

# **Barre Fire Department**

## **2019 Year End Report**

### **Mission Statement:**

The mission of the Barre Fire Department is to minimize the loss of life, property, and the environment from fires, natural disasters, hazardous materials incidents, and life threatening situations. This is achieved through fire suppression, ALS level emergency medical response, disaster management, fire prevention, and public education, provided by a dedicated and well trained force.

### **2019 Highlights:**

2019 turned out to be the busiest year on record for emergency responses with the Department responding to 1,243 calls for service. In July the Department was able to increase its station staffing from 5-9pm 7 days a week, The Department now has station staffing 7 days a week from 7am-9pm with a FF/Paramedic and FF/EMT allowing the ambulance to respond immediately with a crew when a medical emergency is received and provides additional manning for fire responses. This increase in staffing has led to a reduction in response time which means that the residents of Barre are receiving emergency care quicker when they need an ambulance or fire apparatus.

On October 4<sup>th</sup>, the Department took delivery of the New Engine 4, a 2019 Pierce Enforcer pumper that replaced the 1999 Pierce Saber pumper. After receiving the initial factory training the new Engine officially went into service, on October 7. Within minutes of going into service E4 responded to its first building fire, when an electrical fire in the walls broke out on Vernon Ave. An official dedication ceremony took place on October 22 at the Henry Woods building. This is the first New Fire Engine that the Town purchased in 20 years

During the early morning hours on October 17, the Town was hit by a devastating wind storm that caused major damage and power outages across Town. The Wind storm challenged the mettle of the Department with multiple simultaneous emergency incidents and very limited road access due to downed power lines and trees. As expected, the Department rose to the occasion and responded to 43 emergency incidents in a 24 hour period ranging from smoke in the building, fire alarms, EMS calls, MVAs, and downed powerlines. At one point during the storm all Barre Fire and EMS Apparatus were out on separate emergency calls. The Department was able to handle all of the responses without having to call Mutual Aid. This is a true testament to the dedication and training of the members of the Department.

## **Staffing:**

The Barre Fire Department responds out of 3 Fire Stations, and operates a fleet of 3 Engines, 1 Engine-Tanker, 1 Aerial, 1 Heavy Rescue, and 3 Forestry Fire Units, and 2 ALS ambulances. The Barre Fire Department is comprised of 45 members and is commanded by a Fulltime Chief. The Department is comprised of 1 Deputy Fire Chief, 1 Assistant Chief, 2 Captains, 4 Lieutenants, and call 40 Firefighters / EMTs. In addition to the call force the Department employs 1 Fulltime FF/Paramedic, 2 Fulltime FF/EMT, 1 Fulltime Fire Prevention Officer, and 10 per diem Paramedics.

The Fire Department is a primarily on call service meaning that members are called in when an emergency is dispatched and are not at the station on duty. Being an on-call Fire Department presents a few challenges when it comes to providing emergency response. When an emergency call is received, an emergency alert is sent out via emergency alerting pagers that each member of the Department carries. When an emergency alert is received, the Firefighters from the Department must stop whatever they are doing and respond to their respected station, where they then have to man one of the Departments fire apparatus and respond to the Emergency. This results in an average response time of 8 minutes from 1<sup>st</sup> 911 call to the first apparatus arriving on scene. The national standard is 6 minutes. This response time would be much greater if not for the fact that the town is able to operate 3 fire stations which dramatically reduces response times especially with the fact that the town is 45 square miles and the Department has to make long response drives

As with previous years the Department has continued to struggle with retaining call members. It is becoming harder for members to commit to the increased training requirements and call volume, with members having to work hard to balance their personal, and work lives with their Department responsibilities.

Currently 71% of all the Departments responses are within the 12 hour daytime period between 6am-6pm, the same time period that the least amount of members are able to respond. The Department staffs 1 FF/Paramedic at the Fire Station 24 hours a day 7 days a week. Effective July 1, there is also a FF/EMT or EMT at the station with the paramedic providing daytime staffing 7 days a week from 7am-9pm. From 9pm-7am 7 days a week, 2 members are paid on call from their home for ambulance coverage. This staffing allows for coverage of 1 ambulance call, however the number of simultaneous calls is growing exponentially and coupled with the lack of daytime call members is leading to a heavy reliance on the use of the mutual aid system. See the response section for more details. Additional daytime staffing will be needed to handle the daytime responses where the call force is unable to respond. In 2019 the number of mutual aid ambulance calls slightly increased however the Department was able to staff the 2<sup>nd</sup> ambulance more times than in 2018 due to the increase in the number of EMT's on the Department roster. The increase in mutual aid was mainly due to ambulance breakdowns. The Department is working towards trying to get EMT training for its members to increase the number of available EMT's to staff the 2<sup>nd</sup> ambulance when simultaneous calls occur. This has not been something that the Department has been able to accomplish due to the cost associated with EMT training.

## Responses:

2019 was a record setting year for the Barre Fire Department, responding to 1,243 calls for service, a 16.5% increase from 2018.

Of the 1,243 Fire Department responses made in 2019, 20 were for Building Fires, a decrease of 4 building fires from 2018. Those 20 fires resulted in a total dollar loss of \$158,500, however the Department was able to save over 10 million in personnel and property value from damage due to the mitigation efforts of the Firefighters, the Department equipment, and the Fire Apparatus. 3 Civilians and 1 Firefighter were injured in 2019.

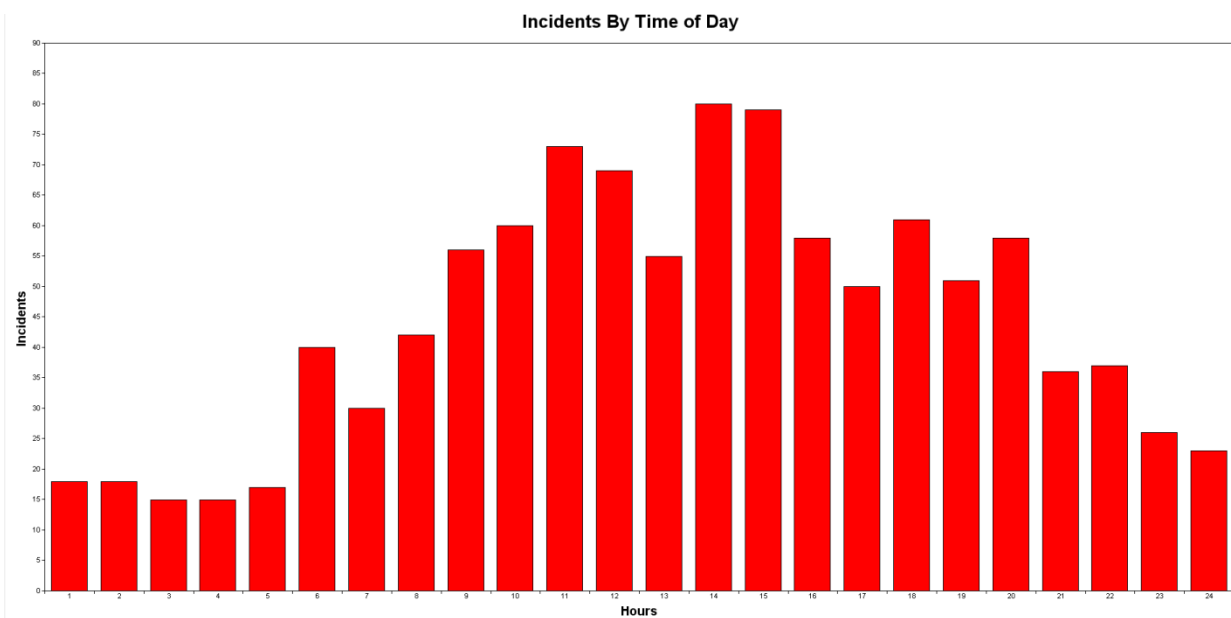
The Department did not respond to any large fires in 2019. All of the building fires were held to a Working Fire assignment, and did not go to 2<sup>nd</sup> alarms. This was due to working smoke alarms alerting residents quickly to the fires which in turn caused a quick response by the Department knocking the fires down quickly.

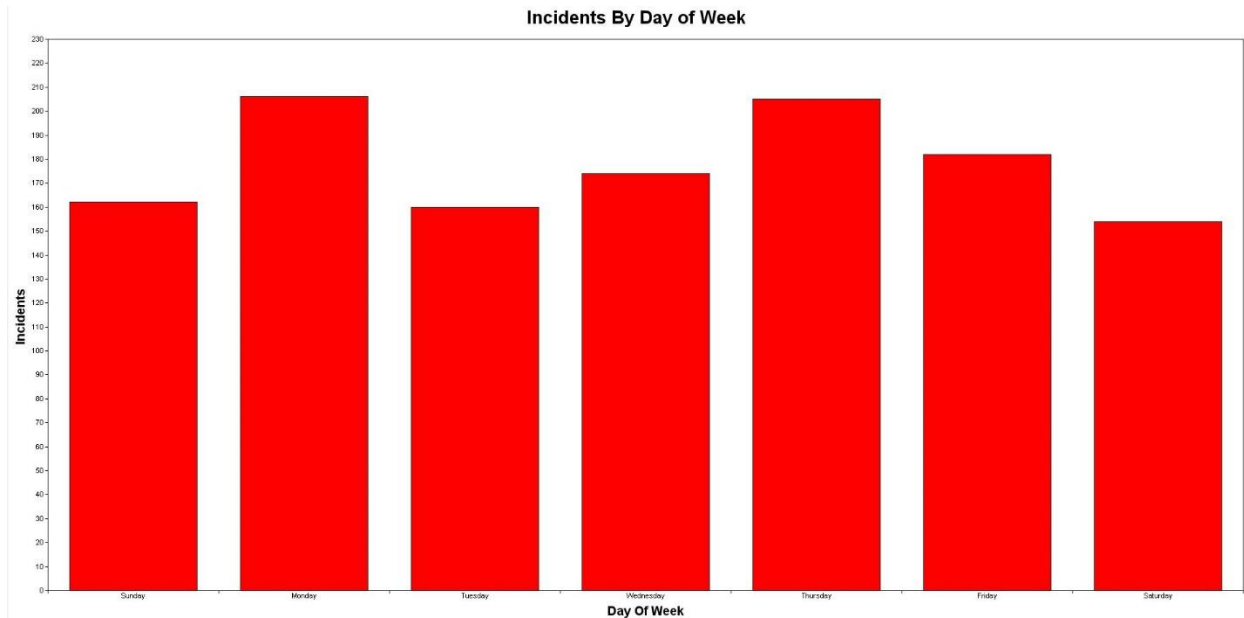
The Department responded to 3 Building fires where the smoke alarms alerted the residents saving their lives. In 2 of those fires, 3 civilians were injured, 2 at 1 fire and 1 at another, escaping the building.

Major Incident Type	# of Incidents	% of Incidents	% Change from 2018
Fires	44	3.5	+7.3
Overpressure / Rupture	2	0.2	+100
Rescue & EMS	858	69	+14
Hazardous Conditions	103	8.3	+35.53
Service Calls	122	9.8	+27.5
Good intent Calls	24	1.9	0
False Alarms / False Calls	84	6.8	+21.7
Severe Weather / Natural Disaster	6	0.5	+500
Special Type / Complaint	0	0	-100
<b>TOTAL</b>	<b>1,243</b>		<b>+16.5</b>

Incident Type	Occurrences	Percent
Building fire	20	1.6
Cooking fire, confined to container	2	0.2
Chimney or flue fire, confined to chimney or flue	6	0.5
Passenger vehicle fire	1	0.1
Forest, woods or wildland fire	3	0.2
Brush or brush-and-grass mixture fire	9	0.7
Outside rubbish fire, other	1	0.1
Outside rubbish, trash or waste fire	1	0.1
Outside storage fire	1	0.1
Explosion (no fire), other	2	0.2
Medical assist, assist EMS crew	1	0.1
Emergency medical service incident, other	1	0.1
EMS call, excluding vehicle accident with injury	809	65.1
Motor vehicle accident with injuries	32	2.6
Motor vehicle accident with no injuries.	3	0.2
Lock-in (if lock out , use 511 )	1	0.1
Search for person on land	1	0.1
Search for person in water	1	0.1
Extrication of victim(s) from building/structure	1	0.1
Extrication of victim(s) from vehicle	4	0.3
Removal of victim(s) from stalled elevator	1	0.1
High-angle rescue	2	0.2
Extrication of victim(s) from machinery	1	0.1
Hazardous condition, Other	2	0.2
Gasoline or other flammable liquid spill	2	0.2
Gas leak (natural gas or LPG)	3	0.2
Oil or other combustible liquid spill	1	0.1
Toxic condition, Other	1	0.1
Chemical hazard (no spill or leak)	1	0.1
Refrigeration leak	1	0.1
Carbon monoxide incident	16	1.3
Electrical wiring/equipment problem, other	6	0.5
Overheated motor	1	0.1
Power line down	28	2.3
Arcing, shorted electrical equipment	6	0.5
Biological hazard, confirmed or suspected	3	0.2
Building or structure weakened or collapsed	1	0.1
Aircraft standby	1	0.1
Vehicle accident, general cleanup	30	2.4
Person in distress, other	10	0.8
Lock-out	10	0.8
Water problem, other	5	0.4
Water evacuation	12	1.0
Water or steam leak	2	0.2
Smoke or odor removal	3	0.2
Animal rescue	1	0.1
Public service assistance, other	1	0.1
Assist police or other governmental agency	10	0.8
Public service	5	0.4
Assist invalid	34	2.7
Unauthorized burning	16	1.3
Cover assignment, standby, moveup	13	1.0
Good intent call, other	2	0.2
Dispatched & canceled en route	12	1.0
No incident found on arrival at dispatch address	1	0.1
Authorized controlled burning	5	0.4
Smoke scare, odor of smoke	3	0.2
EMS call, party transported by non-fire agency	1	0.1
Municipal alarm system, malicious false alarm	1	0.1

System malfunction, other	1	0.1
Sprinkler activation due to malfunction	3	0.2
Extinguishing system activation due to malfunction	2	0.2
Smoke detector activation due to malfunction	5	0.4
Alarm system sounded due to malfunction	6	0.5
CO detector activation due to malfunction	4	0.3
Unintentional transmission of alarm, other	26	2.1
Sprinkler activation, no fire - unintentional	3	0.2
Extinguishing system activation	1	0.1
Smoke detector activation, no fire - unintentional	11	0.9
Detector activation, no fire - unintentional	5	0.4
Alarm system activation, no fire - unintentional	14	1.1
Carbon monoxide detector activation, no CO	2	0.2
Wind storm, tornado/hurricane assessment	2	0.2
Lightning strike (no fire)	4	0.3
<b>TOTAL</b>	<b>1243</b>	<b>100.0</b>





## EMS:

The number of Rescue calls the Department responded to increased by 14% in 2019 with 858 responses. The rescue incidents ranged from EMS calls, motor vehicle accidents, technical rescues, missing persons, pedestrian accidents, stalled elevators, machinery rescues, vehicle extrications, and water rescues. EMS calls account for a large portion of the Rescue responses increasing 17.4% in 2019, from 689 EMS responses in 2018 to 809 EMS responses for 2019. The Department currently provides ALS level care 24 hours a day 7 days a week to the residents of Barre and New Braintree. Barre Fire currently has a contract with the Town of New Braintree to provide the primary ambulance service. Being geographically located a far distance from the major hospitals in Worcester, ALS care is necessary in order to ensure that people receive the appropriate pre-hospital care when they are having a medical emergency leading to many successful outcomes.

The Department also saw an increase in back to back calls which puts a major stress on the local emergency resources. Like all small towns across the Commonwealth, it is becoming increasingly harder to attract and retain call EMTs and paramedics. This makes responding to numerous medical calls simultaneously difficult. However in 2019 the Department was able to respond to more 2<sup>nd</sup> simultaneous calls than in 2018 due in part to the increased station staffing. However mutual aid ambulance request increased in 2019 mostly due to having both ambulances broken down requiring automatic mutual aid. The increase in staffed 2<sup>nd</sup> medical calls, increased the EMS billing receipts income which is used to offset the EMS operating budget.

At one point in January both Ambulances were out of service due to mechanical failures and breakdown leaving the town with no working ambulances. Rutland Fire was gracious enough to let us borrow there back up ambulance so that we would have at least 1 serviceable ambulance with which to respond to EMS calls, which the Department used for over a week before 1 of the Barre ambulances were repaired.

Mutual aid ambulance requests:

	2019 Requests	2018 Requests	% Change
Primary Response	13	18	-5%
ALS Intercepts	31	27	-25%
2,3,4 <sup>th</sup> simultaneous response	72	61	-25%
2 <sup>nd</sup> Call Intercepts	13	8	
<b>TOTAL</b>	<b>116</b>	<b>108</b>	<b>-28%</b>

ALS intercepts means that a Barre ambulance transported a patient to the hospital, however the patient required ALS level care and the Department was not able to provide a paramedic to provide that care so a mutual aid ALS ambulance responded whose paramedic got into the back of Barres ambulance and continued transport. For 2019 this request increased due to the fact that Barre members were able to staff 2<sup>nd</sup> simultaneous ambulance calls at the BLS level. The Department only has 1 paramedic that lives in Barre and is able to respond from home when not on duty.

### **Fire Prevention:**

Starting on July 1, 2019 the Fire Prevention Officer, Captain James Divirgilio's position was increased to 40 hours per week from 30 to meet the fire prevention demands being placed on the fire Department from the State and National fire codes. Captain Divirgilio who is constantly furthering his education and training also became credential in the Commonwealth as a Fire Prevention Officer 2, the highest credentialed fire prevention level in the Commonwealth.

For 2019, the Department conducted 289 Inspections and issued 185 Permits.

TYPE	INSPECTIONS CONDUCTED	PERMITS ISSUED
Annual Inspections	27	
Oil Burner / Oil Tank	28	32
Fire Drill	5	
Fire Safety	23	
Follow-Up	1	
New Construction	6	6
Plan reviews	1	

Propane Tank	12	12
Quarterly Inspection	22	22
SAFE Fire Education	6	
Smoke Detector Installation	25	
Smoke Detector 26F	113	102
Sprinkler Testing	1	1
Tank Removal	1	1
Tank Truck	5	5
Underground Tank	4	4
<b>TOTAL</b>	<b>289</b>	<b>185</b>

This list does not include fire prevention duties that were performed during emergency responses by the responding firefighters and fire officers. It also does not represent the phone calls, plan reviews, and station visits by residents and contractors with fire prevention questions or concerns.

**Fire Education:**

Barre Fire once again was able to conduct fire education for the Ruggles Lane Elementary School students during the month of October. This year Barre Fire was able to use the brand new Fire District 8 SAFE (Student Awareness of Fire Education) fire education trailer. The SAFE trailer is a 40 foot RV trailer that is setup and designed to simulate real fire situations that would rise in a home. The trailer is interactive and allows the students the ability to react to the scenarios that the Department members create giving them the ability to react in real time, in a controlled safe environment. This year Barre Fire was able to use the SAFE trailer with all the Ruggles Lane Students in grades 1-6, with each grade receiving age specific fire education training in the SAFE trailer. The Ruggles Lane students in Pre-k – K received their own fire education program which did not include the SAFE trailer due to the age levels of the students. In addition to the educational programs at Ruggles Lane, the Department also participated in numerous fire education events with the many youth groups and child organizations within town throughout the course of the year. Overall the Department was able to conduct Fire Education training to over 650 Students throughout the course of the year

Captain Divirgilio was able to obtain a SAFE grant from the Department of Fire Services in the amount of \$4,154 which the Department used to fund the Fire Education program.

**Apparatus:**

The Fire Departments fleet of Apparatus are aging and in need of serious replacement. The average age of the Fire Departments front line Fire Apparatus is 23.5 years old. The national NFPA standard recommends that fire apparatus be removed from front line service and placed in reserve status once they become 15 years old.



In October the Departments inspection and response unit Car 2 a 2005 Chevy Trailblazer went permanently out of service due to severe frame rot. Car 2 is a vital piece of Department equipment and is used to respond as the run around errand car and inspection vehicle for the Fire Inspector. Car 2 also responds to medical calls to assist the ambulance and is used to swap out the Paramedic for an EMT basic during BLS level calls. This keeps the paramedic in Town for 2<sup>nd</sup> EMS calls ensuring the best EMS coverage for the residents. Without Car 2 this does not happen.

At the special town meeting in December 2018, voters authorized the replacement of Fire Engine 4 which suffered from severe body corrosion and rot. Engine 4 a 1999 20 year old Engine, served the town faithfully saving millions of dollars from fire loss. The Old E4 suffered a mechanical failure and went permanently out of service in September leaving the Department down an Engine. The new Engine 4 was custom built for Barre by Pierce MFG. in Appleton WI. The truck was delivered in October and after initial factory training went into service on October 7. Within minutes of going into service, the new Engine 4 responded to its first fire on Vernon Ave in South Barre. The new Engine 4 has been a major boost to the Departments firefighting capabilities and will service the town well over the next 25 years.

In January Ambulance 2 suffered a major engine and suspension failures resulting in over \$15,000 worth of repairs to bring the ambulance back into service. A2 was out of service for most of January resulting in the Department only operating 1 Ambulance. This resulted in an increased use of mutual aid for 2<sup>nd</sup> and 3<sup>rd</sup> EMS calls. A1 also suffered a serious mechanical breakdown in January leaving Barre with no functioning ambulances. This also resulted in an increase use of mutual aid as Barre had no ambulances to send to EMS calls. Fortunately the Town of Rutland was kind enough to let the Department borrow their spare ambulance for a week so that the Department could respond with at least 1 ambulance.

Apparatus	Year	Location	Remarks
Engine 4	2019	Station 1	1 <sup>st</sup> Due Engine for Fire District 1
Engine 6	1996	Station 1	Engine Tanker – refurbished December 2018
Engine 1	2002	Station 2	1 <sup>st</sup> Due Engine for Fire District 2
Engine 5	1990	Station 2	Refurb 2004, New Pump 2012
Ladder 1	1999	Station 1	Purchased used in 2017 – Refurbished
Rescue 1	2005	Station 1	
Forestry 1	1985	Station 3	Parked outside – No room in Fire Station
Forestry 2	1986	Station 1	
Forestry 4	1986	Station 1	
Ambulance 1	2016	EMS Station	
Ambulance 2	2005	EMS Station	

## **Special Operations:**

Barre Fire is part of the Fire District 8 Technical Rescue Team and as such has been appointed as an equipment host Department. This has put well over \$150,000 worth of specialized rescue equipment on Rescue 1 and has given the Department a Technical Rescue Trailer full of trench Rescue Equipment. As part of being a host equipment community the Department may respond Statewide in the event of a major rescue or emergency. This equipment that the Department houses can be used for specialized rescue missions such as trench collapse, building collapse, confined space, underwater rescue, silo rescues, heavy machinery rescues, high angle rescues, ect. The Department currently has 6 members assigned as rescue technicians on the team as well as 5 Divers assigned to the dive section of the team. The Department responded to 3 rescue events this year as members of the D8 Technical Rescue Team including a rope rescue off of Wachusett Mountain in Princeton, a dive rescue in Hazard, and a Horse rescue in Westminster. All members assigned to the team attending a monthly team training that is hosted by a different D8 community every month.

## **Fire Stations:**

Fire Station 1 is located at 61 N. School St. and is the Departments headquarters. Fire Station 1 was originally the DPW building and underwent renovations making into a Fire House in 1995 When the DPW moved into its new building. The station houses Engines 4 & 6, Ladder 1, Rescue 1, Ambulance 1, and Forestry 4. Unfortunately, due to the size and age of the station modern Fire Apparatus will not fit into the Station. Every fire apparatus that is housed at station 1 has required the station to be renovated specifically for that apparatus. The Station is beyond the point where it can be further renovated for any other modern fire apparatus.

Fire Station 2 is located at 50 Main St. in South Barre. Fire Station 2 provides vital fire protection to the densely-populated area of South Barre. Due to the close proximity of the buildings in South Barre, any fire that breaks out has the potential to turn into a conflagration. Fire station 2 used to be the old Fire Station 3 and was closed down in 1997. The station was empty until the original Station 2 located at 34 Wheelwright Rd. was damaged and the trucks moved back in in Late 2016. Station 2 is still undergoing renovations, with most repairs being completed by members of the Department and DPW. Station 2 houses Engines 1 & 5 and Forestry 1. Unfortunately Forestry 1 must be parked outside because of the lack of space at Station 2.

Fire Station 3 is located at 30 Wheelwright Rd. in Barre Plains. Station 3 was built in 1822 as a school. In 1932 it became a fire station. Due to the age and some damage to the building it was deemed unsafe for modern fire apparatus. Currently Station 3 is used to store the spare

firefighting equipment, hose, hazmat supplies, the light trailer, ATV, Hazmat trailer, and the emergency management supplies.

Public Safety Building located at 655 South St. This building houses Ambulance 2 and Forestry 2. This building also houses all of the EMS supplies and is used every day by the on duty members and after every EMS call to restock the ambulances the appropriate EMS supplies.

### **Grants:**

In 2019 the Department applied for 2 Assistance to Firefighters grants (AFG) \$62,000 for Fire Hose replacement, and \$600,000 for a new Fire Engine to replace Engine 5. Unfortunately the Department was not successful in obtaining either grant.

The Department did apply for and receive a \$2,600 EMPG grant to purchase radios that are able to communicate with New Braintree Dispatch.

As a host community for the Fire District 8 Technical Rescue Team, the Department has continued to receive numerous technical rescue equipment over the course of the last year to adding to its Technical Rescue Trailer including dive and trench rescue equipment. If not for being a host community for the D8 Technical Rescue Team the Department would not have the means to purchase all of the specialized rescue equipment that it has received as part of the team.

The Department received \$5,915 from the Department of Fire Services to purchase Firefighting gloves and hoods as part of DFS cancer prevention initiative. The grant allowed the Department to purchase 35 pair of structural firefighting gloves and 35 firefighting hoods.

The Department received \$4,154 in SAFE (Student Awareness of Fire Education) funding to help fund the Departments SAFE program.

### **Closing:**

In closing I would like to thank all of the citizens, the Finance Committee, Selectman, and all the other town boards that have overwhelmingly supported the Department over the course of the last year. The Department relies on the citizens and the town administration to provide the funding necessary for the Department to continue to perform its mission and provide the best level of service for the residents of Barre. As Chief of the Department I am very proud to be able to lead such a great organization of highly trained and highly dedicated personnel. The town of Barre is very fortunate to have such an effective Fire Department. I would also like to thank the Police, DPW, and the Rutland Regional Emergency Communication Center, for their continued support and assistance with all of the responses during the last year.

Respectfully Submitted;

*Robert P. Rogowski :*

Robert Rogowski

Fire Chief