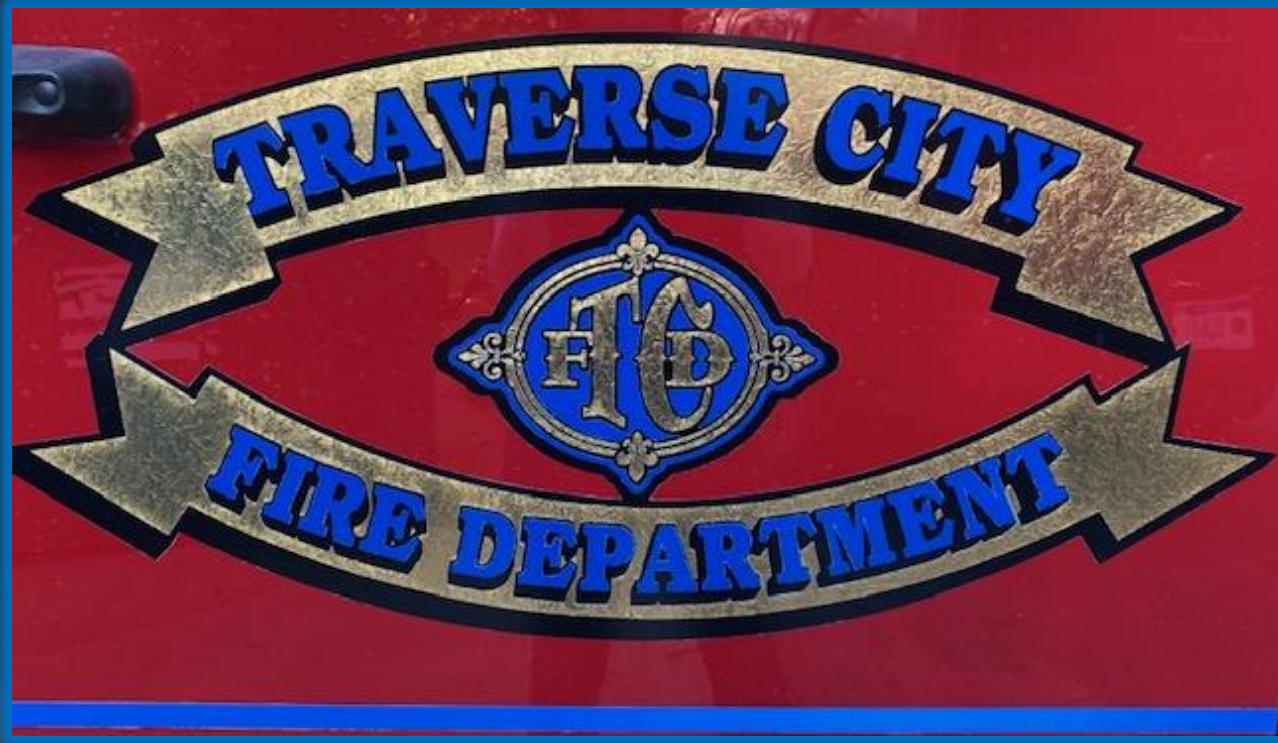


Traverse City Fire Department

2021 Annual Report



Celebrating 145 years of continuous service
to the residents of Traverse City
1876 – 2021



Fire Chief Jim Tuller

Forward from Chief Tuller:

The following pages represent the Traverse City Fire Department 2021 Annual Report. The data and photos will give you a glimpse of where TCFD has been and where we are going in the effort to keep our community safe 24/7/365.

City Fire continues to make adjustments in the area of emergency and day-to-day operations with respect to the pandemic and the continuous stream of related information from our Federal, State and local government and affiliated agencies.

Another area of change we experienced last year, and will continue to experience for the next few years, is the need to continually reconfigure emergency response routes through the City due to the many road and bridge projects completed in 2021 and planned for 2022. In 2023, the reconstruction of Grandview Parkway and East Front Street between Garfield Avenue and Division Street will also be significant. We continue to meet with MDOT, City Staff, and other parties involved to be sure we can respond as quickly and safely as possible to emergency calls for service when these projects are underway.

The number of calls for service that we respond to have increased, and will continue to increase. Contributing factors include the slow increase of the City population, increase in visitors, and an increase in the age of our citizens. In 2019, we responded to 3,187 emergency calls for service. In 2020 we responded to 2,932. As you will see, in 2021, we responded to 3,344.



Fire Chief Jim Tuller

Forward from Chief Tuller, continued:

We have reached the point where it is not safe to continue the practice of sending a fire engine on an emergency call with only a driver through our City. Over the past few years, the increased use of the many forms of non-motorized mobility, traffic calming applications implemented, the increase in motor vehicle traffic, as well as other factors, present a challenge to the safety of our citizens and our fire personnel on a daily basis. To offset this risk, the Fire Department will be requesting the hiring of one additional fire fighter for each of our three Suppression shifts in the upcoming City budget cycle. The intent is to provide a minimum of two personnel in the front seats of our response units to reduce the chances of an accident while traveling to an emergency and also increase the level of service provided once the unit arrives on scene.

We appreciate the support we receive from our citizens and business community, and work hard to provide the level of service expected. Every 24-hour shift we strive to meet these and other expectations through the hard work, commitment, and professionalism our Traverse City Fire personnel bring to the Fire Stations each duty day.

With Best Regards,

Chief Jim Tuller

Mission Statement

“The Traverse City Fire Department is an all-hazards emergency response agency that will provide protection and safety for the public.”

Traverse City Fire Station 1
500 West Front Street
Traverse City MI 49684
(231) 922-4930

Traverse City Fire Station 2
1313 East 8th Street
Traverse City, MI 49686
(231) 922-4932

Fire Chief Jim Tuller
(231) 922-4930 Ext. 2
Jtuller@tcfire.org



Personnel and Station Staffing

Line Staff

- 3 - Suppression Captains
- 3 - Suppression Lieutenants
- 15 – Fire fighter/Paramedics

Administrative Staff

- 1- Chief
- 1- Fire Marshall
- 1- Inspector
- 1- Training Officer
- 1 - Administrative Assistant

Station 1 – Front Street

- 1 Captain
- 2 - 3 Fire fighters

Station 2 – Eighth Street

- 1 Lieutenant
- 1 Fire fighter

Station 3 – ARFF - Airport

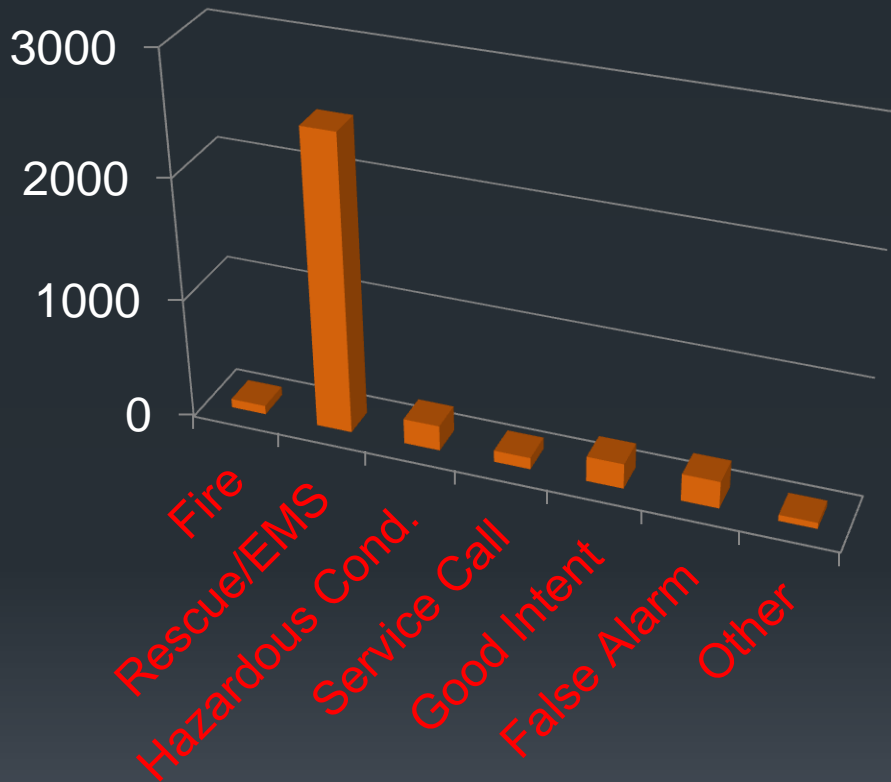
- 1 Fire fighter

Daytime/Weekdays

Chief, Fire Marshall, Inspector,
Training Officer, Administrative
Assistant

2021: By the Numbers

2021 Responses

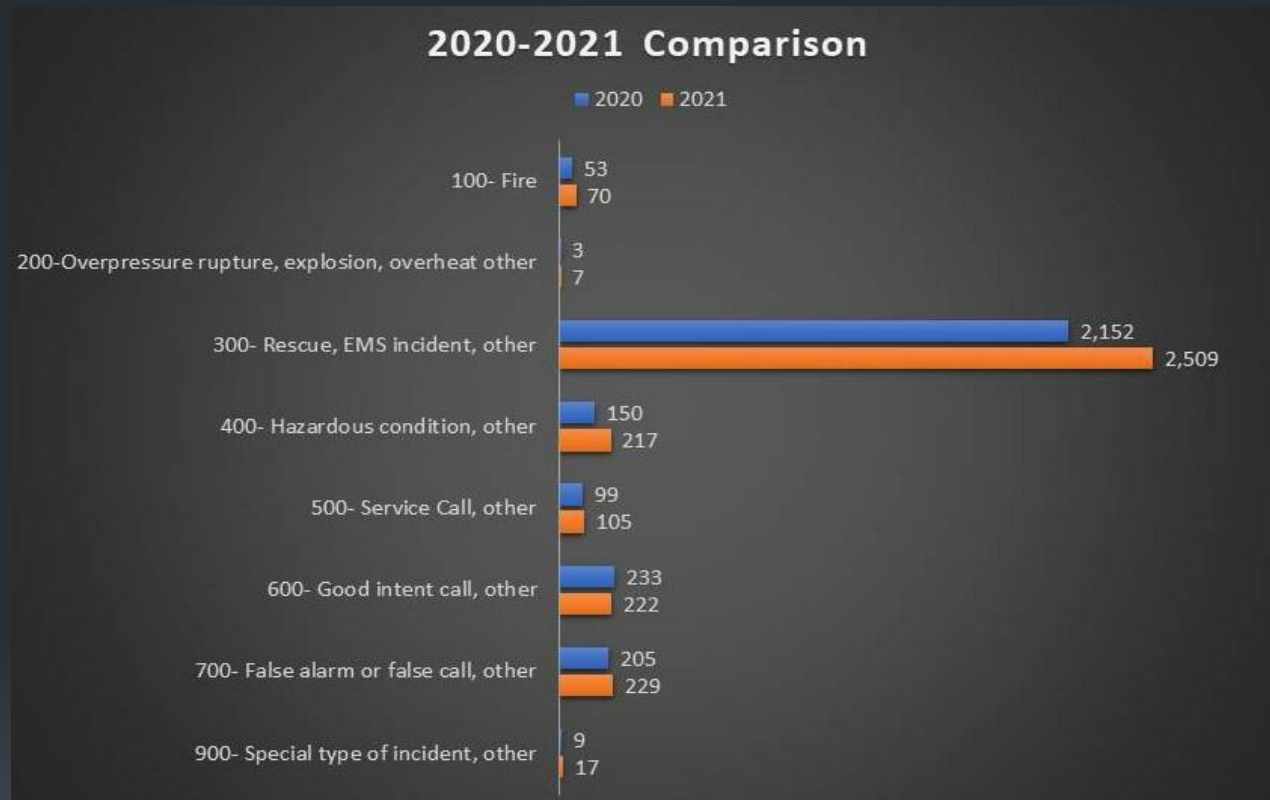


911 emergency calls recorded in 2021:

- Fire – 73
- Rescue/EMS – 2,466
- Hazardous Conditions – 213
- Service Calls – 99
- Good Intent Calls – 311
- False Alarms – 229
- Other - 52

• Total = 3,344

Side by Side: A look at the last two years



- | | 2020 | 2021 |
|--|------|------|
| ■ Rescue and EMS/Medical | 2147 | 2466 |
| ■ Total calls for year | 2932 | 3344 |
| ■ 73% of our responses are Rescue/EMS. | | |

73 fire calls in 2021 : 42 were structure fires

The 1 to 2 and the 3 to 5:

When the alarm sounds at our stations for a house fire, we are up against a clock that began ticking before we were called to respond.

The National Fire Prevention Association (NFPA) reports that a resident has 1 to 2 minutes to safely escape their home once the smoke alarm sounds.

Underwriter's Laboratories report through the many testing processes they employ to understand the science of fires today, that the room where a fire starts will become fully involved in fire in 3 to 5 minutes, then the fire will travel through the building, affecting adjacent bedrooms, the kitchen, dining and living rooms. A fire in the basement is moving up the stairs and into the walls.

All of the equipment and fire trucks we purchase, along with the training we perform, is done keeping the 1 to 2 and 3 to 5 rule in mind.



Photos: (Top and middle) Fire fighters extinguish a residential fire.
(Bottom) Ladder 01 on scene at a commercial structure fire.

Assistance 2021: Mutual Aid

Mutual Aid Given: 41

Mutual Aid Received: 18

Mutual Aid is one of the longest-standing traditions in the fire service. In simple terms, it's helping and being helped by our neighbors. During fires and other emergencies that are too large and/or complex for our on-duty personnel to mitigate, we request assistance from neighboring fire departments through a 2nd Alarm (or 3rd, or 4th) activation through Central Dispatch. Pre-determined fire units and personnel will respond into the City along with other Fire Chiefs to assist our crews and Incident Command who are already hard at work. Likewise, when another fire department requests help, we send a fire unit with personnel and the City Fire Chief to help.

As the adage goes, "There is safety in numbers."



Training: Staying current in ever changing times

- Over 7,000 total department training hours logged were for 2021.
 - Each fire fighter is required 228 hours of Fire related training. This does not include their paramedic license renewals/certification and training in other emergency service disciplines.
- Fire Suppression (Residential, Commercial, Industrial, Wildland)
- Driver's training – all City Fire apparatus.
- EMS – Advanced Life Support
- Hazardous Materials response and stabilization
- ARFF (Aircraft Rescue Fire Fighting)
- Ice Rescue – Water Rescue (open water and swift water)
- Active Shooter/Assailant - Mass Casualty Incident
- High Angle Rope/Confined Space Rescue
- Mental & Physical Resiliency/Peer Support
- Incident Commander Certification Training
- 22 in-house programs delivered 147 individual Continuing Education Credits

Self Contained Breathing Apparatus (SCBA) Training



Smoke from today's fires is more deadly than in past decades, so proficiency with the SCBA requires recurrent training, which is not only required, but essential for the fire fighter to survive and also for performance of life saving skills such as search and rescue.

This training also includes rescuing one of our own with a Rapid Intervention Crew (RIC) Air Pack.

Photo: FF's Snay and Funk utilize the "Buddy Breathing System" with Lt. Peron during training as FF McKerchie and Captain Ball observe and offer guidance.

“Drain the Bay” Collaborative Training

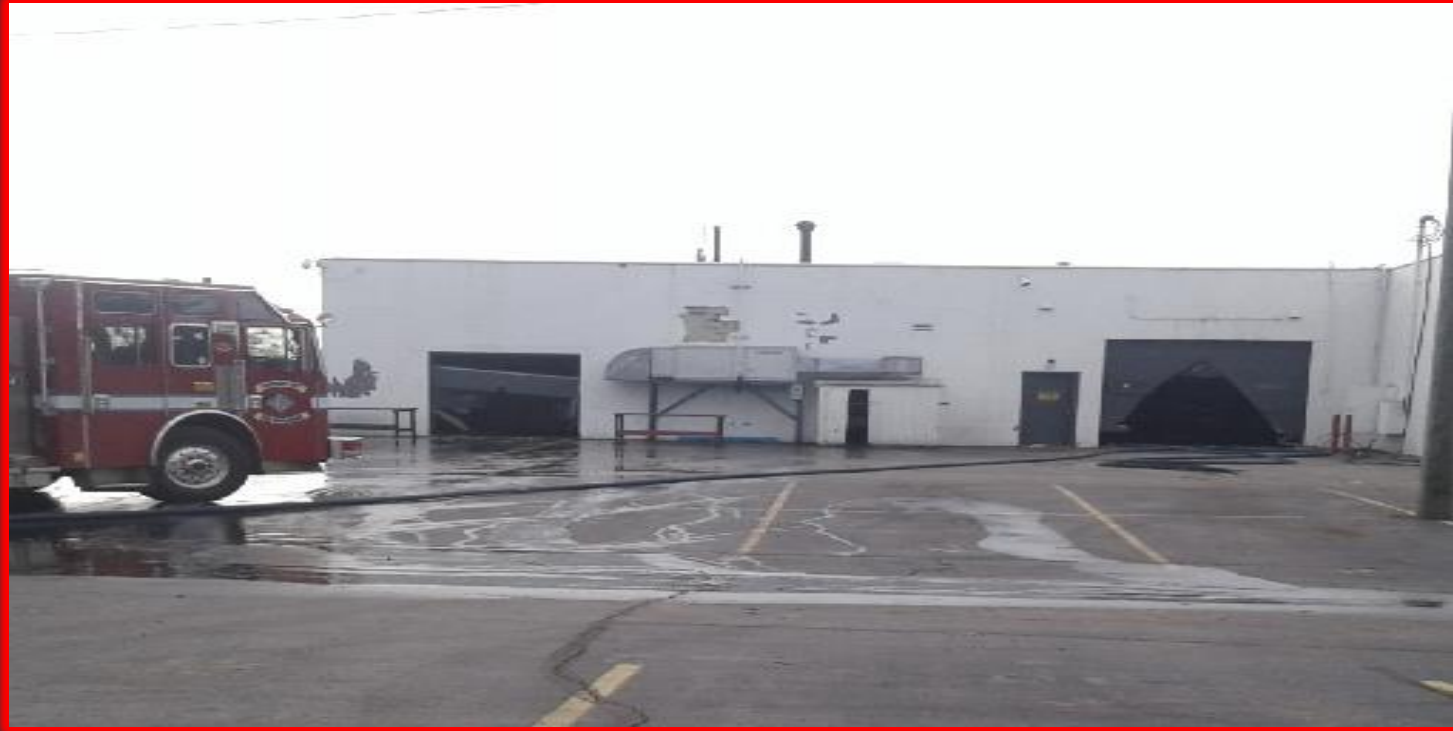
Traverse City Fire Department collaborated with several area agencies in 2021 for “Drain the Bay”, an opportunity to share knowledge from various trainings, such as Nozzle Forward, and information from Fire Department Instructor’s Conferences. The goal: apply more water with less physical stress to those handling the hoses during a fire.

This training corresponds with the recent replacement of all hoses and nozzles used by TCFD.

50 participants from 12 local agencies attended Drain the Bay, taking the knowledge gained back to share with their peers.

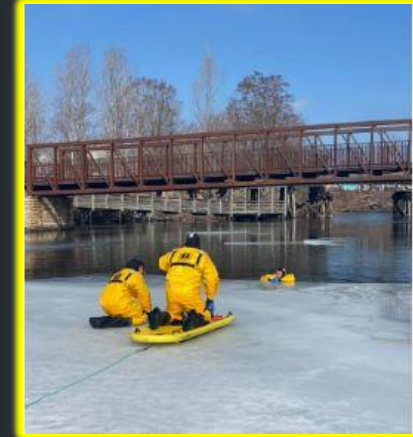


Commercial Building Fire Training



It is infrequent that we are able to conduct training in a large commercial structure. Prior to the demolition of the Serra Toyota dealership building at Garfield and Boon Streets, Hallmark Construction and Serra agreed to allow TCFD to access the building for any type of training necessary, including destructive and non-destructive forcible entry, hose line advancement, large water flows, ventilation training, and search and rescue. TCFD hopes to have more opportunities forthcoming to train in commercial structures. For more information on donating a structure for training use, please visit: <https://www.traversecitymi.gov/vacantbldg.asp>

Specialized Training



Top, L-R: Rescue Task Force/Active Assailant Training (2); Open water dive class; Ice rescue training on the Boardman.



Bottom, L-R: Vehicle Extrication, Trench Rescue, High Angle Rescue (Bay Area Technical Rescue).

Rescue 1 Transport Record

City Fire Rescue 01 is an Advanced Life Support unit that transported 145 patients to the Munson Medical Center Emergency Department in 2021. In 2020, Rescue 01 transported 31 patients to MMC.

In the Fall of 2019, City Fire and City Staff began the process of working with consultant TriData, LLC to study the feasibility of City Fire becoming the primary transport service to the citizens of Traverse City.

Work continues to provide an answer to the question “Is it feasible for Traverse City Fire Department to hire additional personnel and purchase two additional transport units to provide this ALS transport service 24/7 within the City limits?”

It is expected for this subject to come before the City Commission in 2022.



New Engine 01 – coming soon!

In 2021, the City Commission approved TCFD to order a new Engine for Station 01 using funds planned for and set aside for many years for this purpose. The new Engine 01 was ordered, and as of January 2022 was in the process of being built by Pierce in Appleton, WI.

The new Engine 01 is a 2021 Pierce PUC (pump under cab) Velocity Engine. It has a 750 gallon water tank capable of pumping 1500 GPM (gallons per minute)!

Engine 01 will be outfitted with battery operated extrication tools. It will also be ALS (Advanced Life Support) capable, as Engine 02 is.

Once completed, crew members will go to Appleton to pick up Engine 01 and drive it back to Traverse City, where it will be placed into service at Fire Station 01. The current Engine 01 will move to back up status, and our 1994 Engine 03, the current back up Engine, will be declared surplus and sold.



Ladder 01



**LADDER
1**



Ladder 01 is a 2004 KME AerialCat Ladder truck that has a 100 foot tower ladder, designed for providing combined 2,000 gallons per minute (GPM) discharged through 2 nozzles from an elevated position.

The ladder on the truck is wide and safe, designed to be used to move a civilian down it to remove them from danger.

Ladder 01 can also be used to provide a safe anchor point to attach rescue ropes when a safe anchoring point can not be found on scene.

Ladder 01 is the only truck of its kind in the Grand Traverse area. We are making plans for the scheduled replacement of this 18-year-old truck to take place within the next 2-3 City budget cycles.

Fire Service and the Friendly Skies - ARFF

At Cherry Capital Airport is the Aircraft Rescue Fire Fighting (ARFF) Station, which is staffed 24 hours a day, 7 days a week with one Traverse City fire fighter. In 2021, 154 incidents were responded to and covered, which included EMS services, aircraft incidents/potential incidents, system malfunctions, false alarms, smoke/odor reports, and combustible/flammable liquid conditions.

ARFF 2021 Responses

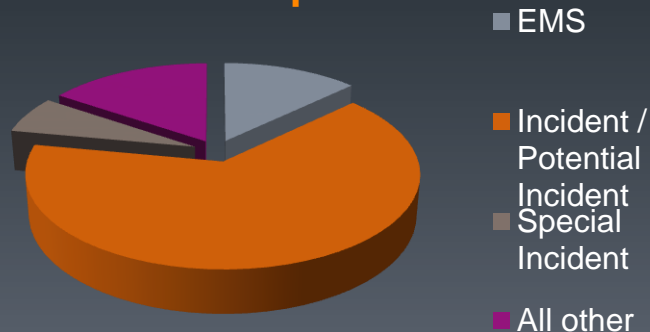
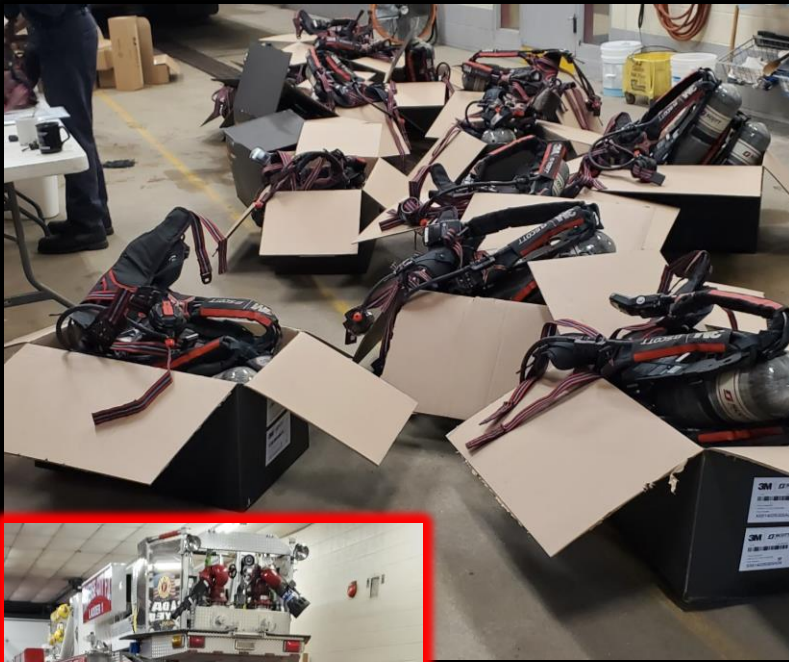


Photo: Sunrise at Cherry Capital Airport provides a stunning backdrop for the ARFF engine standing by.

Grants



In 2021, as part of a collaborative effort with Long Lake, Paradise, Whitewater and Almira Townships, the Traverse City Fire Department received funding from the Assistance to Fire Fighters Grant (AFG) through the Federal Emergency Management Agency (FEMA). This grant provided partial funding for the purchase of 32 new Air Packs and accessories for our fire fighters.

The purchase of the Air Packs and accessories was initially planned as part of the 2022/2023 Capital Improvement Project at a cost of \$224,000. Thanks to the grant, the cost match required of that was only 10%, equaling \$22,400. By utilizing this grant, the Fire Department was able to save our taxpayers over \$200,000 through the City's General Fund budget.



Top: Air Packs arrive at Fire Station 01.

Bottom Left: Captain Fritz, FF Funk, and Lt. Smielewski test out the new packs.

Bottom Right: Lt. Smielewski wearing a new Air Pack.

Partnering up: Agencies TCFD coordinates with

- FEMA – Federal Emergency Management Association
- USFA – United States Fire Administration
- NFA – National Fire Academy
- MiOSHA – Michigan Occupational Safety and Health Administration
- MSPFIU – Michigan State Police Fire Investigation Unit
- FBI – Federal Bureau of Investigation
- DHS – Department of Homeland Security
- MPSCS – Michigan Public Safety Communication System
- UL – Underwriters Laboratories
- NFPA – National Fire Protection Association
- EGLE – Environment, Great Lakes and Energy
- EPA – Environmental Protection Agency
- FAA – Federal Aviation Administration
- USCG – United States Coast Guard
- DNR – Michigan Department of Natural Resources
- MDHHS – Michigan Department of Health and Human Services
- Munson Occupational Health and Medicine
- FCSN – Fire Fighter Cancer Support Network
- MPFFU – Michigan Professional Fire Fighters Union
- MDOT – Michigan Department of Transportation
- GTSO – Grand Traverse Sheriffs Office
- APS – Adult Protective Services
- ATS – Addiction Treatment Services
- TCPD – Traverse City Police Department
- TCLP – Traverse City Light and Power
- DTE Energy
- Lambda Energy Resources
- Michcon – Michigan Consolidated Gas Company
- GTCES – Grand Traverse County Office of Emergency Management
- GTC911 – Grand Traverse County 911/Central Dispatch
- TCAPS – Traverse City Area Public Schools
- GTACS – Grand Traverse Area Catholic Schools
- Northwest Education Services
- Montessori Schools
- NSP – National Ski Patrol
- ARC – American Red Cross
- Goodwill of Northern Michigan
- Safe Harbor of Traverse City
- Traverse Bay Area Task Force on Hoarding
- MFSIA – Michigan Fire Service Instructors Association
- MFIS – Michigan Fire Inspector Society
- MI-IAAI Michigan Chapter of the International Association of Arson Investigators

The Right Tools for the job – evaluating our equipment

When a job is at hand, the right tools are required to complete it successfully, and the fire service is no different. It is critical to utilize the correct hoses and nozzles to get the maximum amount of water on a fire and extinguish it as quickly as possible.

Our three Fire Suppression crews field tested several different hoses and nozzles to determine which would be the most effective at fighting fires.

The hoses and nozzles used by TCFD move up to 300 gallons per minute and push as much as 100 lbs back pressure onto the fire fighter – which makes correct training in body mechanics and handling essential.

Photos: (top) – Lt. E. Jackson & Captain Rueckert test a hose and nozzle. (bottom) - Crew One observes as E. Jackson and Rueckert raise the flow.



Our personnel work out every shift. Whether it is cardio, weight lifting, or during fire fighter skills drills in full turnout gear with Air Packs on, they are ready to perform at 100% when the alarm sounds.

Physical Fitness

We have a Health Awareness Program to assist in Emergency Responder Mental Health.

The fire service is prone to exposure to cancer causing agents within the line of duty. The following are statistics from the Fire Fighter Cancer Support Network (FCSN):

- Cancer caused 66% of fire fighter line-of-duty deaths between 2002 and 2019.
- Fire fighters have a 9% higher risk of being diagnosed with cancer and a 14% higher risk of dying from cancer than the general US population.
- Fire fighters have a 100-200% risk of being diagnosed with 10 different specific types of cancer identified through multiple, multi-year studies as reported by the FCSN.



Fire Department Instructor's Conference



In August of 2021, four of our fire fighters attended the Fire Department Instructor's four day Conference in Indianapolis and were able to participate in HOT (Hands On Training).

Topics covered included hose line advancement, search and rescue, forcible entry, ventilation, commercial fire ground operations, and fire fighter survival techniques.

This conference allowed our attendees to return and share what they had learned with the rest of the department.

Photos: Fire Department Instructor's Conference 2021 at the Wayne Township, IN Fire Department Training Facility. Fire fighters learn and apply hose handling technique, hose line advancement, and nozzle work.

Plan Reviews: 174

Vacation Home Rental/Tourist
Home Inspections: 96

Construction Inspections: 234

Code Compliance Inspections (to
include Special Events): 46

*Due to construction work slowing and stoppage
during the pandemic, these numbers remain
reduced from normal.

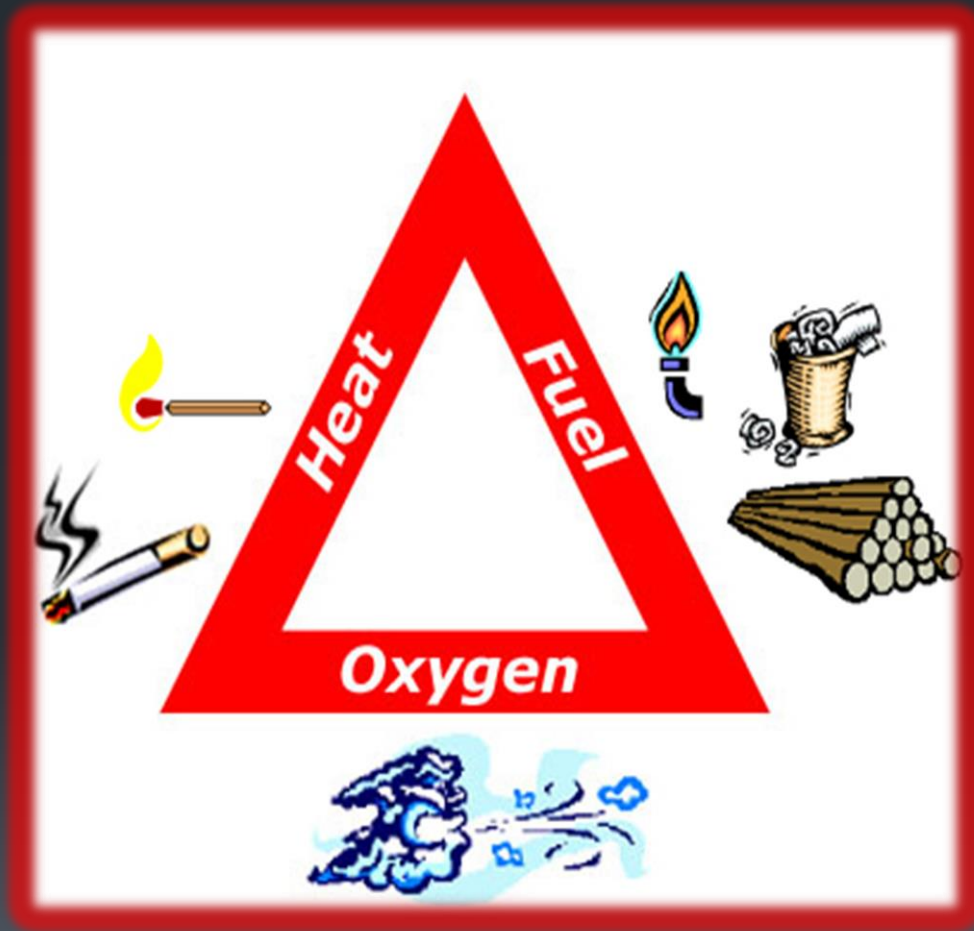
Inspections/Reviews



Public Education

Unfortunately, the 2021 Open House was again cancelled due to the pandemic. Training that was able to be provided under restrictions is as follows:

- Fire Extinguisher Training: 30 hours
 - 10 Events
 - 75 attended
- Public Education: 20 hours
 - 5 Events
 - 100 attended
- Youth Fire Setter Intervention
 - 3 Interventions



Community Involvement: 9/11 - Honoring the Fallen



September 11, 2021 marked 20 years since 2,977 lives were lost in the attacks on the United States. Of those killed, 343 were fire fighters.

The Traverse City Fire Department honored the fallen by participating in a stair climb in full Fire fighter protective gear. Each fire fighter climbed over 90 flights of stairs, the same number of flights climbed by fire fighters in the World Trade Center's Twin Towers.

Photo: Crew members take turns climbing 90 flights of stairs to honor those fire fighters lost.

Community Involvement: Christmas Toy Program

The annual Toy Drive program was handled by the fire fighters on duty in 2021. It began in the mid 1940's during WWII as an effort to help families at home affected by the war, and is a tradition of community service that is proudly continued.

Toys were provided for 30 local families this past Christmas as a result of the help we received from the students of Immaculate Conception & Central Grade Schools and private donors.

Excess toys were donated directly to the families who were victims of devastating tornadoes in Kentucky during late 2021.

(Pictured is Santa aboard the Local 646's 1936 American LaFrance fire engine.)



Looking back - 2021 TCFD Aspirations

- City Fire primary ALS response and transport project – **WIP**
- Regular local live fire training – **Postponed - COVID**
- Develop Special Team response with area fire departments – **WIP**
- Participate in GT Area Youth Fire-Setter mitigation group – **WIP**
- GIS City Fire map viewer – **DONE**
- Joint training exercises with GT area fire departments – **Postponed - COVID**
- Fire hydrant identification and gpm marking program – **WIP**
- Development of internal Company Officer training program – **WIP**
- Increase internal training program provision and FD self-sufficiency – **WIP**
- Administrative Support – **DONE**
- Contract with new EMS medical/fire billing service – **WIP**
- Explore cost recovery options for City Fire services provided – **WIP**
- Develop new contract between the City and Mobile Medical Resources – **WIP**
- Upgrade staffing to 2 City Fire personnel for each front-line response unit – **WIP**
- Maintain ISO Classification 03 status – **DONE**
- Leverage technology to strengthen data storage and retrieval capability – **DONE**
- Leverage technology to continue consistent continuing education and training – **DONE**
- Increase Internship program for college students – **WIP**
- Implement Lexipol Policy management software – **WIP**
- Implement D4H Inventory Management software – **WIP**

Looking Ahead - 2022 TCFD Aspirations

- City Fire primary ALS response and transport project. **Current Project**
- Regular local live fire training to meet ISO requirements. **In Planning**
- Develop Special Team response with area fire departments. **Current Project**
- Explore cost recovery options for City Fire services provided. **In planning**
- Develop new contract between City and Mobile Medical Response **Current Project**
- Upgrade staffing to 2 City Fire personnel for each front-line response unit. **Current Project**
- Develop replacement timeline and plan for current City Ladder 01. **Current Project**
- Develop replacement timeline and plan for current City Marine 01. **Current Project**
- Maintain ISO classification 03 status. **Current Project**
- Firefighter Cancer Awareness/Prevention. **Current Project**
- Participate in GT Area Youth Fire-Setter mitigation group. **Current Project**
- Develop joint training exercises with GT Area fire departments. **Current Project**
- Fire hydrant identification and gpm marking program. **In Planning**
- Development of internal Company Officer training program. **In Planning**
- Increase internal training program provision and FD self-sufficiency. **Current Project**
- Increase internship program for college students. **In Planning**
- Retool new firefighter recruitment procedure and process. **Current Project**
- Increase outreach and education efforts with residential and business community. **In Planning**

TRAVERSE CITY FIRE DEPARTMENT

A proud tradition in service for 145 years



Traverse City Fire Department,
circa 1893.



Traverse City Fire Department,
circa 2017.

When we look back on the beginnings of our department in 1876, we wonder what the founding fire fighters of Traverse City would think of all the advancements modern technology has brought. We are sure they would marvel at the Engines and Ladder trucks currently in use, the turnout gear made of hi-tech flame resistant material (no longer heavy black rubber!), and mostly, be amazed at the incredibly widened scope of services offered; from Fire Suppression to EMS calls and transports; water, ice, confined space, high and low angle rescue – we do it all. In spite of the differences from 1876 until present, one thing remains the same – our commitment to caring service for the residents of Traverse City. And that is a commitment to be counted on; Then, Now, and in the Future.