportation War Committee on Conventions ruled that the full Illinois Fire College could not be held due to wartime gas conservation efforts. In place of the usual four-day program, a one-day Illinois Fire College was held at the Champaign Fire Department on June 14. In addition to local firefighters, fifty out-of-town firefighters chosen by a drawing were permitted to attend the training session. To further serve out-of-town firefighters, the University of Illinois WILL radio station regularly broadcasted portions of the Illinois Fire College throughout the 1930s and 1940s, and stations such as Chicago WGN would re-air the broadcasts locally.



Roy W. Alsip served as Fire Chief of the Champaign Fire Department from 1940 to 1951. He was also Secretary of the Illinois Firemen's Association for more than forty years. In 1923, he served on the planning committee for the first Short Course in Fire Prevention, Control, and Extinguishment and he spearheaded the IFA's lobbying efforts to the Illinois General Assembly for funds to construct the first permanent fire training tower on the University of Illinois campus. Alsip attended the Illinois Fire College for decades and remained a guiding force for fire training at the University of Illinois into the 1960s.

Just as the post-war years were a period of tremendous growth and change across the United States, the fire service was also revolutionized by new challenges from modern industrial hazards and technological advances. The success and popularity of the Illinois Fire College during the first quarter century was a clear indication that firefighter training was valuable at the University of Illinois. In 1951, the Illinois Fire College was placed under the administration of the Engineering Extension Program signaling the University's intention to invest in an expanded fire training program. The following year, the Division of University Extension and the Illinois Firemen's Association hosted a four-day Fire Instructors Training Conference that was the first non-Fire College fire training event offered by the University of Illinois.



From 1950 to 1954, Engineering Professor George H. Harper served as Fire College Director. Harper played a key role in convincing University administrators to expand Fire College into a year-round training program. He was also an early advocate for the construction of a permanent fire training campus featuring burn buildings and other facilities in Champaign.



Robert K. Newton, Supervisor of Engineering Extension, was named Fire College Director in 1954 and was given administrative responsibility for all fire training programs at the University of Illinois. In 1957, Newton was named Supervisor of Firemanship Training, a position he held until his retirement in 1963. Newton's academic administrative experience proved essential to the success of the Firemanship Training Section during its early years, as he helped secure the program's place and reputation within the traditional university structure.

Funded by the Illinois Office of the State Fire Marshal and held at the Illini Union November 17-20, 1952, the Fire Instructors Training Conference was attended by 12 firefighters representing every region of the state. One fire chief in attendance later wrote that the conference "did more to help me in instructing our firemen than any thing else." Another Fire Instructors Training Conference was held in 1954 and Robert K. Newton was appointed Fire College Director. He was tasked with expanding the fire training program to include year-round courses and seminars.

In 1955, the Division of University Extension and the Illinois Firemen's Association hosted five Regional Fire Training Schools in different areas of the state. The first school was held in Lanark followed by schools in Midlothian, Roxana, Carbondale, and Evanston. The eighteen-hour classes were held once a week over six weeks to accommodate the schedules of both career and volunteer firefighters. While delivering short localized classes across the state was unusual within the University system, the schools were a tremendous success. The University continued to offer classes under the Regional Fire Training School name into the 1970s. This concept was revived during the 1990s and continues today.

In 1956, an additional \$75,000 in funding for the Illinois Office of the State Fire Marshal was generated for the upcoming fiscal period (July 1957 – June 1959). The increased funding was secured through lobbying by the Illinois Firemen's Association combined with support from Governor William Stratton. The funding was turned over to the University of Illinois for the operation of a Fire College and Regional Fire School programs to be conducted by the University. Using appropriated funds, a Firemanship Training Section was formally established as a distinct entity within the Division on University Extension in 1957.



In January 1958, the Firemanship Training Section conducted a 32-hour Instructor Training Course attended by twelve firefighters and officers from around Illinois. Eight participants were recruited as part-time field instructors, including Wilford J. Eckert (front row, right) and Gerald E. Monigold (back row, center), both of whom later went on to lead the university's fire training program.



From 1957 to 1963, Joseph I. Fetters served as Head of Firemanship Training at the University of Illinois. A former fire chief with decades of practical firefighting expertise, Fetters was charged with implementing the university's first year-round fire training program. His early emphasis on hands-on training remains a key component of the program.

In publicizing the new training program, Joseph I. Fetters, Head of Firemanship Training, announced that the training focused on six fundamental firefighting skills; ladder practices, hose practices, fire apparatus practices, fire stream practices, inspection practices, and firefighting tactics. For the Firemanship Training Section, the University hired eight firefighters from across the state as part-time instructors who delivered no-cost training sessions at local fire departments near their homes. The program was well-received, as firefighters did not have to travel far for training and were trained using their own department's familiar apparatus and equipment. During these early years, the Firemanship Training Section directed most of its resources to delivering fire training at local fire departments. While the program taught an average of two hundred courses per year during the 1960s, less than ten courses per year were held at University of Illinois at Urbana-Champaign.



During the 33rd Illinois Fire College in 1957, two identical houses were burned but extinguished differently for a demonstration comparing straight stream and fog stream firefighting techniques. The demonstration was held on North McKinley Avenue in Champaign.

Established in 1957, the Firemanship Training Section initially focused on six fundamental firefighting skills; ladder practices, hose practices, fire apparatus practices, fire stream practices, inspection practices, and firefighting tactics.



Chief O. E. Hirst of the Galena Fire Department (shown here in 1975) effectively summarized the evolving fire service in a speech at the 34th Illinois Fire College in 1958. Hirst asserted that firefighters needed more courage to face new challenges and that training would provide that courage. Hirst stated that "modern firefighting requires all of the mental alertness and good judgment that comes from steady training."

While the Firemanship Training Section initially focused on fundamental firefighting skills, the course offerings expanded greatly during the 1960s. Basic firefighting courses were enhanced to include instruction involving forcible entry, driving, inspection and prevention, and arson detection. The University continued to offer periodic training seminars for fire officers and instructors and introduced new specialized seminars covering topics such as pump operations, radiation hazards, and industrial fire training. The Firemanship Training Section also launched fire safety courses aimed at the general public, including training programs presented at hospitals, nursing homes, schools, and civic organizations. In addition, the first specialized technical rescue and structural collapse courses were held in 1962 and 1963.



Marv Austin (shown here in 1969) joined the instructional staff of the Illinois Fire College in 1960 while he was an engineer for the Illinois Inspection and Rating Bureau/Insurance Services Office. Austin taught firefighting courses at the Illinois Fire College for more than two decades while also serving in key national leadership roles for the Fire Department Instructors Conference and the International Fire Service Training Association.



In 1964, Wilford J. Eckert was appointed Head of Firemanship Training and Fire College Director following the retirement of Robert K. Newton and the resignation of Joseph I. Feters. A former fire chief and a full-time instructor for the Firemanship Training Section since January 1960, Eckert led the program until his retirement in 1975. Eckert's loyal service to key national fire service organizations greatly enhanced the national reputation of fire training at the University of Illinois.

The Illinois Fire College continued to grow in attendance, courses offered, and public profile during the 1960s. The University began to publicize the Fire College more heavily to media outlets and members of the public were invited to watch controlled burns and other classes held around Urbana-Champaign. Illinois Fire College further progressed in 1965, when the program was changed to a Thursday through Sunday schedule. This change was good news for volunteer firefighters with full-time jobs who had previously been unable to attend the Fire College when it was held only on weekdays. In addition, firefighters who attended the 42nd Illinois Fire College in 1966 were among the first to train on the permanent, six-story fire training tower constructed near South First Street in Champaign.



In 1964 and 1965, the Illinois Fire College presented firefighting demonstrations at the Champaign County Fairgrounds that were open to the general public.

During those years, attendees witnessed demonstrations involving liquefied petroleum gas fires, foam firefighting, portable sprinkler heads, hose lines, and chemical extinguishers.



In 1965, the Illinois Department of Public Safety allocated \$125,000 from the state's Fire Prevention Fund to construct a six-story fire training tower near South First Street in Champaign. The University had purchased the land in 1961, setting aside twenty-one acres for fire training as a replacement for the training tower that was torn down in 1958. Over the next several decades, new facilities were built on the site and it became the permanent home for fire training on campus.



Illinois Fire College instructors present ladder and hose techniques during a Sunday morning demonstration at the training tower during the 1970s. These large group demonstrations would later be replaced with more hands-on training activities for Fire College students.

The investment in improving fire training capabilities on campus paid off when the Firemanship Training Section conducted the state's first certified Firefighter Academy in the Fall of 1973. The first 200-hour class, designed to certify recruit/candidate firefighters according to statewide standards established by the Illinois Office of the State Fire Marshal, trained 17 paid firefighters who all had less than 3 years of fire service experience. Led by Instructor Howard "Doc" Eskridge for many years, the Academy was expanded over the following decades and emerged as a key resource for Illinois fire departments in training and certifying newly hired firefighters.





A parade of historical and contemporary fire apparatus made its way through the University of Illinois at Urbana-Champaign campus to commemorate the 50th Illinois Fire College in 1974.



During the 50th Fire College Elmer Dicke, a retired member of the Downers Grove Fire Department, was honored for his long-time participation in the annual training event. Dicke was awarded a Lifetime Honorary Membership in the University of Illinois Alumni Association by Director Donald Dodds. Dicke had attended the first Short Course in Fire Prevention, Control, and Extinguishment in 1925 and he returned as a student and instructor for 60 more Short Courses and Fire Colleges before his death in 1990.

The "Golden Anniversary" of fire training was celebrated during the 50th Illinois Fire College in 1974. The commemoration included film footage from previous fire colleges and a number of long-time administrators, instructors, and students were recognized for their contributions to the success of the annual program. The event drew attention from national media outlets and the general public enjoyed firefighting demonstrations and a parade of historical and contemporary fire apparatus.

As fire departments increased their use of self-contained breathing apparatus (SCBA) during the 1970s, Instructor John "JR" Rutledge saw the need for special training in their use and maintenance. In 1975, Rutledge designed and instituted a 2-day Breathing Apparatus Maintenance School that taught firefighters how to maintain and repair their own SCBA. To further fulfill SCBA training needs, Rutledge introduced a week-long Breathing Apparatus Specialist School dubbed "Smoke Divers" in 1977. One of the first and most highly-regarded SCBA schools in the United States, Smoke Divers remains an important firefighter training course.



David "DC" Clark was hired as a field instructor for the Firemanship Training Section in 1975, and joined the full-time instructional staff of the Fire Service Institute in 1977. He became a lead firefighting instructor, specializing in tactics and strategy, and also helped to develop a series of officer courses including First-In Officer, Fireground Company Officer School, and Saving Our Own. Clark was promoted to Associate Director for Academic Affairs in 1998 and Deputy Director in 2003 with responsibility over all academic and training activities at IFSI.



Gerald E. Monigold became Director of Firemanship Training in 1976, following the retirement of Wilford J. Eckert the previous year. Monigold had been a full-time fire training instructor at the University since January 1963 and served as director until his death in August 1996. Monigold participated in IFSTA Validation Conference for more than thirty years and authored a number of fire training books and articles. He also led the design of the Illinois Fire Service Institute's main campus during the 1980s.

In 1976, two years after being placed under the administration of the Office of the Associate Vice President for Public Service, the Firemanship Training Section was reorganized as the Fire Service Institute. The University of Illinois Board of Trustees determined that the name change "reflects more accurately the services now performed" and reported that University President John Corbally "approved an organizational framework for the Fire Service Institute under a director whose status will be analogous to that of the head of the department as provided for in the University Statutes."



Glenn Walters, President of the Associated Fire Fighters of Illinois from 1976 to 1988, spearheaded the lobbying efforts that resulted in the 1979 passage of the Illinois Fire Service Institute Act. More than any other individual, Walters is credited with convincing the Illinois General Assembly to designate and fund the Illinois Fire Service Institute as the statutory state fire academy. Walters was also a member of the Alton Fire Department for twenty-five years and was the first firefighter to serve on the Executive Board of the AFL-CIO.

The program further evolved in November 1979 when Illinois Governor James R. Thompson signed the Illinois Fire Service Institute Act (Public Act 81-1147), which established the Illinois Fire Service Institute as the state fire academy at the University of Illinois. The act took effect on July 1, 1980, and designated IFSI's main duties as "instructing fire protection personnel throughout the State of Illinois, providing service to public and private fire departments in Illinois, and conducting research in the methods of maintaining and improving fire protection and control services consistent with the needs of Illinois communities." The act also established permanent annual funding for IFSI by means of the Illinois Fire Prevention Fund. Prior to this, the University of Illinois had negotiated funding from the Illinois Office of the State Fire Marshal on a yearly basis. Recognizing the continued value of the Illinois Fire College, the Illinois Fire Service Institute Act also made special mention of the fifty-five-year-old event by specifically designating that "the Fire Service Institute shall plan and conduct an annual Fire College and other short courses of instruction."

In its new role as the statutory state fire academy, IFSI was able to expand the course offerings and increase the number of classes beginning in 1980. The Illinois Fire College also evolved and began to refocus more exclusively on hands-on training. For decades, the Fire College had been a mix of hands-on training and lecture-based, academic workshops, but the overall course programming shifted to emphasize the practical skills that firefighters needed to do their jobs. During this time, the part-time instructional staff grew to include firefighters from around the United States allowing students to benefit from the diverse experiences of veteran firefighters from New York City and other major U.S. cities.

During the 1980s, the Illinois Fire Service Institute used a semi-tractor "smoke trailer" to deliver breathing apparatus training throughout the state. The Mobile Breathing Apparatus Training Laboratory trailer contained a reconfigurable two-level maze plus additional confined space props that were set up outside the vehicle.





Top Photo:
 Illinois Fire Service Institute Director Gerald E. Monigold was joined by fire service leaders and politicians for the dedication of the main IFSI campus on June 4, 1989.

Middle and Bottom Photos:
 After the Illinois Fire Service Institute was designated as the statutory state fire academy, the main IFSI campus at the University of Illinois at Urbana-Champaign underwent a number of training facility improvements. Among the immediate upgrades were two new burn buildings and significant enhancements to the existing training tower, as well as a permanent classroom and office building.

Dr. Denise Smith of Skidmore College (center) and Dr. Steven Petruzzello of the University of Illinois at Urbana-Champaign (left) coordinated heat stress research projects at the Illinois Fire Service Institute in the early 1990s. Dr. Gavin Horn (not pictured) joined their research efforts in 2004 when he was hired as IFSI's first full-time research coordinator.

IFSI's position as the state fire academy also prompted the construction of a state-of-the-art fire training facility on the University of Illinois at Urbana-Champaign campus. After more than five years of phased construction, IFSI hosted the dedication ceremony for the improved fire training facility during the 65th Illinois Fire College in June 1989. New facilities on the site included the classroom and office building, the fire station, and two additional structural burn buildings. Existing facilities, such as the training tower, were also enhanced during the construction project. Subsequently, the training facility was expanded even further to include arson burn buildings, a four-story vertical rescue and confined space training prop, a structural collapse rescue city, a liquefied petroleum burn area, agricultural rescue, and automobile extrication training areas.

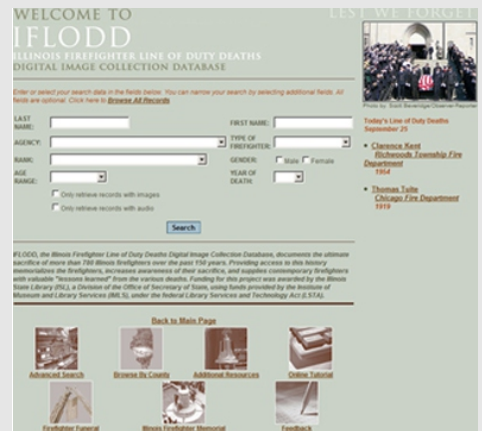
Fire training at the University of Illinois had traditionally included a research component. The research efforts were formalized by the Illinois Fire Service Institute Act and explicitly directed IFSI to "provide action-oriented research to support fire training and education programs." In 1989, Instructor John "JR" Rutledge began working with the University of Illinois Department of Kinesiology and Department of Mechanical Engineering on research into the effect of heat and firefighting gear and equipment on firefighters. This heat stress research became a defining component of the research program and successfully combined traditional academic study with live fire testing. From the start, the heat stress research involved the use of actual firefighters working in live fire conditions. Over the years the research grew to encompass additional factors such as personal protective equipment, blood coagulation, and firefighter psychology and physiology. The heat stress research led IFSI to form research partnerships with local hospitals and Skidmore College in Saratoga Springs, New York.



In 1990, Librarian Lian Ruan established the Illinois Fire Service Institute Library as an in-house library for IFSI staff and instructors. The library became a member of the Lincoln Trail Libraries System in November 1998 and made interlibrary loan services with public libraries part of daily operations. Guided by the IFSI Library Advisory Committee consisting of members from more than sixteen fire and industry organizations from throughout Illinois, the IFSI Library launched the Outreach Program in 1999 to provide no-cost fire emergency library and information assistance and services to both Illinois fire service personnel and Illinois citizens. Following the inception of the Outreach Program, the IFSI Library experienced transformational changes aided by a series of Library Services and Technology Act (LSTA) grant awards, totaling more than \$250,000, funded by the Illinois State Library, Division of the Office of Secretary of State.

The library staffing level increased from a solo librarian to a team of librarians, an archivist, graduate student assistants, undergraduate students, and volunteers. The Library joined inFIRE (the international network for Fire Information and Reference Exchange) and maintained key partnerships with the Chicago Fire Academy, the Learning Resource Center at the National Fire Academy, the University of Illinois Library, and the University of Illinois Graduate School of Library and Information Science. As the only fire emergency dedicated library in the state and one of the three top fire academy libraries in the nation, the IFSI Library helps further the IFSI mission of *Helping Firefighters Do Their Work Through Training, Education, Information, and Research.*

In 1996, IFSI introduced Saving Our Own, a course designed to teach firefighters how to rapidly rescue trapped or injured firefighters during an emergency. Based on an idea originated by IFSI instructors from the Fire Department of the City of New York; Sal Marchese, John Norman, and Donald Hayde, students learned simple rescue techniques that involve only equipment and tools that are available on every fire engine. The course quickly became a model for firefighter rescue techniques and helped to spur major national interest in firefighter rescue and rapid intervention teams (RIT). In addition, 12 documented firefighter saves in the first few years following the course inception were credited to techniques that the rescuers learned in Saving Our Own.



Notable among the IFSI Library grant projects funded by the Illinois State Library was FY2007's "IFLODD: The Illinois Firefighter Line of Duty Deaths Digital Image Collection Database" which memorialized more than 800 Illinois firefighters who have died in the line of duty since 1857 and supplied contemporary firefighters with valuable "lessons learned" from the various deaths. The database remains active today.



Firefighters participate in practical hands-on simulations of firefighter rescue techniques during an August 2000 Saving Our Own class in Galesburg.



In 1997, Richard L. Jaehne, a retired U.S. Marine Corps Colonel, was hired as Director of the Illinois Fire Service Institute. Jaehne had been the keynote speaker at the 70th Illinois Fire College in 1994 when he was Director of Operations for the U.S. Marine Corps and taught at subsequent Fire Colleges. Under his dynamic leadership, IFSI greatly expanded its presence to students throughout the state, reaching approximately 85% of all Illinois fire departments, including every Chicago firefighter. IFSI research efforts and national reputation grew significantly under his tenure.



Firefighters prepare to take a hose line into a training prop at the Regional Training Center in Galesburg, Illinois, in August 2000.

With unanimous support from the Illinois Fire Advisory Commission, IFSI launched the Reimbursable Program in 1998 to increase the number of essential firefighter courses hosted by fire departments throughout the state. Funded by the Illinois Office of the State Fire Marshal's State Reimbursable Training Program Task Force, the program offered fundamental fire training courses delivered at little or no cost to the fire departments. This return to basic firefighter training offered "in the field" was reminiscent of the University's original Firemanship Training Section duties. Under the Reimbursable Program, IFSI was able to reach more firefighters and fire departments. In addition to revitalizing essential firefighter training classes hosted by fire departments, the Reimbursable Program also led to the construction of a series of Regional Training Centers in 1998. Located in Galesburg, Carbondale, Mt. Vernon, and Beardstown, the Regional Training Centers were established so that IFSI could better serve regions lacking fire training facilities. The new centers were a success as they not only greatly increased access to hands-on training throughout the state, but also drastically decreased the amount of travel for students. This concept grew to encompass more than two dozen Regional Training Centers throughout Illinois.

With the theme "Learn from the Past, Train for the Present, and Prepare for the Future," the University of Illinois celebrated seventy-five years of fire training on campus during the Illinois Fire College in 1999. Dr. Denis Onieal, Superintendent of the National Fire Academy, helped mark the occasion with a keynote address and IFSI presented a series of exhibits documenting the seventy-five years of fire training history. Moreover, Fire College participants received a special patch commemorating their participation in the historic event.

To further expand training efforts throughout Illinois, IFSI hired the first full-time Chicago/Metro Region Program Director, Chief John "Mac" McCastland, in 1999 to strengthen IFSI's working relationships with the Chicago Fire Department and with fire departments in the surrounding suburbs.

In 2001, IFSI provided Rapid Intervention Team training to Chicago firefighters using a financial gift from the Ford Motor Company. In 2004, IFSI helped the department design and implement a new High-Rise Incident Command Order to improve search and rescue operations and communications during emergencies in high-rise buildings. New Chicago Fire Department officers at the lieutenant, captain, and battalion chief levels began attending classroom and hands-on training through the IFSI Officer Program and department recruits traveled to Champaign for live burn training at the main campus. In addition, the two organizations collaborated on training exercises held in abandoned buildings throughout Chicago and at O'Hare International Airport.



In 2002, Chicago Fire Department firefighters attended a propane firefighting class that was sponsored by the Illinois Propane Education and Research Council (IPERC) and taught by IFSI field instructors.



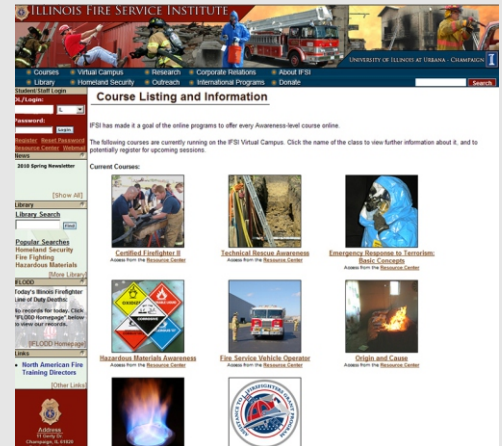
John "Mac" McCastland was hired as the Illinois Fire Service Institute's first full-time Chicago/Metro Region Program Director in 1999. McCastland was later promoted to Associate Director. In 2005, he was photographed with Chicago Fire Commissioner Cortez Trotter, IFSI Director Richard Jaehne, Chicago Fire Department officers and IFSI field instructors Robert Hoff, Kevin Krasneck, and Raymond Orozco. Orozco succeeded Trotter as Chicago Fire Commissioner in 2006 before becoming the Executive Director of the Office of Emergency Management and Communications for the City of Chicago in 2008.

Building upon its 75-year history of fire service leadership in Illinois, IFSI co-hosted the Illinois Volunteer Fire Service Summit in November 1999. The two-day summit brought together more than 200 firefighters, fire service leaders, government officials, business leaders, and educators from throughout Illinois to address issues affecting the emergency response needs of communities served by volunteer fire departments. The summit helped to establish statewide goals, guidelines, and policies related to the key issues of; recruitment and retention, health and safety, training, relations with business and industry, public education, relations with government and the public, and funding. Information gathered at the summit was later used by the Illinois Fire Service Blue Ribbon Committee to produce a series of recommendations identifying the legislative and funding needs for the Illinois fire service.

In 1999, Illinois Governor George Ryan established the Illinois Terrorism Task Force to serve as an ongoing interagency forum for developing homeland security policies and for directing state efforts toward local, regional, and statewide planning, preparation, and response to terrorism in Illinois. IFSI was designated as a permanent member of the task force and a co-chair of the training committee. In this role, IFSI conceived, designed, and co-hosted the Illinois Homeland Security Summit in May 2002. The two-day summit was the culmination of more than thirty statewide planning workshops conducted by IFSI. The summit participants analyzed the state of homeland security awareness in Illinois and made policy and program recommendations at the local, regional, state, and national levels. The recommendations focused on nine critical groups that worked together to create and implement effective homeland security policies and programs and encompassed strategic, operational, and tactical recommendations related to emergency prevention and response in Illinois.

Seizing upon the emergence of the internet as a learning tool, IFSI Associate Director James "JS" Straseske and Instructor Richard Valenta worked with the University's Campus Information Technologies and Educational Services to develop an internet-based fire training program. The Certified Firefighter II course launched in 2000 was the first in the nation and delivered certified training to students online. The success of the course led IFSI to expand Valenta's work into a year-round e-learning program featuring a number of awareness-level classes and other online training packages.

A few years later, the growth of the ethanol production industry in Illinois and elsewhere in the United States prompted IFSI to develop a series of ethanol training packages including a innovative Ethanol Awareness Online course.



The E-Learning Program at IFSI was the first in the nation to offer certified firefighter training online.

Over the years, course programming at the Illinois Fire Service Institute evolved by introducing innovative hands-on training that covered diverse topics as fire and arson, emergency medical services, and wildland firefighting.





IFSI field instructors prepare to lead a live fire house burn as part of a Cornerstone class in Batavia, Illinois.



IFSI instructors lead an Oil Well Firefighter class at the Regional Training Center in Salem, Illinois as part of the Cornerstone program.

In 2001, the Reimbursable Program was renamed the Cornerstone Program to emphasize the ongoing importance and relevance of the core skills it delivered. In addition, the program was expanded to include basic firefighting skills for all ranks. To further serve Illinois fire departments, the state was divided into seven regions and IFSI hired Regional Representatives for each region. Serving as a public face for IFSI, these representatives were tasked with traveling to fire departments in their region to promote IFSI and support departmental training needs. This outreach formalized a role long held by IFSI field instructors. While still mainly funded by the Illinois Office of the State Fire Marshal, the Cornerstone Program has also received support from a number of other organizations in Illinois. Grant funding from the Illinois Propane Education and Research Council (IPERC) facilitated the delivery of no-cost training in fighting propane fires and the Illinois Petroleum Resources Board provided funding for firefighter training on oil well fires. In addition, the Illinois Department of Natural Resources supported Cornerstone programming by funding courses aimed at wildland firefighters.



IFSI field instructors demonstrate techniques for cutting grain bin walls during a Grain Bin Rescue class.



The Illinois Propane Education and Research Council (IPERC) provides complete financial support for liquefied petroleum gas firefighting classes taught throughout the state by IFSI field instructors.

On September 10, 2001, IFSI began constructing the first structural collapse training props at the main training campus. Constructed to support courses involving homeland security issues, the props simulated a variety of different rescue scenarios including collapsed office and residential buildings, and vertical and confined space situations. The Illinois Terrorism Task Force later adopted the training prop designs and similar props were constructed at a number of Regional Training Centers throughout Illinois.

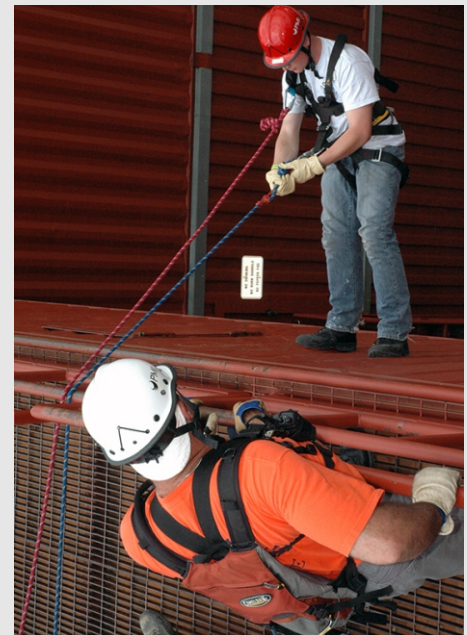


The Illinois Fire Service Institute "Rescue City" included a series of debris pile training props that simulate structural collapses. Students in the Structural Collapse Technician course learn how to operate at an event involving the failure of a building constructed of steel, concrete, or masonry, and practice techniques for cutting, breaching, lifting, stabilizing, searching, shoring, packaging, and removing victims from the simulated collapse environment.



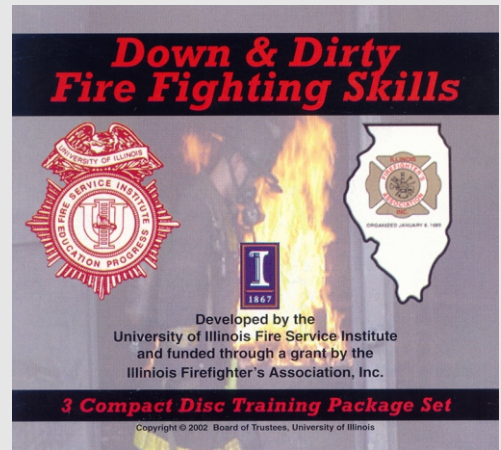
As part of the IFSI Structural Collapse Operations course students learn techniques for safely responding to an incident that has resulted in the failure of a building constructed of wood, light masonry, or pre-fabricated light metal materials. Beginning in 2001, IFSI constructed a series of structural collapse training props to support courses involving homeland security issues. The training props have been replicated at a number of Illinois Terrorism Task Force Regional Training Centers throughout Illinois.

The 78th Illinois Fire College was the first held following the terrorist attacks of September 11, 2001. The keynote address was delivered by U.S. Fire Administrator R. David Paulison and attendees paid no registration fees as much of the programming was covered by a one-time state grant to IFSI. While Fire College still offered traditional first responder courses, the coursework integrated new training that helped to make the traditional skills relevant to homeland security issues.



Firefighters learn technical rescue skills on a training prop at the Regional Training Center at the Northeastern Illinois Public Safety Training Academy (NIPSTA) in Glenview, Illinois.

In 2002, IFSI partnered with the Illinois Firefighter's Association and Underwriters Laboratories to produce a series of training CDs and DVDs. Distributed at no cost to every fire department in the state, the "Down & Dirty" series was created to help ensure that every Illinois firefighter had access to the basic, critical skill information required to safely and effectively protect the lives and property of the citizens that rely upon them in a crisis. Training topics covered by the ongoing Down & Dirty series included; *Fire Fighting Skills, Engine and Pump Operations, Rural Water and Tender Operations, Fireground Support and Aerial Operations, and Fire Attack Operations.*



In 2004, IFSI had a primary role in the establishment of the Illinois Homeland Security Research Center at the University of Illinois at Urbana-Champaign. The IHSRC was created to serve as a statewide clearinghouse to support current and future homeland security needs by fostering interdisciplinary collaboration in addressing broad issues in homeland security research and technology. The center successfully instigated collaboration among a variety of University departments, including the College of Business, the College of Engineering, the College of Agricultural, Consumer, and Environmental Sciences, and the College of Law.

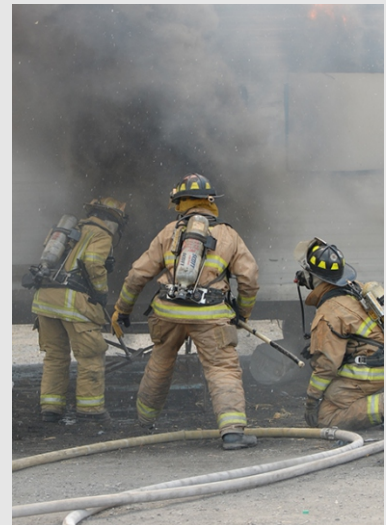
During the 80th Illinois Fire College in June 2004, IFSI unveiled a plaque on the John Bardeen Engineering Quad on the University of Illinois at Urbana-Champaign campus, the original site of the annual fire training event. The plaque commemorated the status as the oldest continuous fire college in the United States. The unveiling ceremony was led by IFSI Director Richard Jaehne who was joined by National Fire Academy Superintendent Denis Onieal, Illinois State Fire Marshal J.T. Somer, university officials, and a variety of fire service leaders.



A plaque commemorating the Illinois Fire College as the "oldest continuous annual fire college" was unveiled on the John Bardeen Engineering Quad on the University of Illinois at Urbana-Champaign campus during the 80th Illinois Fire College in 2004.

In 2004, IFSI hosted the first statewide Explorer-Cadet Hands-On Training Fire School in which young adults (ages 15-21) affiliated with local fire departments were invited to experience the fire profession through live fire training evolutions. The successful program became an annual event at IFSI and the hands-on training aspects of the program brought it national attention.

In June 2007, IFSI hosted the National Fire and Emergency Services Exploring Conference, a week-long event co-sponsored by Learning for Life, a subsidiary of the Boy Scouts of America. More than 600 participants from 21 states and Canada traveled to Urbana-Champaign for the hands-on competitions, training seminars, and demonstrations.



The Illinois Fire Service Institute Explorer-Cadet Hands-On Training Fire School provides participants with the opportunity to learn and practice real-life emergency response skills, including firefighting tactics (pictured), vertical rescue, and auto extrication.

Under the guidance of IFSI Director Richard Jaehne, and in conjunction with the Illinois Terrorism Task Force (ITTF), IFSI emerged as a state leader in providing homeland security incident command training to communities in Illinois. Beginning in 2005, IFSI has taught thousands of emergency responders to implement the National Incident Management System (NIMS) which coordinates emergency preparedness and incident management among various federal, state, and local agencies. IFSI began offering homeland security courses involving unified command, incident management teams, and command and general staff functions, and has assisted with the development and training of interdisciplinary command support teams to assist at all-hazard major incidents. Furthermore, nearly twenty IFSI courses were reviewed and endorsed by the U.S. Department of Homeland Security as nationally approved homeland security courses that can be shared with other states. These efforts proved essential when IFSI employees responded as Incident Management Team (IMT) members to disasters such as flooding of the Mississippi River, California wildfires, and Hurricane Katrina.



Following the implementation of the National Incident Management Systems (NIMS), instruction at the Illinois Fire Service Institute evolved to include aspects of homeland security training. Many older courses were updated to integrate relevant homeland security issues into the curriculum.

In 2005, IFSI partnered with the cities of Urbana and Champaign and University of Illinois Housing to create Fire Factor, a biannual campus fire safety training event aimed at student leaders and residence hall advisors. The program provided participants with hands-on training in fire safety and prevention.

In addition to Fire Factor, IFSI has been a state leader in public fire safety education efforts for decades as instructors have helped to raise general awareness about fire safety issues through open houses, publications, and other community outreach efforts.



Fire Factor at the Illinois Fire Service Institute taught college students a variety of valuable fire safety lessons, including how to properly use fire extinguishers.

After decades of research involving firefighting tools and equipment, building construction, radio communication systems, and other critical issues, the Firefighter Life Safety Research Center was created in 2006 to investigate techniques and technologies that could help to better protect firefighters. An early accomplishment of the center was the "Cardiovascular and Biomechanical Responses to Firefighting and PPE" research project in 2007. Funded by a grant from the U.S. Department of Homeland Security's Assistance to Firefighters Fire Prevention and Safety program, the project built upon IFSI's nearly twenty years of previous heat stress research. IFSI researchers recruited 122 firefighters to complete firefighting tasks in an effort to investigate the relationships between cardiovascular function, biomechanics, and the design of personal protective equipment. The project directly tied into firefighter life safety.

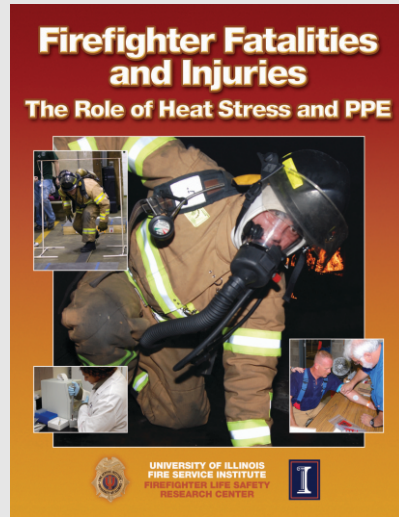


A firefighter works with a sledge hammer in an IFSI burn building as part of the Firefighter Life Safety Research Center's "Cardiovascular and Biomechanical Responses to Firefighting and PPE" research project in 2007.



Researchers check the pulse of a firefighter who just completed a series of strenuous firefighting tasks for the Firefighter Life Safety Research Center's "Cardiovascular and Biomechanical Responses to Firefighting and PPE" research project in 2007.

The research activities of the Firefighter Life Safety Research Center continued to grow following the successful publication of "Firefighter Fatalities and Injuries: The Role of Heat Stress and PPE" in 2008. The center received approximately \$4,000,000 in additional research grant awards through the Assistance to Firefighters Grant Fire Prevention and Safety program, the National Institute for Occupational Safety and Health (NIOSH), the Department of Homeland Security, and the Technical Support Working Group. Grant projects examined hydration levels in firefighters, tested firefighter escape rope systems, and determined the effects of firefighting on the cardiovascular system in an attempt to reduce the risk of cardiac events post-firefighting. The Firefighter Life Safety Research Center built partnerships with fire service leaders, including the Chicago Fire Department, the Fire Department of the City of New York, NIOSH, and Underwriters Laboratories. IFSI Research activities also helped to nurture close working relationships with interdisciplinary departments at the University of Illinois.



In partnership with firefighters from the Chicago Fire Department and the Savoy Fire Department researchers from the National Institute for Occupational Safety and Health study smoke exposure at IFSI in September 2010.

For decades, IFSI has welcomed international fire and emergency service members to Illinois for hands-on training. Firefighters and officers from Russia, France, Ireland, Italy, Hong Kong, Japan, Saipan, South Korea, Brazil, Netherlands, and Australia have benefited from working side-by-side with U.S. counterparts at IFSI. In recent years, IFSI has built robust partnerships with agencies in research, the Beijing Emergency Response Office, and the China Ropeway Association. Since 2008, the Visiting Scholar Program has hosted 163 scholars from 88 institutions. The IFSI International Program has also coordinated university-level training programs for Chinese librarians, University administrators, and business leaders.



In 2009, a delegation from the China Ropeway Association attended rescue training at IFSI, and toured the Regional Training Center in Frankfort, Illinois.

As part of the continuing improvement of the curriculum testing process and in response to firefighter demand, IFSI became Pro Board accredited in April of 2009. Pro Board, or the National Board on Fire Service Professional Qualifications, is an international group that accredits agencies to ensure that the agency's testing, evaluation, and certification methods meet a national best-practices model. Accreditation with Pro Board ensures that IFSI testing procedures maintain a high level of integrity and provides IFSI students with the greater portability of their certifications.

In 2010, IFSI trained 52,379 students, reached 101/102 Illinois counties and 82% of all Illinois fire departments. IFSI operated a fleet of 6 engines, 3 aerial apparatus, an ambulance, and also maintained more than 35 trailers used to transport training props and equipment to offsite classes.



Aerial photo of training grounds in 2010.

Continuing the tradition of innovation in the delivery of online fire service courses, the IFSI E-Learning Program conducted the first blended learning course in 2010 with Fire Apparatus Engineer Online. The incorporation of blended courses allowed students to complete coursework online and still receive practical, hands-on training. The new format reduced the time and costs of travel and hotel accommodations for students while easing staffing concerns and overtime budget expenses at fire departments and municipalities.



IFSI dedicated a Learning Resource and Research Center (LRRC) in January 2011. An addition to the existing facilities in Champaign, the 21,000-square-foot building enhanced both the capabilities and capacity of IFSI to meet the training needs of the fire and emergency services community. The LRRC contains a Memorial Hall honoring fallen Illinois firefighters, IFSI Library, IFSI Research Lab, an Auditorium, Paratech conference room, and a full-scale Emergency Operations Center.



The expanded IFSI Library provides space for increased collection storage, computer terminals, formal and informal study areas and an archival storage room.



In 2012, Colonel Royal P. Mortenson was hired as the Director of the Illinois Fire Service Institute. Colonel Mortenson came to IFSI after a distinguished 30-year military career in the United States Marine Corps that included commanding the 2nd Battalion, 8th Marines during Operation Iraqi Freedom, acting as Director of the U.S. Marine Corps Command and Staff College, and serving as Commanding Officer of The Basic School. Among many other achievements at IFSI, Mortenson oversaw the development of the Leadership Development and Decision Making Program (LDDM), which is a "cradle-to-grave" leadership development program designed to institutionalize the highest quality leadership in the fire service for Illinois.

In September of 2012, Director Mortenson outlined his Seven Strategic Priorities for IFSI:

- Training and educating firefighters in hands-on skills
- Officer training and education
- Distance learning
- Leverage Research
- NIMS and command & general staff training for public officials
- Ensure you have the best live-burn training facility in the country
- Maintain IFSI as your state fire academy

Building upon Director Mortenson's strategic priority for IFSI to prioritize training and educating firefighters in hands-on skills, in 2012 IFSI started a comprehensive review and update of its acquired structure live-fire training policies and procedures. Since the 1990's IFSI employed a dedicated live-burn team with specialized training in the unique challenges posed by using acquired structures for live-fire courses. By 2013, IFSI completed the update and formalized the standard operating procedures for acquired structure live-fire training that exceeded National Fire Protection Association (NFPA) standards.

In 2012, fire service leaders from across the State of Illinois presented the imperative of leadership training to IFSI Director Mortenson, who quickly assembled a working group of IFSI Instructors to embark on a journey to create, implement, and institutionalize meaningful and comprehensive leadership development and decision-making (LDDM) training for the fire service. The LDDM working group was tasked with creating a one-of-a-kind curriculum designed to challenge emerging and seasoned leaders to advance their leadership and critical decision-making skills like no other course in the nation. In March of 2014, IFSI brought together over 100 fire service leaders of all ranks for a weekend test drive of the LDDM Program. All in attendance confirmed that the LDDM Program was addressing the fire service leadership development void and encouraged more refinement of the curriculum. A second weekend pilot was conducted in 2015 with 80 fire service leaders, which allowed for greater refinement of the LDDM concept.



A pilot delivery of LDDM in March 2016.

In July 2015 as the LDDM Program grew, Chief JP Moore was appointed to the position of LDDM Program Director. Throughout 2016 and 2017, the LDDM Program conducted four 40-hour pilot programs which allowed for instructor development and curriculum enhancement.

The IFSI Wildland Fire Training program began in 2005 and offers live-fire training directly at fire departments across Illinois. In 2013, IFSI participated in a study of the necessity of wildland firefighting training in and around the Chicago area. The study showed that over 15,000 fires had occurred in the 12 county area around Chicago during a six-year period and reinforced the need for IFSI to continue to offer a strong complement of wildland fire training courses in Illinois. By 2016, the program was reaching 80 percent of Illinois counties.



Eight IFSI Wildland Program instructors traveled to Oregon per the request from the Governor of the State of Oregon and in cooperation with the Oregon Department of Public Safety Standards and Training. The IFSI team deployed to assist in the training of Oregon National Guards troops for engagement during the current wildfire emergency.

In addition to providing training, IFSI Wildland instructors also respond to assist in wildland fires across the United States in national forests, forest preserves, park districts, and many other areas including those in California, Idaho, Missouri, Nebraska, Oregon, Minnesota, South Dakota, and Washington, among others.

In 2013, IFSI increased the focus on fire officer promotional training to Chicago firefighters. One hundred fifty newly promoted fire and emergency medical services officers received IFSI training to prepare them for the duties of their new positions. Between 2013 and 2016, this promotional training series was provided by IFSI to over 650 Chicago fire and emergency medical services officers. Between 2011 and 2016, IFSI delivered a wide variety of courses to the Chicago Fire Department including High-Rise Incident Command, Special Weapons of Mass Destruction (SWMD), and Trench Rescue courses held at Chicago O'Hare International Airport.



Illinois Fire Service Institute instructors lead a Trench Rescue training course for Chicago firefighters at O'Hare International Airport.

Jim Keiken became IFSI Deputy Director in 2013. Chief Keiken was Assistant Fire Chief of Administration and Operations for the Madison, Wisconsin Fire Department with over 33 years of firefighting and emergency medical services experience. His broad responsibilities as Deputy Director included providing day-to-day direction of all training and education activities at the Institute. He served as a primary advisor to the Director on all aspects of IFSI operations and assumed leadership and policy-making responsibilities in the absence of the Director.



In 2014, the IFSI Curriculum and Testing (C&T) office completed a multiyear review, update, and standardization of all IFSI curricula. The C&T office developed the course revision cycle to ensure that all IFSI courses are updated on a regular basis with the most current and relevant information. To accomplish constant revisions of curricula, IFSI continually collects course feedback from students and instructors and monitors industry best practices, tactics, techniques, tools, and equipment. C&T also ensures that course reference materials are updated.

In 2014, IFSI conducted the 90th Illinois Fire College continuing the long standing tradition of providing essential training to Illinois firefighters. The event attracted nearly 600 firefighters to the IFSI training grounds in Champaign.



In 2014, the Illinois Fire Service Institute's Basic Firefighter / NFPA Firefighter I Academy partnered with the IFSI Information Technology, Curriculum and Testing, and Administrative Support Departments to introduce a new innovation in tracking practical exercises and classroom objectives for Academy students by adopting the use of mini iPads. The software-based model allowed instructors to more effectively track student progress and assess them more frequently.

In response to increases in the transport of flammable liquids using railways in the United States and the need to address the challenges posed by rail disasters in Illinois, IFSI worked with the major United States railroads, the Illinois Emergency Management Agency, and the oil industry in 2014 to create the Flammable Liquids by Rail Awareness class. The course was developed to introduce firefighters to the chemical and physical properties of the flammable liquids being transported by rail and the specifics of the railcars used and the basics of derailment of these types of cars.



Firefighters learn how to respond to simulated train derailments using the Tank Car Derailment training prop.

In conjunction with the increased number of railway-related courses taught at IFSI, railroad training props at the Champaign training grounds were significantly expanded and improved. These improvements included acquiring 3 more modern rail cars to represent what is being used in the industry and a multidimensional and modular tank car derailment prop that can be configured for different derailment scenarios and live-fire burns to simulate flammable liquid derailments.

In the fall of 2014, IFSI Research continued its efforts into the scientific study of problems facing the fire service when it received a \$1.5 million award from the Department of Homeland Security (DHS) Fire Prevention & Safety (FP&S) Grants program to study the cardiovascular and chemical exposure risks for today's firefighters. The IFSI Research team collaborated with Underwriter Laboratories (UL) Firefighter Safety Research Institute (FSRI) and the National Institute for Occupational Safety and Health (NIOSH) on this project that provided the first in-depth scientific study of cardiac and thermal strain and chemical exposures.



Cardiovascular and chemical exposures in modern firefighting research being conducted at the Champaign training grounds.

The study found, among many other important findings, that firefighters' core and skin temperatures are strongly affected by their assigned fireground tasks, that blood clotting potential may be linked to fireground job functions, and that firefighting gear can be contaminated with a variety of potentially carcinogenic substances that can be transferred to firefighters. The research was a necessary first step in understanding these risks and formulating preventative strategies such as on-scene gross decontamination of the gear and cleaning of the skin. Understanding that many firefighters are often exposed to these risks during live-fire training exercises, the second phase of the study focused particularly on these training exposures.

From 2010 to 2016, IFSI Research was awarded over 5 million dollars in research funding to study issues in the fire service, including the effects of aspirin on heart functions in firefighters, the effects of self-contained breathing apparatus (SCBA) design and firefighter fatigue on the balance and safety of movements of firefighters on the fireground, the impact of noise exposure on injury risk, the effects of heat on the SCBA facepieces that firefighters wear, and groundbreaking research on cardiovascular and chemical exposures in modern firefighting.



In 2014, Chief Sean Burke assumed the responsibility of Assistant Director of Firefighting Programs and was responsible for overseeing the planning and execution of all firefighting programs statewide.

A member of the IFSI field staff since 2010, Burke began his fire service career as a volunteer in St. Meinrad, IN, then moved to the Chicago Fire Department. He retired as a Battalion Chief assigned to the 18th Battalion.



In September 2015, IFSI sponsored a team building exercise for the University of Illinois Men's and Women's Wheelchair Basketball teams. This outreach activity offered participants an opportunity to see what it's like to be a firefighter and to relate firefighting philosophies and practices to their workplace or team.

In 2016, IFSI added the Illini Emergency Medical Services (IEMS) as a program. IEMS started as a student group at the University of Illinois in 1979 to provide pre-hospital medical training and support emergency medical services for events in the University campus and community. With the addition of IEMS to IFSI, the Institute became the primary provider of CPR, Automated External Defibrillator (AED), First Aid, Emergency Medical Responder (EMR), and Emergency Medical Technician (EMT) training on the University of Illinois Urbana-Champaign campus.

In 2016, IFSI also saw the culmination of a multiyear effort to significantly upgrade the training facilities. Working towards Director Mortenson's strategic priority of ensuring that IFSI had the best live-burn training facility in the country, increasing the capacity for conducting live burns on-site was a priority. Between 2013 and 2016, the Institute researched and implemented the use of intermodal shipping containers as live-burn structures. Constructed out of 19 intermodal containers, the 9,500 square foot Streetscape training prop was completed in 2013. It contained both live-burn and smoke-only capabilities while simulating a number of different occupancy types, including a laundromat, offices, a machine shop, and restaurants. With the addition of the Streetscape prop three additional intermodal burn structures, a six-bedroom wood frame ranch, and the flammable liquid train derailment prop, IFSI effectively tripled its capacity to deliver live-burn training on the Champaign campus.



The IFSI Streetscape training prop is one of many simulated structures that allow firefighters to develop skills tailored to specific firefighting environments.



*Above: 2009 aerial photo
Right: 2015 aerial photo*



Aerial Photos of IFSI's training grounds in 2009 and 2015 showing the many additions to the grounds in the time period, including the Learning Resource and Research Center, the Trench Rescue prop, and intermodal burn containers for research and fire behavior training.

Facility improvements during this period also included upgrading the electrical infrastructure to support the continued growth of research and general training and adding a permanent grain bin rescue prop to the technical rescue training tower. IFSI was also able to reclaim one acre of land that was previously used as a wastewater catch basin for training for flammable liquids incidents on railways.

In addition to facility upgrades, IFSI also acquired a variety of fire apparatus for use in training, allowing students to get hands-on experience with the types of apparatus that they would encounter at their fire departments. The fleet included six fire engines and three aerial apparatus. To further improve IFSI's capabilities to deliver quality training at the Champaign campus, it also started utilizing federal programs that allow the institute to acquire excess equipment at little or no cost, including heavy construction equipment used to support training and a more modern breathing air compressor system used to refill self-contained breathing apparatus bottles. Between 2012 and 2016, IFSI acquired and repurposed over \$500,000 worth of federal excess equipment at little to no cost to the Institute.



In July 2016, the Illinois Fire Service Institute received an Assistance to Firefighters Grant that included funding that allowed IFSI to create the Driver Readiness Interactive Vehicle Experience (DRIVE) program. The DRIVE program, featuring a new emergency vehicle driving simulator, provided realistic experiential learning in a safe environment with scenarios specifically designed to elicit natural behaviors from the student. DRIVE allowed students of differing skill levels to develop their driving capabilities through realistic training exercises and operational experiences.

The first DRIVE class was offered in September 2018.



In October 2016, the Responder Intervention Team (RIT) Program delivered the first RIT on the Road training program at the Firehouse Expo in Nashville, Tennessee. This training event brought firefighters from across the country together to train in live fire conditions. RIT instructors were able to showcase the unique training experience of rescuing live downed firefighters on the national stage.

Building upon the success of the training delivered at the Firehouse Expo, in September 2018 RIT Program Manager Gary Coney attended the First Annual Fireground Survival Seminar in Belgium. During the symposium, Coney presented RIT in the USA facts and best practices to the international audience. Instructor Coney's attendance allowed IFSI to reach fire service personnel from 5 countries.

The IFSI RIT Program is recognized as a global leader in delivering relevant and intense training related to managing a mayday. The curriculum reflects a specific schedule of skill development evolutions that are based on line of duty death studies. Because IFSI Instructors serve as downed firefighters in the training scenarios, the student experience is thought-provoking and immersive.

On November 17, 2016, Director Mortenson issued a directive to develop first responder resiliency awareness curriculum for inclusion in all IFSI courses 24 hours and greater. The project would include mental health information as part of the course curriculum in over 70 courses. In practice, resiliency training resulted in IFSI instructors sharing the mental health message with over 4,500 first responders each year.

The family and founders of the nonprofit foundation RE;ACT (Lt. Ryan Elwood: Awareness, Counseling and Training for First Responders) made a generous donation to the Illinois Fire Service Institute to aid in the development of the Mental Health and Resiliency curriculum.

Between 2016-2021, IFSI delivered resiliency awareness training to over 4,700 students.



Director Mortenson accepted a donation from RE;ACT and issued a directive to develop first responder resiliency awareness curriculum for inclusion in select IFSI courses.



The IFSI First Responder Resiliency Program subject matter experts group consisted of members from IFSI, the Illinois Fire Chiefs Association, Illinois Firefighter Peer Support, Associated Fire Fighters of Illinois, various mental health organizations, and firefighting chaplains.



From November 28 to December 5, 2016, IFSI instructors conducted the 3rd Hazardous Materials Ops Training Program for 34 Chinese firefighters and first responders at the National Hazardous Chemicals Emergency Rescue Huizhou Base, Huizhou, China. In the spirit of global collaboration, IFSI International Programs has connected the Institute with firefighters and fire service academies in several countries around the world with the mission of emphasizing mutual learning, information exchange, knowledge sharing, and cultural experience. International Programs delivers resources, services, and expertise to give IFSI a global presence.

Starting in January 2017, Fire Officer courses were transitioned from their traditional Fire Officer I and II format to a blended format referred to as Company Fire Officer and Advanced Fire Officer. Both programs started being delivered statewide to reach more firefighters and officers. This blended delivery allowed more flexibility in scheduling for volunteer fire departments.



In March 2017, IFSI received accreditation through the International Fire Service Accreditation Congress (IFSAC). IFSAC is a non-profit system of both fire service certifying entities and higher education fire-related degree programs. IFSAC accreditation allows for increased portability of certification credentials across state lines, serves as confirmation that individuals meet the standards of excellence as defined by national accrediting bodies, and is a general recognition of an individual's competency as measured against national standards.

In spring 2017 as part of the Vision 2027 initiative, IFSI's Strategic Priorities were extensively revised into eight points:

1. Train and educate firefighters in the full spectrum of skills and knowledge, with a primary focus on hands-on application(s).
2. Provide training, education, information and research opportunities to non-traditional groups in order to advance/support interoperability across the full spectrum of the fire service mission.
3. Set the bar nationally in leadership and education for all fire service personnel - Firefighter, Company Officer, and Chief Officer.
4. Leverage dynamic technologies in order to increase access to training and education without compromising hands-on application(s).
5. Provide global leadership in revolutionary and collaborative research in order to improve firefighter health, safety, and effectiveness.
6. Construct and maintain world-class facilities in order to provide innovative and realistic training for the first responders of the 21st century.
7. Protect and advance Illinois Fire Service Institute's reputation as YOUR global leader in fire and emergency services training, education, information, and research.
8. Develop, maintain, and preserve constructive relationships as an integral member of the University of Illinois at Urbana-Champaign campus.

In January 2018, Jill Kraft was hired as the new full-time IFSI Director of Marketing. Prior to this appointment, Kraft had served as Interim Marketing Director. Her key job responsibilities included the creation and implementation of the IFSI Brand, social media management, video production, and the development of promotional marketing campaigns. As her responsibilities increased to incorporate public/media engagements, campus relations, and state agency and governmental affairs support, her position was altered to include the role of Director of Public Relations. In 2019, Jill was appointed by Director Mortenson as a member of his Executive Leadership Team.

On April 19, 2018, Illini Emergency Medical Services (IEMS) received the Excellence in Fire Service-Based EMS Award from the Congressional Fire Services Institute and Masimo at the 30th Annual National Fire and Emergency Services Dinner in Washington DC. The Excellence in Fire Service-Based EMS Award recognized IEMS efforts to improve acute cardiac care capabilities at the University of Illinois at Urbana-Champaign, including compiling data and operational status for Automated External Defibrillators (AEDs) on campus and conducting hands-on CPR training at public outreach events.



IFSI receiving the Excellence in Fire Service-Based EMS Award.

In 2017, IEMS trained 1,297 individuals in CPR, a 206 percent increase over 2016, and increased the number of American Heart Association certified CPR instructors by almost 20 percent. In order to ensure greater coverage of AEDs at the University of Illinois campus, IEMS also added 42 new devices and created a system using PulsePoint technology that located the AED closest to cardiac arrest victims.

In 2018, due to the efforts of the Illini Emergency Medical Services (IEMS), the University of Illinois at Urbana-Champaign was awarded the designation of HEARTSafe Campus by the National Collegiate Emergency Medical Services Foundation. The HEARTSafe Campus program recognizes campuses that promote and support rapid response by CPR and AED trained first responders, rapid public access to defibrillation, early access to advanced care, public CPR and AED training for the community, and engagement in preventative cardiovascular healthcare activities. The University was the first campus in Illinois to receive the distinction.



2018 CBIRF disaster scenario training on Champaign training grounds.

In July 2018, the Illinois Fire Service Institute (IFSI) facilitated a week-long cooperative multi-functional disaster scenario training exercise on the Champaign IFSI training grounds and in the City of Chicago. Under the direction and facilitation of IFSI, the training included participation from local, state, and federal response agencies. The goal of the effort was to improve the integration and interoperability of Illinois and federal disaster response capabilities. Members of the United States Marine Corps - Chemical Biological Incident Response Force (CBIRF) completed technical rescue and hazardous material decontamination training in Champaign and Chicago. With the support of IFSI instructors and staff, the University of Illinois College of Veterinary Medicine, the Disability Resources & Educational Services, the Office of the Illinois State Fire Marshal, CBIRF executed complex and realistic training critical for national emergency preparedness standards.



On November 10, 2018, the first Veterans in the Fire Service Day: An Opportunity for Firefighters Past, Present, and Future was held to commemorate and provide guidance to Armed Forces Veterans who have already joined, or are considering joining, the fire service. The free event hosted separate programs for Future Members of the Fire Service and Current Members of the Fire Service. Veterans in the Fire Service is now a 2-day annual event .

In January 2019, IFSI hosted a ribbon cutting ceremony to launch four new mobile Cornerstone Program trailers purchased with funding secured by the Office of the State Fire Marshal and allocated to the IFSI Cornerstone Program. Each trailer contained equipment essential for firefighting skills training for use across Illinois. The trailers were developed in cooperation with OSFM to be deployed across the state and readily accessible to local fire departments as a no cost training resource. Much of the equipment was to be allocated to training volunteer fire departments where resources or budgets may be limited.



In January 2019, construction began on the new Special Operations Training Program prop on the Champaign training grounds. The new Special Operations prop was designed to provide training capabilities including; high to high anchor execution, a cell tower prop, confined space, machinery and hazardous materials specific training. The fixed facility props allowed for practical execution in the multi-disciplined training prop that met the training needs of Illinois first responders.



Special Operations training prop.

In February 2019, the existing Structural Collapse Operations training prop was demobilized and construction began on a structural collapse operations city block training prop. The new prop was designed to mitigate the current safety hazards, allow for more realistic technical rescue training drills, and allow for additional student training space for scenario execution. The northeast and west end of the collapse prop was framed out to represent a 2-3 story wood framed apartment building presenting the appearance of a partly collapsed structure.



Structural Collapse training prop in initial stages of construction.

The IFSI Basic Operations Firefighter/NFPA Firefighter I Blended Program (BOF) was developed in 2018 and offered the pilot delivery on August 10, 2019. The 18-week course provided a combination of online, instructor supported coursework with hands-on, live fire training during nine weekend practicals in Champaign. Tuition was covered by a grant supported through the Office of the State Fire Marshal, making the cost completely free to students and departments. In December 2019, the first group of firefighters graduated from the BOF Program. In order to expand access to the program to firefighters across Illinois, the second delivery of BOF was offered at regional training locations around the state.



Students at Basic Operations Firefighter (BOF) NFPA Firefighter I Blended Program orientation on August 10, 2019.

In 2019, modifications were made to the original Resiliency Awareness Program based on feedback given to IFSI Mental Health Subject Matter Experts. The 1-Hour Program and a new 4-Hour Resiliency Development for First Responders Course were modified to include emphasis on the scientific component of stress and the impact it has on human physiology.



In October 2019, IFSI received its first new fire apparatus since 1992, which was named Engine 2 and uniquely customized to have the orange and blue University of Illinois colors, with a majority blue color scheme, to symbolize IFSI's educational legacy in connection with the University of Illinois and serve student training on campus. The apparatus purchase was made possible through the Assistance to Firefighters Grant Program. A second orange and blue engine with a majority orange color scheme named Engine 1 was delivered in the fall of 2020.

In November 2019, Dr. Farzaneh Masoud was hired as the new Director of IFSI Research. Dr. Masoud came to IFSI with a PhD from the University of Illinois Department of Cell and Developmental Biology and an extensive background in molecular, cell, and developmental biology. Her previous research identified factors that can cause mesothelial cells to undergo epithelial to mesenchymal transition, the developmental phenomenon that underlies metastatic cancers. Prior to joining IFSI, Dr. Masoud held a position with the National Center for Supercomputing Applications (NCSA) Strategic Research and Proposal Development Office and was responsible for leading pre-proposal coordination for large and strategic grant opportunities.

In 2019, IFSI expanded the Illinois Emergency Management Agency (IEMA)/IFSI instructor database and training program. The program included online and in-person Hazmat Awareness and Refresher training for 13,000 first responders annually, including firefighters, local police departments, local emergency management agencies, the Chicago Police Department, and the Illinois State Police. The program began in January 2020 and allowed police officers throughout the State of Illinois to take standardized refresher training through an online platform.



In February 2020, the IFSI Cornerstone Program expanded to cover 8 separate regions that included Central Illinois, East Central, North Central, Northeast, Northwest, Southern, and Southwest Illinois as the original regions. Cook County was separated into its own region due to increased activity in the Chicago Metro region.

Dan Bracken became the Regional Representative for the Cook County Region on February 1, 2020. With this change, the areas bordering Cook County were renamed from the Chicago Metro Region to the North Central Illinois Region.



Map of Illinois showing IFSI's 8 Cornerstone regions, including the 2020 change to make Cook County its own separate region.

On March 13, 2020, in response to the spread of COVID-19, Director Royal Mortenson issued a communication suspending all IFSI courses until April 30 and limiting the staff working on site in Champaign to essential employees only.

On March 20, 2020, Illinois Governor J.B. Pritzker issued Executive Order 2020-10, in an effort to slow the spread of COVID-19, which contained a stay at home order and closed non-essential businesses. Access to the Champaign campus was limited to staff needed to perform essential functions. Courses with in-person components were postponed but online courses continued.

It was not until May that on-site functions began to slowly resume with the release of Illinois Executive Order 2020-32 and the Illinois Department of Commerce & Economic Opportunity FAQ document dated April 2020, where the IFSI mission to train and educate first responders was deemed an essential function and exempt from certain COVID-19 restrictions. Director Mortenson issued a "Crawl, Walk, Run" model for how IFSI would slowly implement the degree at which on-site activities resume:

- Crawl – Conducted May 18-30; classes that had been stopped midway through Spring 2020 by the COVID shutdown were allowed to be completed.
- Walk – June 1-30; some classes were allowed to be delivered at specific statewide locations.
- Run – July 1 and forward; normal schedule delivery was gradually resumed statewide.



October 2020 offering of LDDM with masks and distanced seating.

facebook forum >>>

FORUM

FREE LIVE TRAINING

UPCOMING COURSES

WEDNESDAY, MAY 13 - 1:00PM CT
PUMP OPERATIONS
Instructors: Tal Prendergast and John McMann

THURSDAY, MAY 14 - 4:00PM CT
ILLINOIS FIRE SERVICE STATE AGENCY STATUS UPDATE
Participating Agencies: IFSI, OSFM, MABAS, Illinois Fire Chiefs Association, Illinois Firefighters Association, International Association of Fire Chiefs, Chicago Fire Department, Associated Fire Fighters of Illinois, Illinois Association of Fire Protection Districts, Illinois Professional Firefighters Association

WEDNESDAY, MAY 20 - 1:00PM CT
ROOF OPERATIONS: FLAT ROOF
Instructors: Larry McCormack and Eric Troken

FRIDAY, JUNE 5 - 11:00AM CT
**ENGINE COMPANY OPERATIONS:
 DEPLOYING THE FIRST DUE LINE**
Instructor: Sam Vega

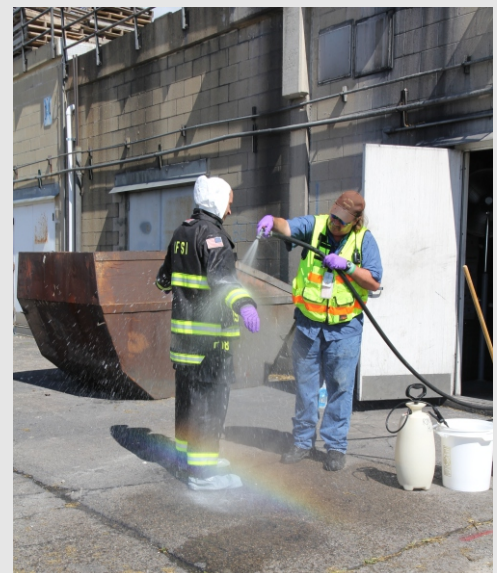
TO PARTICIPATE: [FACEBOOK.COM/FSI.ILLINOIS.EDU](https://www.facebook.com/FSI.ILLINOIS.EDU)
 A Facebook account is not required to participate.
Broadcasts are posted immediately following the live feeds.

Example of virtual classes offered through the Facebook Forum.

In response to the COVID-19 pandemic, IFSI launched the Facebook Forum on March 23, 2020. The delivery platform was created to offer free, live training and information broadcasts through the IFSI Facebook account. Initial broadcasts focused on COVID-19 trending topics but evolved into offering regularly scheduled training sessions. Session topics were selected to highlight the full scope of IFSI Programs. In the first year of broadcasts, the Forum reached over 1 million people with the audience representing all 50 US States and over 25 countries.

In May 2020, IFSI launched the Preliminary Exposure Reduction Project in collaboration with the Office of the Illinois State Fire Marshal and Mutual Aid Box Alarm System (MABAS)-IL, based on research from IFSI, the National Institute for Occupational Safety and Health (NIOSH), Underwriters Laboratories (UL) Fire Service Research Institute (FSRI), and Skidmore College. The project was designed to provide departments with free basic equipment that could be used for preliminary exposure reduction (gross decontamination or decon) of personnel on incident response scenes, and training on how to use the tools. The recommended decon equipment included common household items that were easily obtainable and fit into a space the size of a standard 5-gallon bucket.

In FY2020, 1,648 decon buckets were delivered to Illinois fire departments and 2,901 firefighters completed online training concerning their use. This project served as an example of translatable research conducted at IFSI and the publications that followed led to actionable changes that fire departments implemented to lower the risk of contamination and cross contamination in the U.S. and abroad.



Demonstration of Preliminary Exposure Reduction Project equipment being used to decontaminate a firefighter.



Students attending the 2020 Fire College in Swansea, Illinois.

In 2020, for the first time in IFSI history, the 96th Fire College was not held in June and instead took place in October. Due to the COVID-19 pandemic and related safety precautions, IFSI chose to postpone Fire College until the fall. In addition to moving from June to October, this was the first time in the Fire College 95-year history that drastic changes were made to how it would be conducted. Departing from its usual 4-day program occurring on a Thursday through Sunday, the 2020 Fire College was shortened to two days, held on a Saturday and Sunday, and was delivered at five regional training sites across Illinois; Champaign, Cherry Valley, Plainfield, Chillicothe, and Swansea. Also in keeping with COVID-19 safety precautions, class size was limited to 50 students per site. The focus remained on hands-on training, just with a more dispersed delivery model. Over 100 instructors and staff successfully delivered 23 unique training courses to 301 registered students who represented 57 departments from 31 Illinois counties.

Also in response to COVID-19, the Explorer Cadet Fire School scheduled for June 11-14, 2020 was cancelled since postponing this event until the fall was not seen as feasible. This was the first time the Explorer Cadet Fire School was not held since the first statewide program in 2004. The cancellation was deemed necessary due to the safety concerns surrounding the global COVID-19 pandemic.

In September 2020, the Curriculum and Testing Office expanded their support capacity by adding a third full-time Curriculum Support Specialist to partner with IFSI course designers in developing new IFSI courses and keeping current course material up to date. Also in 2020, the Testing Office created the full-time Certification and Accreditation Manager position to manage the processes that lead to certification for IFSI students and ensure programs maintain compliance with accreditation requirements. Examples of such maintenance work include the development re-training for exam proctors and training for skill evaluators. The online training modules, combined with monitoring steps, were implemented to ensure that IFSI continued to be a leader in producing highly proficient responders ready to competently serve.

In 2020, for the first time in IFSI history, team members created, managed, and secured multiple bids to deliver training at the five largest U.S. fire service trade shows, including the Fire Department Instructors Conference (FDIC), Intershutz USA, Firehouse, Industrial Fire World, and Fire-Rescue International (FRI). Training proposals ranged from pre-conference workshops to hands-on training. This effort confirmed IFSI was recognized as a national leader in training.

From April 2020 to January 2021, the IFSI National Incident Management System (NIMS) Program responded to feedback from fire officers across Illinois who wanted to know where the fire service fit in the Incident Command System (ICS). In response, IFSI developed a Active Shooter Incident Management (ASIM) course. By integrating a progressively challenging Tabletop Exercise (TTX) into an ASIM Instructor Development Program (IDP), the ASIM course provided a model framework for use by law enforcement, fire, and EMS to manage active shooter event response to minimize time to threat neutralization, provide medical intervention, and improve survivability of casualties.

During the IDP sessions, the need for additional training on a Standard Reunification Method was identified for shooting events in schools. Accordingly, IFSI developed School Safety and Violent Event Incident Management – Reunification course (SSAVEIM). This resulted in a two-day course with ASIM and SSAVEIM-Reunification. The course provided a model framework for use by school administrators, law enforcement, fire, and EMS to manage violent event response to minimize time to threat neutralization, provide medical intervention, improve survivability of victims, and reunify students with their parents/guardians.

From February 2021 through May 2022, IFSI conducted a training program overview with the Illinois Terrorism Taskforce (ITTF) with the goal to achieve approval of ASIM/SSAVEIM Programs as two new Incident Management Programs. The ITTF Training Working Group unanimously approved the ASIM/SSAVEIM Programs as a model for Active Shooter Incident Management Training in Illinois.



SSAVEIM students work through the student/parent accountability process to ensure the children are reunified with an authorized parent or guardian.

Law enforcement and fire students serve as Tactical, Triage, and Transport Supervisors to communicate and coordinate the response to neutralize the threat and get the injured to definitive care. Students are using accountability boards and ASIM checklists.





In June 2021, IFSI dedicated a portion of the Learning Resource and Research Center as the Mortenson Leadership Annex in recognition of Colonel Royal P. Mortenson's visionary leadership as Director of IFSI. A dedication ceremony took place during the 98th Annual Fire College.

The Mortenson family at the dedication ceremony in June 2021.

In July 2021, IFSI Deputy Director Jim Keiken became Director of IFSI after the retirement of former IFSI Director Colonel Royal Mortenson. As Director, Chief Keiken established and started moving forward on a strategic vision for IFSI that included: providing quality leadership development and decision-making training & education curriculum for the fire service, enhancing and expanding practical hands-on training, expanding life safety research, expanding on-line educational deliveries, and growing the Institutes partnerships, reach and reputation nationally and internationally.



In August 2021, Chief Heather Moore assumed the role of IFSI Deputy Director. A 21-year firefighter, Chief Moore retired as the Division Chief of Training and Education for the Springfield, Illinois Fire Department. Chief Moore joined the IFSI team in 2006 as an instructor and has served as an instructor, program manager, program director, and senior leader. Her areas of expertise grew to include every aspect of IFSI training and education courses/classes, with specific areas of responsibility in special operations and technical rescue courses, leadership training/education, and instructor development. Chief Moore has served on numerous state affiliate boards and working groups and led the Fire Service Women of Illinois as President and Vice President. She also served as a Technical Rescue Leader on the MABAS (IL) 48 team.



In August 2021, IFSI delivered the first FDIC (Fire Department Instructors Conference) RIT UNDER FIRE HOT class in Champaign. After a successful multi-year bid proposal process and delays due to COVID-19, IFSI executed the delivery of two, one-day hands-on training classes for a sold-out national stage audience. The classes were held in 2021, 2022, 2023, and 2024, and expanded IFSI's reputation as a national leader in fire service training. The use of the IFSI training grounds for the HOT class activities led to new corporate partnerships, prop advancements, and international marketing engagements.



From July to November 2021, the IFSI Fire Officer Program developed the Fire Officer Instructor Development Task Book and tracking, with the goal of ensuring that all Fire Officer instructors were well-versed and prepared to deliver all learning components to foster professional development.

In October 2022, the Fire Officer Program also integrated the Crew Resource Management (CRM)/Firefighter Teamwork Initiative into the curriculum for the Company Fire Officer and Advanced Fire Officer courses. The Firefighter Teamwork Initiative adapts crew resource management principles and practices for the fire service with the objective to foster organizational change, enhance safer operations, and build a team environment to improve safe behaviors and reduce risk.

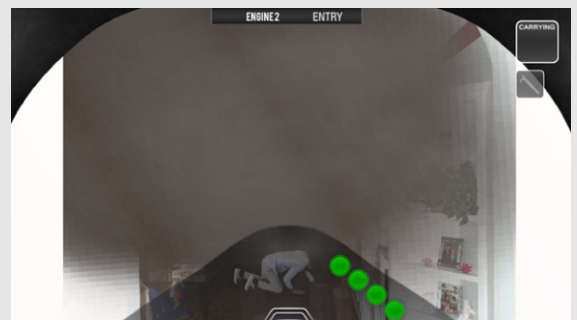
Starting in May 2022, the NIMSPro Fireground Computer Simulation Program was added to the Company Fire Officer and Advanced Fire Officer courses to provide pressurized decision making during fireground simulated exercises.



Starting in October 2021, the IFSI Leadership Development and Decision Making (LDDM) Program developed 9 Leadership Reaction Courses (LRCs) to allow LDDM students the opportunity to employ the lessons of the week under stress to improve how they lead in a challenging situation. The LRCs were integrated into the 5-Day LDDM Program and grouped firefighters, fire officers, and fire chiefs as a team to work through 8 different scenarios with each student having the opportunity to be a leader of the team.

In the left photo, students navigate 1 of the 8 LDDM LRCs.

NIMSPro Simulator screenshot of the interior operations of a structure fire with the Heads-Up Display providing a visual display of SCBA status along with a victim in the foreground.

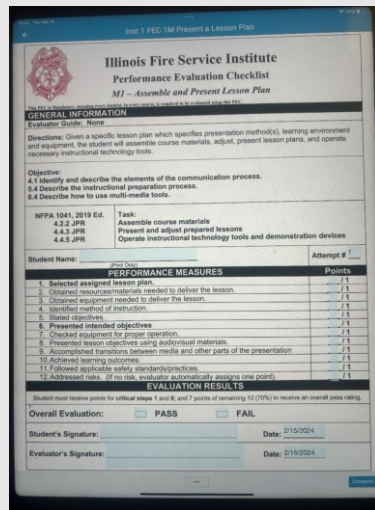


In November 2021, the Illinois Fire Service Institute entered a partnership with the Illinois Fire Chiefs Educational and Research Foundation (IFCERF) to develop curricula and redevelop the delivery of the Chief Fire Officer Program in Illinois. This partnership was designed to leverage the educational and leadership strengths of both agencies for the benefit of the Chief Fire Officer students. In July 2022, after six months of intense curriculum development, the Chief Officer Program completed a comprehensive curriculum package and the IFSI Technology Based Training (TBT) Program started development of a highly interactive Learning Management System which would be used to deliver all Chief Fire Officer (CFO) Phase 1 learning. By October 2022, the IFSI/IFCERF CFO Program curriculum was validated, approved, and accredited by Pro Board and approved by the Office of the Illinois State Fire Marshal.

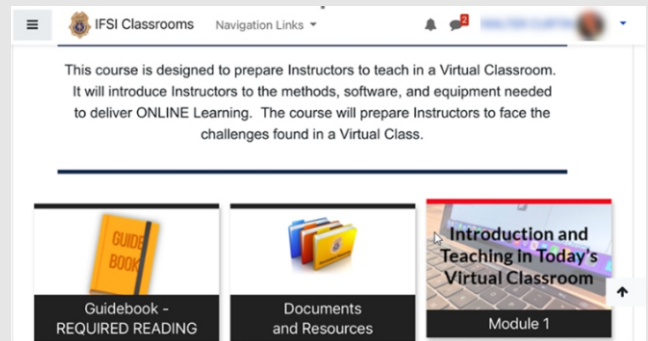
From December 2022 to January 2024, IFSI and IFCERF conducted the 13-month Chief Fire Officer delivery with 60 students enrolled in the course.

As demand for online learning options continued to increase, the Technology Based Training (TBT) team worked to develop courses to meet the demand. Starting in 2022, the TBT team collaborated with the Illinois Fire Chiefs Foundation to offer the Chief Fire Officer Blended course. In 2023, TBT collaborated with the Illinois Pipeline Emergency Response Initiative to offer the Pipeline Emergencies online courses.

On demand awareness level courses continued to be offered at high rates throughout the early 2020s with over 40 individual on-demand awareness level classes, over 25 online/blended courses, and a variety of instructional classes for IFSI staff.



From July 2022 to April 2023, the Instructor Program developed and implemented Electronic Performance Evaluation Checklists for all courses within the program. This effort improved operational efficiency and student feedback while reducing paper consumption.



From November 2022 to July 2023, the Instructor Program designed and implemented a Virtual Instructor Boot Camp Course that was designed for all IFSI instructors who teach virtually, with the focus on creating a better understanding of how to improve the quality of their lesson delivery in a virtual classroom.



In 2023, IFSI saw the 1000th student complete the IFSI Basic Operations Firefighter (BOF) Blended course.

In 2022 and 2023, the IFSI First Responder Resiliency Project was updated. The updates included the launch of an online First Responder Resiliency Awareness course. This platform was completed with the assistance of the Office of the Illinois State Fire Marshal, the RE;ACT Foundation, and made available to first responders across the U.S. at no cost.

Curriculum updates also included the incorporation of training that focused on nervous system regulation while working in high stress incidents. This led to the effort to develop evidence-based training on the causes of and solutions to stressors on the fireground that inhibit command performance. The First Responder Resiliency Program joined forces with the 100 Club of Illinois, an organization founded to provide resources, financial support, training, and moral support to both the families of first responders killed in the line of duty and active duty first responders throughout the state of Illinois.

From 2020-2023, IFSI Research worked to develop collaborations with different departments and disciplines across the University of Illinois such as the College of Engineering, the College of Agricultural, Consumer and Environmental Sciences (ACES), the National Center for Supercomputing Applications (NCSA), the Department of Food Science and Human Nutrition, and the Cancer Center at Illinois, while also improving the research capabilities of the lab for conducting genomic, epigenomic, and proteomic research. The lab update was made possible by the generous contribution from the Office of the Illinois State Fire Marshal.

In 2023, IFSI Research developed a glove cleaning and full body decontamination unit for the training ground, developed a 4-hour online curriculum for Exposure and Cardiovascular risk reduction, and published "Evaluating Exposure to VOCs and Naphthalene for Firefighters Wearing Different PPE Configurations through Measures in Air, Exhaled Breath, and Urine," in the International Journal of Environmental Research and Public Health.



An IFSI Research team member dresses a mannequin in firefighting gear and attaches an air collection device under the firefighting personal protective equipment (PPE). The mannequin was placed in a smoke chamber so that the air collection device could record volatile organic compounds (VOCs).



In February 2023, IFSI hosted the FILE: Firefighter Immersive Learning Environment Summit. The two-day event was a collaborative effort between the North American Fire Training Directors (NAFTD) and National Fire Protection Administration (NFPA) and brought together constituents from across the United States to collaborate on the development of a roadmap for fire service training.



In early 2023, IFSI finished a new live-fire training prop modeled after a two-story single-family dwelling that was designed and built by IFSI shop personnel. The prop was designed to replicate a typical single-family home found throughout Illinois with all the interior rooms, closets, bathrooms, kitchen, and interior stairs leading up into the second-story bedrooms. This provided instructors the unique challenges for scenarios that single-family dwellings present for the firefighter. The prop design allows for live-fire training in three burn rooms on the first floor and two rooms on the second floor while also having the added ability to conduct basement fire scenarios.

In April 2023, IFSI Curriculum and Testing was restructured to become Curriculum, Testing, and Certification (CTC). From 2021 through 2023, CTC assisted in the development and implementation of nearly 30 new Cornerstone and Online courses, oversaw 39 Pro Board levels, and 15 IFSAC levels national certifications, achieved new accreditation for Airport Firefighter, Live Fire Instructor, Live Fire Instructor in Charge, Chief Fire Officer, Health and Safety Officer, Wilderness Search and Rescue Awareness, and Small Unmanned Aircraft Systems National Certification Courses developed by IFSI Program Managers/Subject Matter Experts. CTC also piloted the use of computer-based testing (CBT) and starting in January 2023, all on-site end of course exams were being delivered via CBT.



From 2021-2023, the IFSI Library received three major grants, each one helping the library in its mission to provide fire/emergency library and information assistance and services to the Institute's instructional staff, students, Illinois fire departments and firefighters, and other fire/emergency-related users in the successful and effective performance of their jobs. In 2021, the library received Institute of Museum and Library Services (IMLS) American Rescue Plan funding for the project "Experience-Based Knowledge Management Initiatives to Support Illinois Firefighters' Dynamic Needs in Response to the COVID-19 Pandemic". The project collected experience-based knowledge gained by the Illinois fire service during the pandemic to create online resources for the education and training of future firefighters.

In 2022, the IFSI Library received American Library Association (ALA) American Rescue Plan: Humanities Grantmaking funding for the "Children's Fire Safety, Literacy, Reading and Discussion Program". The program provided children's books on fire safety and firefighting to Illinois firefighters who participated in reading-discussion programs with over 500 children across Illinois. Books were also provided in Spanish, Chinese, and Polish. Following these successes, the IFSI Library received IMLS National Leadership Grants for Libraries funding for the project "Libraries as Partners for Emergency Preparedness and Response in Times of Crisis" in 2023. The project investigated how libraries can partner with community emergency response organizations during widespread crises to pave the way for future research on this topic.



Rusty Glosser of the Marshall Fire Protection District reads to children during the IFSI Library's 2022 ALA grant program "Children's Fire Safety, Literacy, Reading and Discussion Program."



**A CENTURY
OF TRAINING & TRADITION**

ILLINOIS FIRE SERVICE INSTITUTE

Since 1925 with the first offering of Fire College, the Illinois Fire Service Institute (IFSI) has held a long-standing commitment to offering top-quality, innovative, and relevant training and education to first responders. In the centennial year of operation, IFSI has grown to reach nearly 57,000 students through the delivery of over 1,300 courses and countless engagement events. Over 481,000 student contact hours are achieved each year. It is with great pride that we can note these numbers are only expected to grow in coming years.

Without question, our many successes are a direct result of the strong team of professionals that represent the Institute. Our dedicated instructors and staff face the many challenges of delivering premier fire service training with true passion and commitment.

Our programs are unparalleled. Our team and partnerships are strong. We remain grateful for the students, staff, departments, agencies, partners, and affiliates who support us in the fulfillment of our mission. *We look forward to the opportunities that we will embrace in the next 100 years.*

WE ARE IFSI

IFSI training grounds, December 2023.

Our greatest resource has always been our people. IFSI instructors are among the top fire service professionals in their field. The hard-working, exceptional IFSI staff are dedicated to achieving our mission. Our past, present and future successes are made possible by the team of individuals that make up IFSI. As of the end of 2023, IFSI staff includes more than 1,000 full and part time employees.

#WEAREIFSI.





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