

Study of

Emergency Services

for

The

Town of Willington, CT

by

*Field Service, Inc.*

1999

## *a brief history*

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The Town of Willington covers 33.5 square miles and has a population of 6,400+/- . The older buildings in town indicate a typical New England growth pattern of rural agricultural with activity at the geographic center with churches and a town hall. Industrial development located where water power was available and the Hall's Mill complex grew to a village with housing, school, a farm, and other facilities to support those who worked at the mill.

Route 32 and the railroad run north and south following the Willimantic River on the town's western border. Most of the commercial development serving the town stretches all along Route 32. A rail siding and lumber yard are at Route 74 very close to a busy intersection with Route 32. Route 74 runs east/west and carries local and through traffic to I84. I84 crosses diagonally in the northern section of town as it goes to Boston from Hartford. There is a rest area as I84 enters town and an interchange at Route 32, and a second interchange at exit 71 which meets Ruby Road/Route 320, then the highway continues to the northeast and the Ashford town line. Commercial development at Exit 71 which is half way from Hartford/Worcester and New York/Boston is more regional and related to I84. There is a large, very active, 'state of the art' truck stop/traveler facility that includes vehicle services, restaurants and a hotel. The Roadway Terminal at this exit is also a large modern facility.

Two fire departments have provided the communities' needs for fire protection and the increasing call for emergency services. The Willington Fire Company #1 grew from its beginning in the 1920's at Hall's Mill and the surrounding village. Willington Hill Fire Company, Inc. was formed in the early 1950's, and located in the center of town to better reach areas to the north and east.

With the change in Willington's needs as growth occurs the volunteer fire departments need to change is inevitable. Willington is growing as evidenced by the commercial development along Route 32, and the Truck/traveler and Roadway facilities. The number of residential units will increase throughout the rural sections, particularly as Tolland and Mansfield grow.

Large areas of state forest, streams, and ponds add to the attractiveness for development. As more people come to town to live and

work their needs for emergency services must be addressed. The numbers of medical calls and auto accidents will increase. Today's building codes and early warning devices are working in that serious fires are happening less frequently, but service calls to the early warning devices and the whole new group of calls for CO detectors create an increased number of calls. Some of these calls will be for a true emergency, therefore, all of them must be answered quickly with the resources to deal with that emergency. The potential for a serious fire or other emergency still exists throughout Willington. The possibility of a such an event lies in the heavy fire load created by large numbers of large buildings, particularly those in and around Hall's Mills. Hazmat incidents are occurring more frequently today and their potential exists with railroad cargoes and highway cargoes, particularly around the truck stop and terminal. Places like the mini-storage south of the school on Route 32 occasionally present hazmat incidents from illegal storage or depositing of material. Life safety concerns must be addressed particularly with large exposures such as the Manor and larger apartment complexes.

The fire departments bring two elements to these emergency responses. Trained people and specialized equipment.

**Providing equipment is the easy part.**

**Providing trained people is the hard part.**

## ***willington emergency services study***

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### **Willington's Current Situation**

There are two volunteer fire departments in Willington providing fire and emergency medical services.

The amount of apparatus and type is generally appropriate for responding to the types of emergencies that happen.

### **Identify Any Current Shortfalls**

There are fire and medical calls that go unanswered by each department from time to time.

Response districts do not put the closest or most appropriate resources on the scene first.

Incident reporting should be the same for both companies and fire marshal, using like software, and conforming to NFIRS/ National Fire Incident Reporting System.

The staffing of the ambulance creates a situation where volunteers do not respond at times when paid crews are on, and also when a paid crew is not on.

The paid ambulance crew becomes fire responders for fire calls and puts one company's trucks on the road before the other.

Lack of truly active volunteers in both companies. Truly active volunteers are the number arrived at by dividing the active roster in half to get the "active volunteers" and dividing that number in half to get the "truly active volunteers".

Financial reporting is not standard, has intermingling of activities and is difficult to understand when it reaches the town report. Capital items are purchased and/or financed with operating funds.

Each company is trying to be completely self sufficient, even to the extent of no coordination when purchasing like equipment.

Equipment and apparatus appear without the other department's knowledge.

### **Other Shortfalls - heard in town**

One company makes decisions too quickly with too few people participating.

One company takes forever to make a decision, sometimes because the question doesn't get to the company in a timely manner.

One company has a tanker that will block the world.

One company has a rescue that will block the world.

### **Projection of Future Requirements in 5 and 10 years**

More supervision and managing of the Fire Department, Fire Marshall and EMS/ ambulance activities may be necessary.

A part time fire Marshall may not be able to handle the job

Actual fires may increase slightly.

Medical calls will increase at a faster rate than fires. (generally accepted, 1 emergency transport/ 10,000 population/ day)

Fire alarm system calls will increase.

Hazmat nuisance calls will increase.

95% of calls can be handled by 4/5 people.  
5% of Calls will need 20/25 people

No additional stations should be needed.

The core of Willington #1 Station 13 needs expansion of office, meeting, kitchen, lavatory/shower facilities, storage and a modest bunk area.

The core of Willington Hill Station 49 needs expansion of office, kitchen, lavatory/shower facilities, rebuild of mechanical area, storage and a modest bunk area

Current apparatus levels should be adequate.

Apparatus Replacement and Rehab		YEAR 2000 \$ DOLLARS \$	REPLACE YEAR \$
rehab ET249 81' ALF	2000	\$60,000	
rehab T149 73' GMC	2001	\$10,000	
rehab R149 96' Mack	2005	\$50,000	\$65,000
replace ET213 81' GMC	2007	\$250,000	\$325,000
replace S113 91' GMC	2007	\$200,000	\$275,000
retire T149	2007		
rehab ET149 90' Mack	2010	\$60,000	\$120,000
rehab ET113 91' Int	2010	\$60,000	\$120,000
replace ET249 81' ALF	2010	\$275,000	\$550,000
replace F149 68' Jeep	2015	\$75,000	\$225,000
rehab R149 96' Mack	2015	\$50,000	\$100,000
rehab ET149 90' Mack	2020	\$60,000	\$240,000
replace ET113 91' Int	2020	\$275,000	\$1,000,000
replace R149 96' Mack	2025	\$250,000	\$1,500,000
rehab ET213	2027		
rehab S113	2027		
replace ET149 90' Mack	2030		

## **Plans to Satisfy These Requirements**

Create a means of operating the two fire companies as one fire department.

‘Willington Fire Department’

Level the ‘playing field’ - between departments

- R1 response
- fire response
- ambulance staffing (career/ call/ volunteer)

## ***Specific Areas***

### **Equipment**

#### **A - Vehicles**

Willington has supported its fire apparatus needs with the purchase of trucks, two engine tanks, in 1980 and 1981, an engine tanker and an engine in 1990, a mini-pumper/ service in 1991, an ambulance in 1995, and a rescue truck in 1998. A 1973 tank truck, 1968 4x4 forestry, and a pick-up/service truck complete the apparatus inventory. The apparatus is clean and appears well maintained. The fire apparatus in Willington is normal for a town of this size.

Fire apparatus and facilities needs must be continually addressed as they age and as Willington grows. But, plans can be put in place that will give a 20-25 year window for needs and financial planning. There should be clear levels of specialization. Specialization can cut duplication and costs of new apparatus and equipment while providing a focus on trained personnel to operate it.

#### **Rescue vehicles**

The Willington #1 (S113) and Willington Hill (R149) Rescues are different from one another. Willington #1’s ‘walk around’, carries 200gal of water, has a 500gpm pump, hand tools, hydraulic tools, generator and lighting on a small 4x4 chassis and Willington Hill’s ‘walk in’, is on a larger chassis with a personnel compartment for four people, walk-in section in the rear with interior storage and can provide ‘command’ facility functions. In addition to hydraulic tools and air bags it has a large

generator, lights and winch. This truck needs to have some of its design features finished and other equipment and space utilization features added.

It could be argued that one Rescue truck is sufficient for a town the size of Willington. Willington #1 has carried a hydraulic rescue tool since the 1970's primarily for response to I84 and Route 32. A relocation of ET213 to station 13 would allow it to carry the hydraulic tools, more hand tools and extrication equipment, and with the use of Class A and B foams provide more fire fighting capability at accidents. When this truck is replaced in 2007 a 'rescue-pumper', 4 door cab 1500gpm/1000gal configuration may be appropriate.

S113 could be moved to station 213, and with a lighter load and Class A foam could serve as a quick attack vehicle backed up by T149. S113 could be equipped with a deck gun, fed by other trucks, for quick placement in tight spots around some of the large buildings and apartments in town.

## **Engine**

ET149 is well designed as a water supply vehicle with a 1500gpm pump and 2200ft of 5in hose on a reel. Its 800gal tank and hand lines allow it to do attack functions as an engine tank if ET249 is occupied.

## **Engine Tankers**

ET 249 with a 5 person cab, 1250gpm pump and 1000gal tank is a very capable attack vehicle. ET 113 with a 2 door cab, 1500gpm pump and 2000gal tank serves as a larger tanker and attack vehicle. Each town should have one large tanker that can function with those from neighboring towns to provide greater tanker flows to incidents on the Interstate and areas remote from water.

## **Tanker**

T 149 carries 1400gal with a 300gpm pump on a single axle GMC chassis. This truck is a 1973 and should be retired soon. Perhaps it and S 113 could be combined in what is popularly called an 'urban interface' truck in 2005 - 2007. The replacement would be a 2 door 4x4 chassis with 1000gpm pump and 750gal tank. This would be a maneuverable, quick attack vehicle that can meet ISO Engine requirements and can function off-road and in bad weather.



## **Forestry**

Willington Hill operates F149, a military jeep that is outfitted to respond to brush and forest fires. Although it is a 1968 vehicle it should be kept in service as long as possible. Its the right vehicle for the job - and there will be woods fires!

## **Service Truck**

The former DPW pick-up at station 13 used to plow snow, do forestry in-season, haul stuff and do errands is a lot cheaper to operate than the other apparatus.

## **Ambulance**

The 1995 International/ MedTec ambulance is larger and has more compartments and open space around the patient position than most Type III ambulances. Most Type III ambulances with a 146in box provide sufficient patient care area, room for attendants to work, interior storage for scene and in-transit needs, room for a second patient on the 5% of trips this may happen, and exterior storage for scene needs. A smaller vehicle fits in more places and is easier to train drivers.

## **Aerial Apparatus**

The question of whether Willington should have a piece of aerial apparatus has been asked. It is hard for a town the size of Willington to justify the price of a piece of aerial apparatus and also to provide trained manpower.

Tolland has a very appropriate aerial near-by, as is the platform from UCONN.

There are ways to provide an aerial, but it takes dollars and trained people.. If a community has only one aerial device, generally speaking, the best choice is a straight ladder. This is due to greater fire ground flexibility, ability to contact surface area, ease of operation and training, cost, and ease of maintenance. A preowned vehicle of newer vintage will have the power for adequate road speed, and more of today's safety features, at a fraction of the cost of new apparatus. Purchasing a truck of this type requires knowledge of trucks, apparatus builders during the years the piece in question was built, examining the truck and life it has led, accidents, maintenance and history of test results.

## **B - Portable Equipment**

The hand tools and portable equipment carried by both companies is normal and does show some different concentrations of interest and style. Sometimes the 'latest and greatest' makes sense, as with defibrillators, a function that the rescuer cannot do on his/her own. But other things that do what the rescuer can do with his/her training, hands, eyes, and senses without charging a battery might be better left to the simplicity of human action.

## **C - Communications Equipment**

This is an area the two companies didn't get together on and Willington #1 went ahead with a system.

## **Facilities**

Willington Fire Company #1 Station 13 is a modern metal frame, metal roofed, metal sided, insulated building built in 1980. It sits back from Route 32 at Trask Road, with a large paved apron and grass area to the front.. Originally with three truck bays to the front, a fourth door was added creating a fourth bay that when used takes away from meeting/training area.. Across the rear of the 40'x60' are rooms that create two offices, common/ small meeting room that currently has two fold-away bunks, lavatories, mechanical and kitchen. There is storage above these rooms that isn't adequate, isn't easily accessible and doesn't look good. The fire company would like to add to the north side of the building to create offices, a meeting/ training room with sleeping area above.

As part of a capital plan the four bay apparatus section of the building is adequate and some use can be made of the area behind the shorter trucks for rooms and storage at the ground floor level with mechanical areas enclosed above. If other accommodations between the companies work out a large meeting room may not be needed. A new single bay width the full depth on the north side could house new offices a moderate sized meeting/ training room and two two person bunk rooms. Lavatory/ shower and kitchen area could fit in the existing station rear. The original building is 20 years old. With any addition the existing roof should probably be replaced and the existing siding evaluated. To do this type of renovation and detail the front of the station to fit the surrounding community, will provide a service life of at least 25 years, at a lower cost than a new facility on a new site.

This station provides good north/south response with access to I84. To relocate to the area of Exit 71 would only slightly improve response to the northern half of town. Much of the very northeast section is better served from the Willington Hill station.

The Willington Fire Company #1 Station 213 is a single story brick and block building built in the 1960's. It has three bays, two of which are too small for large apparatus and the third has height restriction and is tight on width. It has a small kitchen and common room.

The site is very small and probably would accommodate very few other uses. If the building can continue as a neighborhood station with an ISO rated Engine and provide some of the storage both other stations need for just the cost of continuing maintenance, this would be a good use. Don't forget there needs to be a core of responders to get the truck or trucks stored here on the road.

Willington Hill Fire Company Station 49 is housed in a single story wood frame/ masonry faced building that has been added on to several times. The property is confined and immediately adjacent to a residence and one of the Town's schools. There are four full size truck bays which are tight by today's standards, a common entry area, day room, office, and lavatory. Further, an entry hall leads to a large meeting room with kitchen to one side.

This facility is well used by the community and with common parking and proximity to the school compliments its neighbors. The building, although in good repair, shows signs of age. Its core area needs to be rebuilt and although tight on its footprint on the site a small addition to the rear of the apparatus section and/or to the front of the office/ entry hall could allow the continued use as fire station/community center for 20 to 25 years.

From a capital planning perspective this is the first fire facility that should be considered for a new building. It would also mean a new site which should be secured before too many years pass. The new site should have as good access as possible to the north/south and east/west roads in the south central part of town as possible.

## **Personnel Policies**

### **A - Attracting New Members**

Attracting quality new members is one of the most important tasks of the volunteer fire service in Willington.

Each of the companies should have more members from Willington. There is one or more generation age group (i.e. 30-40yr, 40-50yr) missing from each department. Today we are trying to make up for a lack of recruiting over many years. Had this effort been in place today's problems would be fewer.

Having said this - can the situation be reversed? Yes!

Quality will breed quality!

An organization has to be developed that meets the needs of those who volunteer. Train them well. Teach them to execute their tasks professionally. Constructively criticize and reward them with well meant praise.

This means well managed operations where the top officers commit to creating an organization that is well and fairly managed. They commit to learning how to manage and recruit - this cannot be delegated.

Sometimes the best 'How to do it' is just 'DO IT' !

### **B - Retaining qualified personnel**

An interesting, well run operation begins the element of retention on its own.

A volunteer cannot be fully compensated for his/her efforts, or they would be paid/career status. That said, today there are a number of forms of compensation for continued and length of service. Chiefs who have had these programs in place for some time will say they don't do the whole job.

A length of service award provides a monthly benefit after reaching a certain age and having a number of years of active service.

A small cash stipend each year, 1/2 year or 1/4 year based on points earned for calls and training is an immediate reward, usually more popular with younger members.

A 'Couples Night', annual recognition dinner, sponsoring an athletic team are means of recognition. Pizza or Boston Cream Pie after meetings!

Property tax relief. The Connecticut General Assembly PA No. 99-272 Sec. 6. The legislative body of any municipality may establish, by ordinance, a program to abate up to one thousand dollars in property taxes due for any fiscal year for a resident of the municipality who volunteers his or her services as a firefighter, emergency medical technician, paramedic or ambulance driver in the municipality. This is a significant benefit that the town should require certain levels of participation over certain lengths of time for qualification (3-5yrs = \$250, 5-9yrs = \$500, 10yrs+ = \$1000).

Each of these and other retention programs require significant, accurate record keeping and reporting. Each has a price that can be determined and applied to the hoped result. Once a program is instituted it is almost impossible to reduce it or take it away. These all need a careful plan.

## **C - State Regulations      NFPA/ISO/OSHA**

These three acronyms affect the fire service in many ways. They provide codes, standards and regulations that are a framework within which the fire service may operate safely and efficiently.

**This is good!**

There are rewards for following their guidelines and directives, and there are penalties for ignoring or not doing so. The rewards include a safer environment for citizen and firefighter in buildings built to code. With early warning smoke detectors and sprinkler systems loss of life and property damage is less. Citizens will know what to expect in emergencies and firefighters will be better trained for more situations and have better protective equipment and better tools. Fewer lives will be lost. Dollars will be saved.

The National Fire Protection Association promotes fire safety from codes and standards to fire safety education. NFPA is recognized with a high level of confidence. From the prevention of fires to the actual fighting or suppression of them NFPA has a standard. The committees that develop the standards are made up of people with relevant experience. In the case of standards that relate to fire departments these committees are made up of fire officers and firefighters as well as fitness/health expertise, equipment and apparatus manufacturers. This balance allows the committees to create standards that are achievable with today's technology and available resources.

The Insurance Services Office uses their Fire Suppression Rating Schedule to review the available public fire suppression facilities, and to develop a Public Protection Classification for fire insurance rating purposes. Although it should not be used for purposes other than insurance rating, improvement in the areas it examines will create a better fire defense system. The criteria used in reviewing the town's fire alarm system, water supply system and fire department have been likened to "an open book exam" for improvement in the town's rating. This can make a significant savings on fire insurance premiums. There is a divergence factor applied when there is a difference in the three categories. By understanding divergence and the rating process the water department, fire departments and town government can create the right upgrades that can save thousands of dollars per year for years to come.

OSHA enforces compliance by fire departments from the standpoint of firefighter safety. OSHA uses state and federal regulations and accepted industry practices and standards such as NFPA 1500, Standard on Fire Department Occupational Safety and Health in developing a comprehensive safety and health program.

#### **D - Paid vs. Volunteer Ambulance**

Willington has had paid staff on its ambulance daytime's during the week for sometime. This has led to difficulty getting volunteers to run during the nighttime hours, and now evening and weekend hours.

With only 300 transports per year the \$90,000 revenue for service (billing) will not support the operation and payroll.

Ambulance Operations		\$90,000
Billing fees	\$10,000	\$80,000
Paramedic fees	\$10,000	\$70,000
Building exp.	\$ 8,000	\$62,000
Admin. exp.	\$ 7,000	\$55,000
TCMA exp.	\$ 2,000	\$53,000
Equip exp.	\$ 5,000	\$48,000
Med. supplies	\$ 5,000	\$43,000
Other exp.	\$ 3,000	\$40,000
Amb replace	\$20,000	\$20,000
Payroll		
End Balance		\$20,000

The payroll account has been funded by the town about \$90,000 per year and \$20,000 from Willington #1 (ambulance recovery or operating budget).

Options to staff ambulance:

The midnight to 5am at	\$35ea.	\$70/day	\$350/wk	\$18,200/yr
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5pm to 5am on call at	\$50ea.	\$100/day	\$500/wk	\$26,000/yr
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Weekend 4ea 12hr shift	\$50ea.	\$200/day	\$400/wk	\$20,800/yr
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150 calls 3persons/\$15ea.	\$45			\$ 6,750/yr
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200 calls 3persons/\$25ea.	\$75			\$15,000/yr
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Unless a strong push for volunteer crews comes along, some form of on-call system with compensation per run or per shift may be necessary.

A strong goal should be to have two EMT's in the back. One to treat and one to fill out the run form. This provides two heads thinking about the patient, and an extra pair of hands when necessary, also a witness.

## **Organization**

### **A - Consolidation**

Not a popular subject in the Fire Service in New England.

Operational savings won't drive consolidation. Fewer numbers of apparatus won't drive consolidation. **Providing greater numbers of trained people for emergency response, or the lack there-of will drive consolidation. Consolidation from within or outside? Today it is the fire companies choice, tomorrow it may not be.**

The combining of two relatively small groups of people can build a greater strength. Stop redundant operations at all levels. Create strength in management, record keeping and reporting

Create one new fire department, WILLINGTON FIRE DEPARTMENT, with a single board of directors. Each existing fire company would elect three directors, one for 2yrs, one for 3yrs, and one for 4yrs. At 2yrs two new directors would be elected from the active members of the new fire department for 3yr terms. To be eligible for the board of directors

candidates must be active members of the department for a minimum of three years. The chairman of this board will be elected annually.

This Board of Directors could be elected to facilitate the planning for, organization, and creation of the new Fire Department. It could be charged to create a constitution and bylaws and even appoint chief officers, secretary, treasurer, and personnel committee for the first two years of operation. The Board would work within a time frame - say 6 months - and determine how all offices would be elected or appointed in future years.

The ambulance will be part of the new fire department. One EMT/Firefighter will be stationed at each fire station (Sta13/ Sta49). This allows both of these facilities to be open to the public. It also ensures a more consistent and timely first responder response throughout town. These personnel will also be responsible for basic upkeep of the facilities and equipment, including, but not limited to: medical and fire equipment and apparatus, and the three fire stations. In addition to first responder and ambulance response activities these personnel will respond to fire and other emergency calls with the appropriate apparatus, thus enhancing all emergency responses.

The Fire Department command structure shall be:

- Chief
- Deputy Chief
- Assistant Chief
- Captain Station 13
- Lieutenant
- Lieutenant
- Captain Station 49
- Lieutenant
- Lieutenant

## **B - Fire Commission**

A fire commission may have a place in Willington in the future. At present the involvement of the First Selectman and Chairman of the Board of Finance in receiving budget requests and interacting with the fire companies serves that function.

If separate fire companies or a separate fire department are not a viable option in the future, a Fire Commission could be established to handle the business functions of the town's fire department with the fire chief reporting to the commission.



### **C - Redefine districts**

As already discussed, if two fire companies continue to provide emergency response the response districts need to be redefined to provide the quickest appropriate response to the customer. In the mean time the two fire companies should establish a response plan to do this **immediately!** District lines can be redefined anytime.

### **D - Regional Ambulance Service**

With only one ambulance, the people of Willington expect it to be available for them. Today Willington provides some mutual aid, mostly to Stafford and Union. This is done without formal assignment of PSA's (primary service areas) through mutual aid agreements. If this activity persists an idea to add a second ambulance (one in each station), without adding full time staff, may increase revenue and help support the luxury of two ambulances in town. 600+ runs would seem to be a target for this. Firm commitments from other jurisdictions may cause them to ask for an ambulance stationed there, defeating the availability to Willington.

## *conclusion*

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The Town of Willington has two fire departments that grew from times when geographic distances - response times - were greater. Communicating needs and getting mutual aid were difficult. Today those barriers are gone, with instant communication - county wide - and mutual aid minutes away. The need for two completely separate fire companies is no longer there. The benefits of a single fire department are numerous and to succeed it must be well planned and the costs and changes understood.

The existing apparatus in town has been well purchased, maintained and rehabed when appropriate. Two new pieces should be planned for about 2007. Further rehab and purchases can be scheduled and modified as outlined in this report. Willington #1's northern station and the Willington Hill station need work on their core facilities and planning should start to replace the Willington Hill Station.

Department lines of service are changing as routine calls increase and serious calls become less frequent which makes the need for training more important. Uniform training requirements are needed and the results should be reported to the Selectmen regularly. Like it or not the members of the fire department are considered employees of the Town of Willington by OSHA and others.

Dispatching procedures must serve the customer better. Again, creating the correct response is necessary for all concerned. Everyone can't go to every call.

A long range capital plan for replacement of apparatus and facilities will allow the Town to plan more easily for continued financial support of its fire department. In turn a long range capital plan will show when groups of purchases may be wise for financing reasons. Equipment items such as radios, pagers, turnout gear, SCBA's, and hose, that have a useful life, can be included in a capital plan. This plan and truer operating budgets will calm many of the emotions that create conflict and unrest during budget and capital request sessions.

Changing energy from providing equipment and facilities to attracting and retaining qualified members will be the greatest benefit to the town. Measuring and rewarding proper response to calls and the creation of appropriate numbers of trained members with necessary skills for all the services they provide is the greatest challenge.

The information in this  
report is presented by

*Field Service, Inc.*

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