

The Maine Fire Protection Services Commission



Report on Regional Live Fire Training Facility Needs

July 2017

Introduction:

The Maine Fire Protection Services Commission (Fire Commission) was established by the legislature in 1999 to “monitor and evaluate the State's fire protection services system on a continuing basis and to provide recommendations to the appropriate state agencies and to the Legislature regarding necessary changes in the fire protection services system”. One of the core duties of the Fire Commission is “to assist all governmental agencies with firefighter training and education responsibilities to enhance their delivery of services to fire prevention, protection and life safety professionals, including paid, call and volunteer fire service members”.

Since 1999 the Fire Commission has worked diligently with a wide range of stakeholders to improve firefighter training and education. The Fire Commission has conducted studies, produced reports, and submitted legislation to improve the availability, quality, and safety of firefighter training across Maine.

The Challenge:

Maine is a very large and diverse state with a wide range of fire service capabilities and training needs. However, there are common basic fire training needs that apply state-wide. They include safe, modern training facilities within a 60-minute travel time Maine's firefighters where they can obtain hands-on live fire training in a safe and structured environment.

Maine is one of very few states in the nation that has no central training facility and in fact none of the regional training sites in Maine are owned or operated by the State. They are all a mix of local community, regional groups, chief's organizations, and firefighter association sites that have been built and maintained through a variety of local efforts and resources. Most of the facilities are twenty years old or more (the newest built in 1996). Furthermore, not one of the facilities currently used by Maine firefighters has a NFPA compliant class A burn building which is a key component to any endorsed facility.

For several years our State fire training office, the Maine Fire Service Institute (MFSI), was able to provide a modest level of grant support for some of the facilities that it uses for skills testing. Those funds came from their operations budget but the available resources does not come close to meeting the need. A recent report from MFSI indicated there are only six current regional training sites that meet the absolute minimum standards that MFSI requires to conduct proficiency exams for firefighters and again, none of those sites meet current national consensus standards and guidelines.

Live fire training is a necessary qualification for firefighter certification and proficiency and is also one of the most dangerous evolutions firefighters perform. Historically most live fire training was conducted in acquired structures but due to costly environmental regulations and hazard mitigation costs, concerns from neighbors, and liability issues, acquired structure live fire training is no longer recommended. The key to any successful regional training facility is an engineered, NFPA compliant, class A burn structure designed specifically to meet the required training evolutions leading to firefighter certification.

Training Firefighters in Maine:

Due to the vast differences in needs, resources, and capabilities across Maine, firefighters are trained through three primary pathways as illustrated on the graphic on page 5.

Local & regional fire training programs – individual fire departments and regional programs developed and delivered by a group of departments in a region often taught at local fire stations during the evening or on weekends when most volunteers are available.

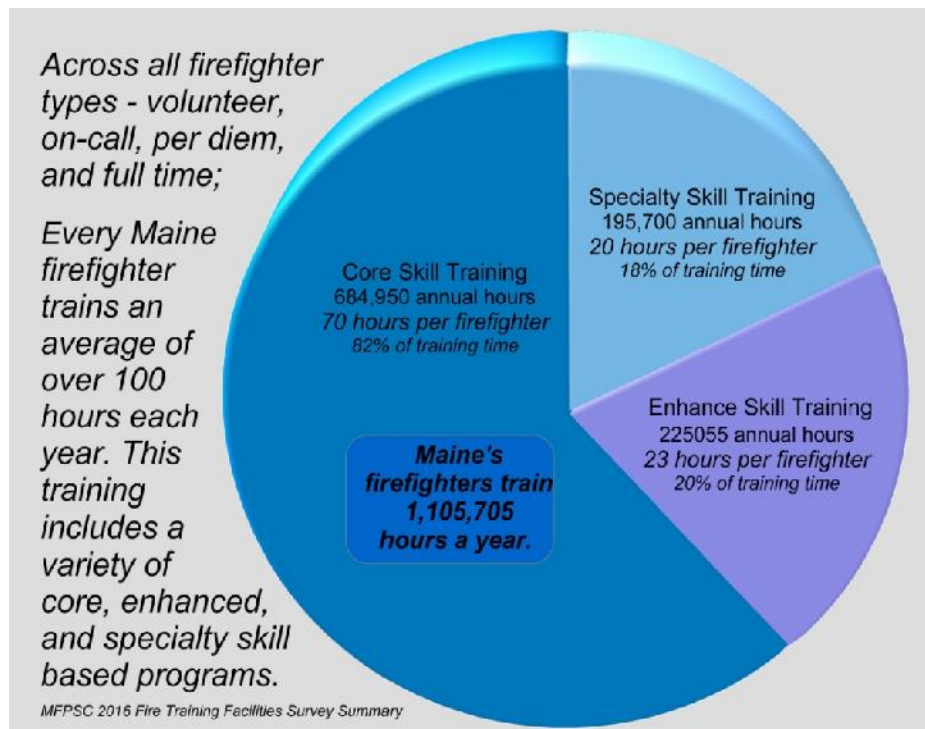
Maine Fire Service Institute (MFSI) programs – a variety of certified firefighter training programs and professional certifications are offered. MFSI certified instructors teach at MFSI classrooms, through local delivery classes at fire stations, and other training sites across the State.

Associate degree programs – Southern Maine & Eastern Maine Community Colleges each offer two-year associate degree programs in fire science where firefighters can earn college degrees and other certifications in preparation for a career in the fire service.

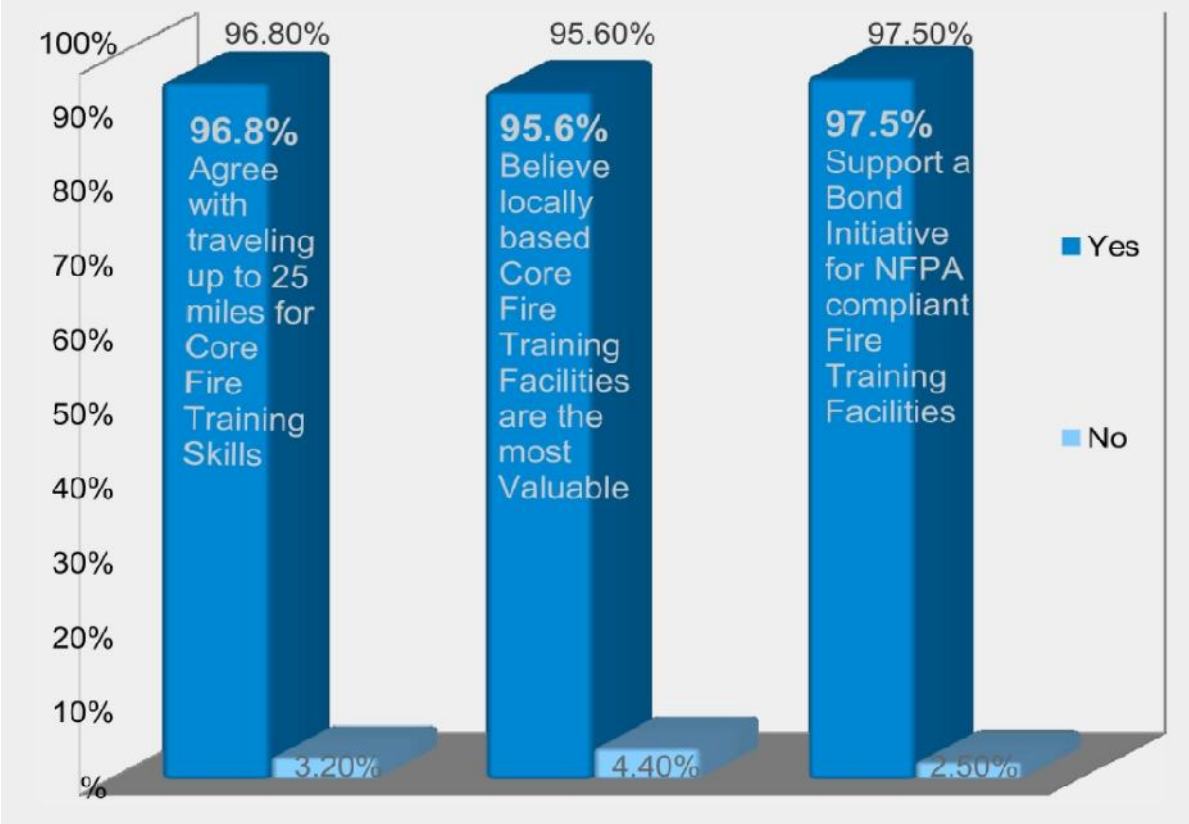
No matter where or how firefighters are trained in Maine, they must be trained commensurate with their duties (including fighting structure fires) and in accordance with NFPA standards. This includes *NFPA 1403 Standard for Live Fire Training Evolutions* 2012 edition, for live fire training evolutions.

Survey Data:

In December of 2016 the Fire Commission surveyed Maine's fire service to follow up on a similar survey conducted in 2002. The following graphics illustrate some of the relevant data:

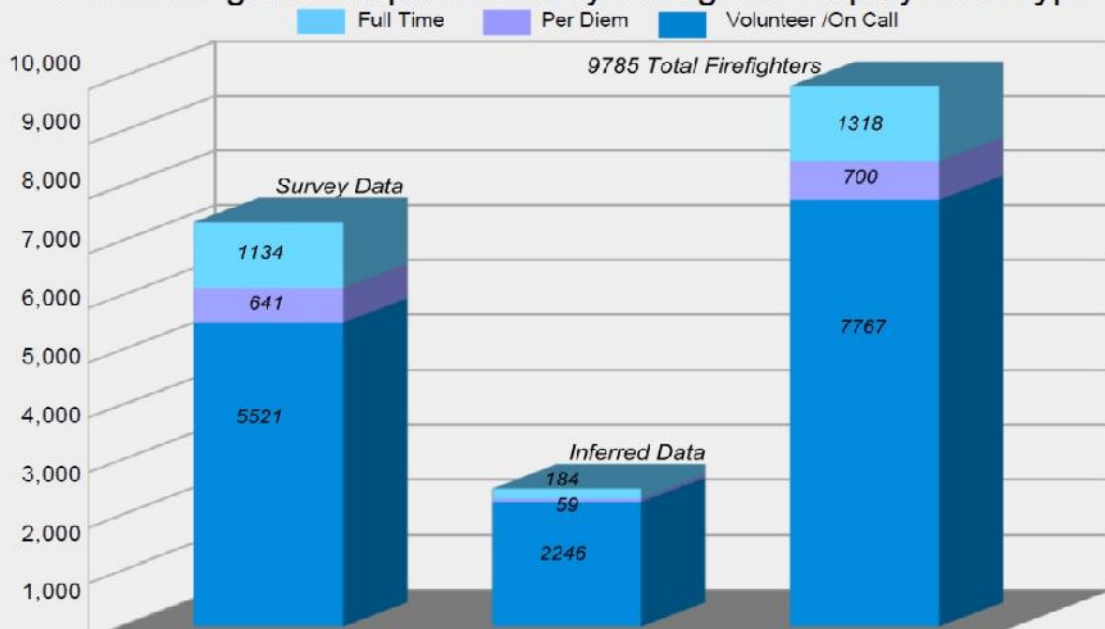


2016 Maine Fire Protection Services Commission Fire Training Facilities Survey Summary



2016 MFPSC Fire Training Facilities Survey Summary

Total Firefighters Represented by Firefighter Employment Type



*Inferred data was compiled utilizing public information provided by and for municipalities that did not submit survey information via our electronic survey. This includes online documentation and direct municipal contact.

Created for the Maine Fire Protection Services Commission in cooperation with MFSI 2017

Training Firefighters in Maine

Local & Regional Fire Training Programs

Individual fire department or regional programs, often taught at local stations on evenings and weekends.

Additional training for firefighters includes:
 Emergency Vehicle Operations Course
 Hazardous Materials Operations
 Basic Fire Officer
 Fire Officer
 Incident Safety Officer
 Fire Ground Company Operations

All certified fire training in Maine is taught to National Fire Protection Association standards (NFPA 1001) & takes over 200 hours of classroom and hands-on training in the state's Regional Training Program. Programs in Maine train thousands of our firefighters every year, and additional hours are spent practicing and reinforcing their skills.



Local & Regional Fire Training Programs
 Training through the Maine Fire Services Institute (MFSI)
 Associate & Technical Degrees via Southern Maine (SMCC) & Eastern Maine (EMCC) Community Colleges

While the variety of programs is very diverse; there are three primary ways we train firefighters in Maine



Training through the Maine Fire Services Institute

Training provided in 16-hour classes that lead to obtaining Firefighter I & II, Fire Officer, Driver/Operator, and a variety of other certifications. Classes are held at local stations, weekend fire schools, week-long academy style, and at MFSI in Brunswick.



No matter where or how firefighters are trained in Maine, they must all certify their training through MFSI's testing & credentialing.

Live-Fire End testing is conducted at affiliated sites which are supported by MFSI's fire facilities grant program.



2 year Graduate Degree programs via Southern Maine Community College and Eastern Maine Community College



Proposed Solution:

Based on the data from our survey, and the experience from MFSI and the many other representatives on the Fire Commission, we clearly understand that we need to move forward with a solution to Maine's fire training deficiencies. It is imperative that Maine's firefighters have safe & effective regional facilities where they can train, learn, and demonstrate proficiency in live-fire evolutions to earn certification and be ready to protect the citizens in their communities all across Maine. At a minimum those facilities must meet *NFPA 1402 Guide to Building Fire Service Training Centers* 2012 Edition, and *NFPA 1403 Standard for Live Fire Training Evolutions* 2012 Edition.

In order to meet the goal of providing a certified, safe, NFPA compliant live-burn facility within a 60 minute drive of 94% of Maine's firefighters, the Fire Commission studied the data from our survey and determined that it would require 11 sites strategically placed across the State. We have obtained cost estimates for the site work and a pre-engineered, model facility that is designed to mimic the actual types of structures found in nearly every Maine community.

Our proposal is to seek funding for a general obligation bond, facility bond, or an annual appropriation to fund a vigorous competitive grant program modeled after the very successful federal level FEMA Assistance to Firefighters Grant Program. Our grant program will build on previous MFSI facility grants with the goal of constructing one of these facilities each year. The Fire Commission will oversee and collaborate with our stakeholders and MFSI on that effort. The grant program will publish guidance and set priorities to assure sites are geographically spread across the State within a 60-minute travel time for Maine's firefighters, and to maximize return on the State's investment by partnering with municipal and private partners to cover the cost of operations and maintenance going forward. The grant program will assign scoring criteria that incentivizes regional collaboration and leverages other available grants and sources of local or regional funding.

Based on our research each facility will cost approximately \$850,000 to construct at 2018 costs. Since construction and material costs have increased approximately 4% annually on average, we have included an escalation factor over the 11 year life of the project which brings the average cost of each facility to \$1,042,127 over 11 years for a total project amount of \$11,463,397.

Examples of the Capabilities & Requirements for Regional Live-Burn Training Facilities:

- Building suitable for training attack and extinguishment of Class A fire. Must be able to provide training in hose line operations & advancement; ventilation; search & rescue; ground ladder operations; and high angle rescue. Prop should be 40' in height for aerial ladder operations.
- Water supply from a pressurized hydrant and a static water source such as a cistern or pond
- Ventilation training prop.
- Forcible Entry training prop.
- Flashover simulator
- Below grade & Confined Space Rescue Training
- A working sprinkler & standpipe system
- Prop suitable for training attack and extinguishment of Class B fires utilizing two hose lines.
- Prop or concrete pad suitable for training and extinguishment of vehicle fires
- Concrete pad or other suitable surface and open area for vehicle extrication, portable fire extinguisher operation and similar training needs such as the MFSI vehicle fire prop.

